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Analysis of Knowledge Level Laws of The Game Rugby Union of Rugby Athletes PON XX Papua

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ABSTRACT

The purpose of this study was to find out how high the level of knowledge regarding the laws of the game rugby union of Indonesian Rugby players as elite players who participate in National Sports Week (PON) is. The type of this research is descriptive research. The method used is a survey with data collection techniques using true and false tests. Techniques data analysis using quantitative descriptive analysis as outlined in the percentage form. The population in this study were rugby athletes who participated in the PON XX Papua (7 provinces). The women's team: Papua, DKI Jakarta, West Java, Aceh, Bali, Yogyakarta, the men's team: Papua, DKI Jakarta, Yogyakarta, West Java, Banten, and Aceh. The sampling technique used random sampling with a total of 55 rugby athletes. The instrument adopted the Laws of the Games Rugby Union exams by World Rugby obtained 35 valid items with a significant level of 5%, the value of rtable = 0.2441, and reliability of 0.718. The research instrument trials were conducted on 15 athletes in Pra-PON Bali. Based on the results of the study obtained the level of knowledge Laws of the Game Rugby Union of Rugby Athletes PON XX Papua the very high category by 12.75%, in the high category by 40.00%, the medium category is 43.64%, the low category is 3,64% and the category deficient at 0.00%. This study is the first study to examine the understanding of the rules of playing Rugby on a national scale (Indonesia) to evaluate elite professional athletes to prepare athletes for a higher level by balancing cognitive factors (understanding of the rules of the game of Rugby) and psychomotor.

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1. Introduction

The National Sports Week, abbreviated as PON, is the government's mandate to implement UUSKN (articles 42 and 43). In the UUSKN, it is also explained that every sporting event carried out by the government, organizations, institutions, and the community must pay attention to the goals of national sports and the principles of organizing sports. The National Sports Week (PON) is Indonesia's largest multi-event sporting event. PON, held every four years, manifests the Indonesian nation's efforts to carry out complete development. PON was first held in Solo in 1948 by competing in 9 sports, which 600 athletes attended. PON continues to grow until it evolves into a prestigious and most prominent sporting event in Indonesia. In its implementation, PON involves participants from all provinces in Indonesia with their ethnic and cultural diversity. PON plays an essential role in increasing national unity and integrity.

Furthermore, the achievements of each province are the capital in elevating the dignity of the Indonesian nation in the international sports arena. According to Relly Komaruzan, quoted by Triani (2011), Regulation is a rule that is agreed upon and binds a group of people or institutions to achieve a specific goal. Meanwhile, according to the Indonesian Dictionary (2001), regulations are orders or instructions, rules or provisions that regulate. Rugby Union is a sport that involves physical contact. Sports that involve physical contact have great dangers because they can cause injury to players.

History records that Rugby is a new sport that is competed in the exhibition sport of PON XIX, West Java. Based on Decision Letter (SK) of the General Chairperson of the Central Indonesian National Sports Committee Number 72 of 2018 Regarding the Determination of Sports Branches, Match/Contest Numbers, and Athletes quotas each sport of the XX National Sports Week (PON) 2020 in Papua, included Rugby as one of the official sports that are contested. Meanwhile, Rugby has competed at the SEA Games, Asian Games, and Olympic levels at the international level, even though the Indonesian Rugby team has never competed in the Olympics. With the development of the sport of Rugby and the proliferation of various competitions available, the demand for optimal performance of a Rugby athlete that results in achievement is mandatory. According to Biscombe et al.,(2010), the rules of Rugby are drawn up by an international Rugby body known as the International Rugby Board (IRB). The IRB continues to review and develop the rules of the game. These changes are intended to help players enjoy a safe and exciting game. Indonesia also has a body that regulates Rugby called the Indonesian Rugby Union (PRUI), established in 2004. Source: rugbyindonesia.or.id. Knowing the level of knowledge of rugby rules in these athletes can be used as the basis for evaluating and planning achievement development programs to face higher events such as the Sea Games and Asian Games.

