



JUARA: Jurnal Olahraga

E-ISSN 2655-1896 ISSN 2443-1117

<https://doi.org/10.33222/juara.v7i3.2431>



Riau Petanque Athlete Profile Judging from the Effectiveness of Time in Shooting

M. Fransazeli Makorohim^{1*}, Alficandra², Sasmarianto³

^{1,2,3} Universitas Islam Riau. Jl. Kaharuddin Nst No.113, Simpang Tiga, Pekanbaru City, Riau 28284, Indonesia.

*e-mail: mfransazeli@edu.uir.ac.id

Info Artikel

Article History:

Received 03 August 2022

Approved 01 November 2022

Published 08 November 2022

Keywords:

Time Effectiveness,
Shooting, Petanque

Abstract

This study reviews the description of the Riau province's petanque athletes in shooting in terms of time effectiveness. This study aims to determine what factors can affect the effectiveness of time in shooting in the petanque sport. The subjects of this research are several related stakeholders (athletes, coaches, and arbitrators) of Riau province. The research method used is the descriptive method. Data collection techniques include observation, interviews, documentation, and data triangulation. The data obtained were analyzed qualitatively by 1) data reduction, 2) data presentation, and 3) drawing conclusions. Based on the results of the study, it was found that the average petanque athlete in Riau Province 1) was still in a hurry to shoot, 2) was inconsistent about the target, 3) lacked focus, 4) was nervous or lacked confidence in the circle, 5) the shooting rate was low. Not maximal. It can be concluded that the effectiveness of time in Shooting is significant and affects the shooting results of Riau petanque athletes.

© 2022 M. Fransazeli Makorohim, Alficandra, Sasmarianto
Under the license CC BY-SA 4.0

✉ Alamat korespondensi: Jl. Kaharuddin Nasution No 113 Pekanbaru, Riau

E-mail: mfransazeli@edu.uir.ac.id

INTRODUCTION

Petanque is a form of boules game whose goal is to throw an iron ball (boules) as close as possible to a wooden ball called a jack, and both feet must be in a small circle. There is also a unique competition for Shooting (Agustina & Priambodo, 2017). The character of petanque tends to require accuracy; anyone who wants to play petanque, regardless of age, position, or gender, is allowed to play this sport (Souef, 2015). Petanque sports can also be considered static sports, which do not require too much movement activity and no body contact, so this sport has very minimal risk of injury; petanque athletes also need several physical conditions such as strength, endurance, balance, coordination and focus on staying perform Lara, (2020) optimally. This game is usually played on hard ground but can also be played on grass, sand or other ground surfaces (Eko Cahyono & Nurkholis, 2018). The character of petanque tends to require accuracy; anyone who wants to play petanque, regardless of age, position, or gender, is allowed to play this sport (Gracia Sinaga, 2019). In its development, this activity can be entertaining, fun, or increase sports achievement (Febrianto et al., 2022).

Several numbers are contested in the petanque sport, such as men's and women's triples, men's and women's doubles, men's and women's singles, and Shooting. For the shooting competition, numbers are carried out at a distance of six meters, seven meters, eight meters and nine meters with points that can be

obtained 0 points, 1 point, 3 points and 5 points for each successful Shooting. Shooters can only shoot once for each disciplinary distance given (Hanief & Purnomo, 2019). Shooting is a throw that drives away the opponent's boredom from the target and tries to land the ball over the target to push it out (Lubis, 2020). The main goal of shooting in a match is to achieve maximum accuracy. Throws must be right on target to get the highest point. Thus accuracy affects the shooting numbers; the more precise the throws are given, the more points will be obtained to achieve victory. The level of difficulty in Shooting is more.

Tall compared to pointing. Apart from requiring good shooting techniques, it also requires the mentality and confidence of an athlete. Four aspects of training need to be considered and trained, namely physical activity, technical training, tactical training and mental training, which are inseparable (Irwansyah et al., 2019).

Game techniques in petanque sport have two throwing techniques. The first technique is pointing. The pointing process is an attempt by a person or team to deliver the ball to approach the target. In doing the pointing procedure, itself has two ways, standing and squatting. The second technique is shooting (Chandra Triadi, 2021). The shooting technique is an effort made by a person or team to keep the opponent's ball away from the target. The shooting technique can also be done by standing and squatting (Sukawi et al., 2021).

Based on the objective of the main mechanics, the petanque game is included in a

sport that aims to achieve maximum accuracy (Agustina & Priambodo, 2017). This means that the throw must be right on a specific target to get the winning point. The essential skill that every petanque player must have is shooting because the game aims to get the ball closer to the target ball, keep the opponent's ball as far away as possible, and prevent the opponent from stealing the score (Gracia Sinaga, 2019).

Petanque athletes must also be able to make the right decisions in every throw that will hit the target to achieve maximum points. However, there are still athletes who have yet to observe that petanque requires patience so that when throwing and seeing the target, they are not in a hurry which causes the athlete not to focus. The throw needs to be right on target due to tired physical condition and disturbed mentality, which causes the results to be inaccurate. Max and lose the game. The focus in petanque sports is prioritized to get the desired shooting accuracy. Doubt about the Shooting can be a negative thought that causes stress within yourself and results in losing focus.

So to get focus or concentration, namely by instilling calm into the heart, so that you can control yourself. Alternatively, you can also practice visualizing views of the future during the training process to increase self-confidence (Rauhe, 2022). Shooting in petanque does not need long descriptions, aiming at the target ball (focus on the point of the target ball, not the ball trap), trying to land the ball on top of the target ball and pushing it off the court. (Pelana, 2016), Shooting is a

throw to expel the opponent's boji from the target boka. The types of Shooting, namely: shot on iron shooting right at the opponent's body without touching the ground first. Short Shot fires the opponent's bosses by touching the ground about 20-30 cm from the opponent's bosses. A ground shot shoots an opponent's bore by touching the ground about 3 or 4 meters and rolling about the opponent's bore (Nikmah, 2020).

To be able to shoot in the expected petanque game, special skills are needed, for example, the speed of arm movement when throwing boji. This requires swing and arm strength so the boji can go fast when the boji is thrown. Setiawan, (2020). Success in throwing Shooting is determined by many aspects (Iskandar & Rahman, 2019). Three kinds of equipment need to be owned to achieve maximum achievement: technical development, mental development, and champion maturity. Meanwhile, another aspect needed in the petanque game is the physical aspect (Pujiyanto, 2015).

Errors in athletes' performance usually occur when they are in a match or training situation because they should be the same in training and competition. An athlete must get used to the atmosphere of training, like in a match, so he is used to being ready to face his opponent. Four components play an essential role in petanque achievement (Pelana, 2016), namely 1) biological aspects, including basic body abilities and organ functions, 2) psychological aspects, including movement coordination, motivation and anxiety; 3) social aspects, environmental facilities and

infrastructure, 4) supporting aspects which include trainers and training programs. The sport of petanque that is needed is physical and non-physical, which is very influential. One non-psychoic factor influencing it is anxiety (Hasanah Refanthira, 2020).

Mental is also a determinant of success in competing; what if an athlete has been practising for a long time and has a good physique and technique but often experiences anxiety, anxiety and fear when competing? Then the achievements obtained will be less than optimal (Agita & Tansir, 2021). Athletes achieving accomplishments require physical, technical, tactical and mental maturity. Therefore, all of these aspects must be completed. An athlete trained mentally with habit will easily overcome various disturbing factors during a match so that technical abilities can be carried out in a match. Likewise, in the sport of petanque, with a strong mentality, the athlete will also calm down more easily; otherwise, if an athlete's mentality is weak, it will affect the calmness and anxiety of the athlete in throwing to hit the target achieved.

Based on the petanque shooting score data for Riau province, the score results are still not optimal. This condition is caused by several factors, namely the influence when athletes Shooting are still in a hurry, inconsistent on target, lack of focus, nervousness or lack of confidence in the circle, competition experience and the number of competitions that are still minimal, lack of training programs, concentration and accuracy. Shooting is still low; when shooting, the ball

does not reach the target, the training intensity is still lacking, and the shooting rate is not optimal. Each player shoots one by one, starting from stations 1 to 5 with a distance of 6 to 9 meters, with 20 minutes to make all shots. Based on the results of observation and analysis of the results of the score at the Riau Open match in 2022, it was found that there were still many athletes who were unsure, so the scores obtained were relatively low in results and time, with an average time of 13 minutes, this was because athletes were still in a hurry to shoot, then during the match, the athlete who lacks confidence feels that the technique he is doing is correct. However, it turns out that the technique used is different from what the trainer taught, and it will affect the shooting results that are carried out.