Winning teams obtained 80% in penalty goals, 32% in drops, and 70% in conversions. These percentages can serve as references to establish training objectives for practicing kicks and for monitoring efficacy in situations of training and competition. In the phases of obtaining the ball and more specifically in scrummage and line-out, winning teams lose fewer balls than losing teams (winning teams have an efficacy of 90% in both actions) (Ortega et al., 2009). Earlier, six nation's tournaments from 2003-2006 seemed to indicate a particular style of play that can be associated with winning teams. Significantly more mauls were won by winning teams than losing teams, and losing teams lost significantly more scrums and line-outs (Ortega et al., 2009).

The problem that athletes in the competition often do is a violation of the rules; during the training process, that is given only focused on the psychomotor aspect, regardless of the

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athlete's level of understanding of the rules of the game of Rugby. In addition to this, athletes expect assistance from coaches in matches to always provide instructions related to game rules. Rugby matches that are needed in addition to technique, tactics, and physical condition are no less critical, athletes' understanding of the game's rules. The rules of the game serve to clarify the way and control the rules that have been made for the smooth running of a match. Furthermore, the athlete's understanding of the rules of Rugby dramatically affects the quality of team play.

Many Rugby rule errors lead to injuries (Brooks, 2005). Six percent of all injuries (forwards, 7%; backs, 6%) were caused by foul play. Injuries sustained during scrummaging accounted for 11% of forwarding injuries, but a collapsed scrum caused only a tiny proportion of these (15%). The incidence of ''tackled'' injuries was significantly higher for backs, and the incidence of ''ruck/maul'' injuries was significantly higher for forwards. Most injuries sustained from being tackled were from side-on (51%) and head-on (34%) tackles, whereas most injuries sustained from tackling were caused by head-on (56%) and side-on (38%) tackles.

Quarrie KL., (2007) in "Effect of a nationwide injury prevention program on serious spinal injuries in New Zealand rugby union" The most common tackles in Rugby are responsible for the most significant number of injuries. However, certain types of tackle carry a higher degree of risk. Prevention of tackle injuries needs to balance the frequency and severity of injuries sustained with the desire of rugby participants and understanding the rugby laws prevent injuries (including players, administrators, and supporters) to maintain the full-contact nature of the sport.

Russell et al., (2017) "Play and the moral limits of the sport ."Players are encouraged and directed to reward 'positive' play. However, Rugby has so many aspects that a team that plays with fair. The referee has a duty of care to the players, which means they must not allow dangerous situations or put players at risk.

Johnston et al. (2019), said that "No physical characteristics were associated with reduced attacking error rates (e.g., knock-on, forward pass) in the backs, with all physical characteristics showing weak association with increased error rates."

Sye et al. (2006), in "High school rugby players' understanding of concussion and return to play guidelines," Rugby union players in Ireland under 20 years old were that 64 of the 133 reported they had experienced at least one concussion in their playing history. Of these players, 61 reported their symptoms to their coach; however, just 36 (56%) sought medical attention, in line with previous findings of underreporting concussions and low adherence to return to play guidelines.

Fraas & Burchiel (2016), in "A systematic review of education programs to prevent concussion in rugby union," Investigating knowledge of concussion and rugby laws is justified as many thousands of young people participate in impact sports—particularly at the university level. Rugby unions are popular contact sports in universities. In amateur university-level sports, coaches typically have little to no education on concussion and rugby laws.

If there is a problem in the field, the next mistake, when the coach has to instruct the error, it is not easy to be immediately understood by the athlete because of several factors in the field conditions. The fatal thing that can happen is to miss an opportunity in vain. The second is when the attack pattern turns out to be a forward pass or knock-on or when the ruck is offside. These are minor mistakes that Indonesian players, even elite players, still make.

Errors like that if they occur continuously during the game, then it becomes a significant obstacle that needs to be followed up on increasing understanding in the game. So important is the athlete's understanding of the rules in the game of Rugby, and it has a massive influence

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on the team. Even though there was only one athlete who did not understand some of the game's rules, it greatly affected the quality of the team is playing, resulting in being careless in defense and weak in attack due to the influence of emotions within the team itself.