METHODS

The method in this study uses qualitative methods. The qualitative method is one of the research methodologies for understanding the meaning of individual experience based on the observed behaviour and the activities that underlie it. This method aims to provide an accurate picture of individual events or experiences. This research uses a case study approach. They performed on Riau petanque athletes in terms of related problems. Participants in this study consisted of 3 people who were selected through a purposive sampling technique. Participants with characteristics: 1) coach, 2) athlete, and 3) arbiter. Methods of data collection using semi-structured interviews and documentation.

In this qualitative approach, researchers will evaluate the problem of time effectiveness in shooting petanque by describing the objects to be studied, namely athletes, coaches, and arbiters, based on current facts. Here the researcher wants to know about the implementation of the petanque shooting process for athletes carried out by Riau petanque athletes. This research focuses on shooting time for petanque athletes in Riau.

In qualitative research, the instrument or research tool is the person himself. Therefore, researchers as instruments must also be "validated" to what extent qualitative researchers are ready to conduct research and then go into the field. Validation of researchers as instruments includes validation of understanding of qualitative research methods, mastery of insight into the field being studied, and readiness of researchers to enter research objects, both academically and logistically. The one doing the validation is the researcher, through self-evaluation of the extent of understanding of qualitative methods, mastery of theory and insight into the field under study, and readiness and provision to enter the region. While research instruments are tools or facilities that researchers can use in collecting or obtaining data in the field under study and readiness and provisions to enter the area. Research instruments are tools or facilities that researchers in collecting or obtaining data can use.

In this study, researchers used several ways to collect data, namely the following data collection methods:

Observation is a complex process consisting of various biological and psychological functions (Sugiyono, 2015). Observation techniques are used when researchers pay attention to human behaviour, work processes, and natural phenomena and when the observed respondents are manageable. According to (Arikunto, 2013), observation is a technique carried out by making careful observations and systematic recording.

As for the initial steps regarding observation, the researcher conducted observations and records at the Apacmandiri Football Academy, Bergas District, Semarang Regency, to find a general description of the implementation of the management of the Apacmandiri Football Academy.

Interviews are conversations with specific aims and objectives. The interviewer and interviewee are the two parties conducting the discussion (Putra, 2016). Interviews are a data collection technique if the researcher wants to conduct a preliminary study to find a problem that must be studied. Researchers want to know things from respondents more deeply, and the number of respondents is small. This data collection technique is based on self-report, or at least on personal knowledge and beliefs (Sugiyono, 2015).

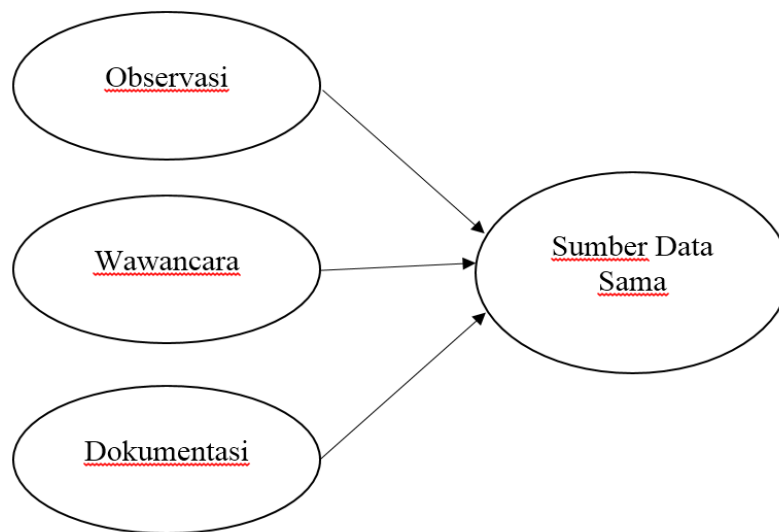
Meanwhile, according to Arikunto (2013), interviews are a way or method used to get answers from respondents by using one-sided questions and answers. It is said to be unilateral because the respondent is not allowed to ask questions in this interview. In this problem, researchers used semi-structured

interview guidelines (Sugiyono, 2015). This interview aims to find problems openly, where the party invited to the interview can be asked for opinions and ideas. In conducting interviews, researchers must listen carefully and record what the informants say. To get informants who have a lot of thoughts and ideas, researchers collect data by interviewing administrators, coaches and athletes because research.

About the management of the coaches of the Apacmandiri Football Academy. In journals (Gema, 2016), documentation is any

written material or film, other than notes, prepared at the investigator's request. In journals (Irwan, 2017), documentation looks for data about things or variables in notes, transcripts, books, newspapers, magazines, and so on (Suharsimi, 2013). This study used this method to obtain data or written information and photos related to the management activities of the Apacmandiri Football Academy coaches in Bergas District, Semarang Regency. Researchers used observation techniques, in-depth interviews, and documentation in collecting data.

Figure 1. Data Collection Techniques



Methods of data collection using semi-structured interviews and documentation. Interviews were conducted not only with the subject but also with the parties concerned with the participants. Researchers selected coaches and peers of athletes as significant others in this study. After collecting data

through interviews, data analysis was carried out. The data analysis technique

used is Triangulation means, using different data collection to obtain data from the same data source. Triangulation Participatory observation techniques, in-depth interviews, and documentation for the same data sources simultaneously. Source

triangulation means obtaining data from different sources using the same technique.

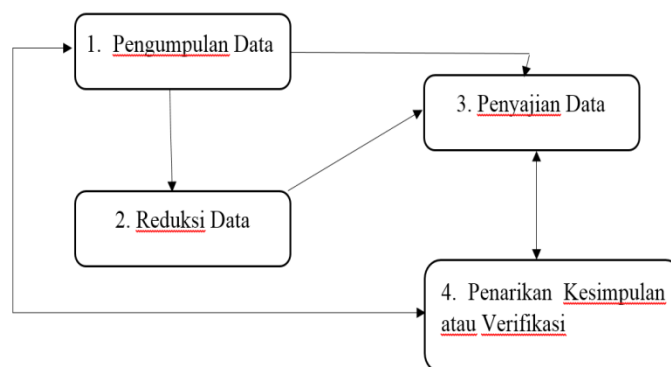
Data collection is searching, recording, and collecting all data objectively and as is by the results of observations and interviews in the field, namely recording the necessary data on various types of data and various forms of data in the field that are sent down by researchers and recording in the field.

The data that has been collected is selected and grouped based on data that is similar or the same. Then this data is organized to get conclusions as material for presenting data. The preparation of the data is carried out with the following considerations in the preparation of the data : 1) Only

formulate data that is important and needed; 2) Only enter data that is truly objective; 3) Only enter authentic data; 4) Distinguish between information data and personal messages of respondents.

After being organized, the data is presented in narrative descriptions accompanied by charts or tables to clarify the presentation of the data. After the data is presented, conclusions or verification are carried out. For more details, the process of data collection, data reduction, data presentation, and drawing conclusions or verification, as well as the interaction of the three components.

Gambar 2. Desain Penelitian



FINDINGS AND DISCUSSION

Petanque (pronounced (pe.ta.k) in French) is a form of boules game whose goal is to throw an iron ball as close as possible to a wooden ball called a cocoon, and the feet must be in a small circle. Iran, (2014). This game is usually played on hard or oil ground but can also be played on grass, sand or other ground surfaces; similar games are bocce and bowls.

Hanief, (2019). which is called a jack, and both legs must be in a small circle; there is also a unique competition for shooting Lubis et al., (2021).

Based on the character of the petanque sport, it requires accuracy anybody. Those who want to play petanque, regardless of age, position, or gender, are allowed to play this sport—Herve et al. people for the triple category Pamungkas et al., (2021). For players

in the double and triple categories, mixing in the team is allowed. The whole game is done with hand skills to process the ball. To start the game, start with both players or both teams playing a coin toss. Achieving a goal requires basic techniques and playing strategies in pétanque sports Rasyono et al., (2020).

Shooting in pétanque is the most spectacular act and is also liked by the audience (Agustina & Priambodo, 2017). A successful shooting allows the team to put opponents under pressure, take advantage, and escape tricky situations. Technically, Shooting combines quite a several components, such as balance, flexibility, relaxation, speed of action and focus (Irhas, 2022).

The shooting movement is not simply throwing the ball but also includes directing and trying to make the ball fall right on the target (Hanief, 2019). Practice directing the ball in such a way that the ball falls right on the intended ball (Irhas, 2022). Because Shooting is an essential technique in the game and takes frequent practice practising shooting from close range or a long distance. Shooting in petanque is an attempt to keep the target ball away to reduce the opponent's points and add points to the team.

Based on the results of the context evaluation, it is made based on what is a requirement by looking at existing resources and must be observant and pay attention so that each existing indicator can be achieved by what has been set. So that it can encourage someone to do something. Factors that affect athlete achievement include individual factors, namely needs/anxieties, interests, and

hopes/beliefs, as well as environmental factors, namely the existence of standard norms that must be achieved, the existence of competitive situations, types of tasks and challenging situations.

In the anxiety factor, petanque athletes are often in a hurry to shoot, making their own mistakes, and the shot does not hit the target (Pelana, 2016). This affects the shooting time because when shooting, the time is given 1 minute at each

stage so athletes can calm down before shooting (Irhas, 2022). The lack of a shooting training program that focuses on timing when Shooting is also one of the fundamental problems, so athletes are used to not paying attention to the time before shooting and seem in a hurry when shooting (Subekti, 2018). Lack of experience, playing hours and minimal competition also affect athletes when shooting; sometimes, there is even more time left than has been set.

The need for trainers is something that cannot be separated from fostering a level of education, both formal and non-formal. Humans need conditions to achieve prosperity, so if needs still need to be met, humans will undoubtedly feel less prosperous. It can be said that conditions are something that must exist because without them, our lives will not prosper, or at least something is lacking (Kurniawan et al., 2022)

Improving coaches' abilities will give coaches more knowledge than they currently have and will also help coaches have broader insights into soccer (Nurfani et al., 2022). Coaches must regularly adapt to the latest

developments and be able to change or modify their coaching practices. Such changes can occur when coaches: (1) understand the principles established in each relevant discipline and (2) regularly seek new knowledge in sport science. The trainer does not need to be a real scientist, but to become a professional, he must be an active consumer of various scientific information and apply it (Syamsudin et al., 2021).

As an arbiter/petanque umpire, you must have good stamina because, for one game round, it can take approximately 1-2 hours. The arbiter/referee as a whole must be able to direct and manage the game so that it runs smoothly. The arbiter/referee will give an assessment and signal a violation to the player. Arbitrators in Riau Province are few, and none are Nationally licensed; lack of socialization from the Riau Province officials, little experience in leading matches and less competition make an arbitre lack of mentality in leading a petanque match.

Data analysis can be done by compiling and interpreting activities to conclude. Due to the connection with the phenomenon to be interpreted according to its natural setting, qualitative data analysis must be fulfilled: naturalistic, inductive and holistic analysis. Naturalistic. Namely, data analysis must be based on real situations that change naturally and openly, and there is no variable control engineering. Based on induction thinking procedures, inductive analysis reveals specific data and details to find categories, dimensions, and essential and original relationships, expressed in open questions. Holistic meaning

that the totality of phenomena must be understood by researchers as a complex system, comprehensive interrelatedness and not viewed partially.

Based on the results of in-depth interviews, then proceed with thematic analysis. A central theme gives birth to effectiveness in shooting time for Riau petanque athletes. Time effectiveness in Shooting is significant, influencing shooting results in Riau petanque athletes. Moreover, the hope is for athletes and coaches to pay more attention to time effectiveness in Shooting.

CONCLUSION

The study's conclusions show the factor of time effectiveness in the Shooting. 1) Athletes are still in a hurry in Shooting, 2) Not consistent in shooting targets, 3) lack of focus in Shooting, 4) nervous or lack of confidence in the circle, and 5) shooting numbers that have not been maximized. From the analysis of the shooting data, it can be seen that athletes who are in a hurry or fast when Shooting have lower scores than athletes who are calmer or use a longer time. Athletes and coaches must pay more attention to time effectiveness in Shooting, as it gives many disadvantages to athletes.

ACKNOWLEDGMENTS

This research was able to be completed thanks to the help of various parties. Therefore, the researcher expresses his highest

gratitude and appreciation to those who have assisted in completing this research.

REFERENCES

- Agustina, A. T., & Priambodo, A. (2017). Hubungan Antara Tingkat Konsentrasi Terhadap Hasil Ketepatan Shooting Olahraga Petanque Pada Peserta Unesa Petanque Club. *Pendidikan Olahraga Dan Kesehatan*, 5(3), 391–395. <https://jurnalmahasiswa.unesa.ac.id/index.php/9/article/viewFile/19598/17915>
- Chandra Triadi, N. (2021). Contribution Of Power And Strength Of Arm Muscles To Petanque Shooting Ability In Sports Education Students At the Muhammadiyah University Of Surakarta. *Ijersc.Org*, 648–656. <https://www.ijersc.org/index.php/go/article/view/132>
- Eko Cahyono, R., & Nurkholis. (2018). Analisis Backswing Dan Release Shooting Carreau Jarak 7 Meter Olahraga Petanque Pada Atlet Jawa Timur. *Jurnal Prestasi Olahraga*, 1(1), 1–5. oai:ojs.journal.unesa.ac.id:article/24169
- Febrianto, A., Sulaiman, & Hidayah, T. (2022). Kontribusi Panjang Kaki, Kelenturan Kaki dan Kecepatan Kaki Terhadap Hasil Kemampuan Smash Kedeng Sepaktakraw. *JUARA : Jurnal Olahraga*.
- Gracia Sinaga, F. S., & . I. (2019). Analysis Biomechanics Pointing dan Shooting Petanque Pada Atlet TC PON XX PAPUA. *Sains Olahraga : Jurnal Ilmiah Ilmu Keolahragaan*, 3(2), 66. <https://doi.org/10.24114/so.v3i2.15196>
- Hanief, Y. N. (2019). Petanque : What are the physical factors that determine performance? *Jurnal Keolahragaan*, 7(2), 116–125. <https://doi.org/https://doi.org/10.21831/jk.v7i2.26619>
- Hanief, Y. N., & Purnomo, A. M. I. (2019). Petanque: Apa saja faktor fisik penentu prestasinya? *Jurnal Keolahragaan*, 7(2), 116–125. <https://doi.org/10.21831/jk.v7i2.26619>
- Hervi, A., Qorihah, A., Keolahragaan, F. I., Semarang, N., & Article, H. (2021). Survei Manajemen Olahraga Petanque Pada UKM Petanque Unnes Kota Semarang. *Https://Journal.Unnes.Ac.Id/Sju/Index.Ph p/Inapes Survei*, 2(1), 230–234. <https://doi.org/10.15294/INAPES.V2I1.44213>
- Irawan, F. A. (2014). Biomechanical Analysis of Concentration and Coordination on The Accuracy in Petanque Shooting. *Journal of Physical Education, Sport, Health and Recreations*, 3(1), 23–27. <https://doi.org/https://doi.org/10.15294/active.v8i2.30467>
- Irhas, S. (2022). Latihan Pergelangan Tangan, Power Lengan, Konsentrasi dan Shooting pada Petanque. *JUARA : Jurnal Olahraga*, 07. <http://jurnal.upmk.ac.id/index.php/juara/article/view/2410>
- Iskandar, T., & Rahman, F. (2019). Pengaruh Metode Latihan Hand Grip Terhadap Kekuatan Genggaman Tangan Pada Atlet Putra Pelatcab Petanque Kota Bekasi. *Motion: Jurnal Riset Physical Education*, 9(2), 140–145. <https://doi.org/10.33558/motion.v9i2.1539>
- Kurniawan, R., Junaidi, S., & Hidayah, T. (2022). *JUARA: Jurnal Olahraga The Effect of Flexibility Exercises, Static Balance, Eye-Hand Coordination on Petanque Shooting Results BY-SA 4.0*. <https://doi.org/10.33222/juara.v7i2.2015>

- Lara, A. A. (2020). *Kontribusi kekuatan otot lengan terhadap ketepatan shooting petanque jarak 6 meter pada atlet riau.*
- Lubis, M. R., Permadi, A. G., & Muhaimin, A. (2021). The Effectiveness of Using Le Duo Tir Tools in Increasing Petanque Shooting Accuracy. *Prisma Sains : Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram*, 9(2), 186. <https://doi.org/10.33394/j-ps.v9i2.4074>
- Nikah, W. (2020). Pengaruh Latihan Target Media dan Tire Terhadap Ketepatan Shooting Jarak 9 Meter Pada Atlet Petanque Kabupaten Jepara 2020. *Seminar Nasional KeIndonesiaan V Tahun 2020 "Negara Dan Tantangan Kenegaraan Kontemporer (Qua Vadis Arah Pembangunan Ketahanan Nasional Indonesia*, 126–148. <https://jurnal.syntax-idea.co.id/index.php/syntax-idea/article/view/1120>
- Nurfani, Rahayu, S., & Priyono, B. (2022). The Relationship of Anxiety, Confidence, and Motivation to the Performance of Volleyball Referees: A Correlation Study. *JUARA : Jurnal Olahraga.*
- Pamungkas, G., Jananta, W., Kristiyanto, A., & Doewes, M. (2021). The study on the development of petanque sport in central Java province Indonesia. *СПОТИВНИ ИГРИ И СПОРТИВНИ ИГРЫ*, 5(2), 112–119. <https://doi.org/10.15391/si.2021-4.12>
- Pelana, R. (2016). Hubungan Kekuatan Otot Tungkai Dan Keseimbangan Statis Dengan Hasil Shooting Pada Atlet Klub Petanque. *Prosiding Seminar Nasional Peran Pendidikan Jasmani Dalam Menyangga Interdisipliner Ilmu Keolahragaan*, 12, 116–127. <http://pasca.um.ac.id/conferences/index.php/SNPJ/article/download/996/667>
- Pujianto, A. (2015). Profil Kondisi Fisik Dan Keterampilan Teknik Dasar Atlet Tenis Meja Usia Dini Di Kota Semarang. *Journal of Physical Education Health and Sport*, 2(1), 38–42. <https://doi.org/10.15294/jpehs.v2i1.3941>
- Rasyono, R., Sukendro, S., & Palmizal, P. (2020). PENGEMBANGAN MODEL TAHAPAN LATIHAN SHOOTING TINGKAT DASAR DAN LANJUTAN UNTUK PEMAIN PETANQUE JAMBI. *Riyadhoh : Jurnal Pendidikan Olahraga*, 3(1), 21. <https://doi.org/10.31602/rjpo.v3i1.3089>
- Ramadan, Gilang & Juniarti, Y. (2020). *Metode penelitian : pendekatan kuantitatif, kualitatif dan R & D.* CV Sadari Press.
- Rauhe, E. V. (2022). Pengaruh Latihan Power Lengan Terhadap Kemampuan Melempar Dalam Permainan Softball Pada Mahasiswa Jurusan Pkl Fik Unima. *Jurnal Pendidikan Kesehatan Dan Rekreasi UNIMA*, 03(01), 96–101. <http://ejurnal.unima.ac.id/index.php/olympus/article/view/4235>
- SN, D. A. A., & Setiawan, I. (2020). Pengaruh Latihan Koordinasi Mata Tangan dan Kekuatan Otot Lengan Terhadap Akurasi Lemparan Bola Petanque. *Indonesian Journal for Physical Education and Sport*, 1(2), 496–501. <https://doi.org/10.15294/INAPES.V1I2.42088>
- Souef, G. (2015). *The Winning Trajectory.* Copy media.
- Subekti, N. (2018). Tingkat Kebugaran Fisik Dasar Mahasiswa Pendidikan Olahraga Fkip Ums Angkatan Pertama 2017. *JUARA : Jurnal Olahraga*, 3(1).
- Sukawi, W. A. S., Maliki, O., & Widiyatmoko, F. A. (2021). Pengaruh latihan kekuatan

otot tangan, daya tahan otot dan keseimbangan terhadap ketepatan shooting game petanque di UKM Petanque Upgris. *Journal of Physical Activity and Sports (JPAS)*, 2(2), 274–279. <https://doi.org/10.53869/jpas.v2i2.67>

Olahraga Interval Training and Endurance Training to Increase VO₂max: Article Review Fajar. *Journal of Physical Activity and Sports*. <https://doi.org/https://doi.org/10.53869/jpas.v3i1.175>

Syamsudin, F., Syaifullah, R., Subardi, M. B., & Fariz, S. (2021). JUARA : Jurnal