Every rugby athlete must have a good understanding of the rules to achieve optimal performance. To get an optimal understanding of the rules, we need to go through a proper and programmed training process. In addition, a rugby athlete must also maintain the safety of other players during the match by avoiding any violations. Because a good understanding makes it easier for athletes to learn relatively complex skills, complete the training program given by the coach without experiencing any difficulties or misunderstandings, and will not endanger other players from injury during training or matches.

Based on some of these studies, it is evident that understanding the game's rules is very important to avoid creating penalties injuries and benefiting opponents. So the researchers raised these problems in the preparation of the research entitled "Analysis of Knowledge Level Laws of the Game Rugby Union of Rugby Athletes PON XX Papua."

2. Methods

The type of this research is descriptive research. According to Morissan (2012), using the survey method, the advantages or advantages of survey research are "surveys can be used to examine a problem or research question in actual situations ."The data collection technique used true and false test questions. The questionnaire results will be analyzed using descriptive statistical techniques and expressed in the form of percentages to get an idea of knowledge level laws of the game rugby union of rugby athletes PON XX Papua.

2.1 Population

A population is a group of individuals with the same characteristic (Creswell, 2012). The population in this study were rugby athletes who participated in the PON XX Papua (7 Province). The women's team: Papua, DKI Jakarta, West Java, Aceh, Bali, Yogyakarta, the men's team: Papua, DKI Jakarta, Yogyakarta, West Java, Banten, and Aceh. Each team consists of 12 Athletes.

Table 1. Population

Womens	DKI Jakarta	West Java	Aceh	Yogyakarta	Bali	Papua
Mens	DKI Jakarta	West Java	Aceh	Yogyakarta	Bali	Papua

2.2 Sample

In this study, the researcher took the sample using simple random sampling because each member of the population had an equal chance of being selected. Creswell (2012) explains that a slight variation of the simple random sampling procedure uses systematic sampling. In this study, the researcher used simple random samples to take five athletes to become the subject of research from each team, so the total sample is 55. The function of simple random sampling is to choose individuals from the sample who will represent the population.

2.3 Instrument

This study used an instrument in the form of a written test with true and false choices containing statements about the game of Rugby Union. Sugiyono (2015) questionnaire is a data collection technique done by giving a set of written questions to respondents to answer. The instrument adopted the Laws of the Games Rugby Union exams by World Rugby obtained 35 valid items with a significant level of 5%, the value of rtable = 0.2441, and reliability of

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0.718. The subjects of this test trial were four teams that did not pass the PON selection, namely: East Kalimantan (male/female), Bali (male), Banten (female), and East Java (male/female).

2.4 Procedure

The data collection technique used in this study is a survey technique using a test question instrument containing questions about rugby laws. The test questions were given to 55 athletes, five from each team (province) participating in the PON XX Papua, obtained from random sampling results. The test questions use the Guttman scale, which contains accurate and false answers.

1. Validity Test
   A validity test is used to measure whether or not a questionnaire is valid. A questionnaire is said to be valid if the questionnaire can reveal something that the questionnaire will measure. This validity test uses the "Pearson Product Moment Correlation," and the calculation of this validity test uses the SPSS (Statistical Package for the Social Science) program.
2. Reliability Test
   Internal Consistency will carry out the reliability test of this instrument. Testing is done by trying out the instrument only once, then the data obtained is analyzed with specific techniques. The analysis results can be used to predict the instrument's reliability. Testing the instrument's reliability can be done with the technique of splitting in half from Spearman- Brown (Split half), KR. 20, KR. 21, and Anova Hoyt and the calculation of this reliability test using the SPSS 24 (Statistical Package for the Social Science) program.

2.5 Data Analysis

The data analysis technique used in this research is quantitative descriptive analysis with percentages. The analysis attempts to find answers to questions regarding the formulations and the things obtained in the research. Anas Sudijono (2012) explains the calculation formula for each item in the questionnaire to use the percentage obtained. Furthermore, the SPSS 24 (Statistical Package for the Social Science) program was used.

3. Results

The results of this study are intended to describe the level of knowledge laws of the game rugby union with a questionnaire in a total of 35 questions.

Table 2. PON Rugby Knowledge Level Result

Interval	Frequency	Presentation (%)	Category
28 – 25	7	12,73%	Very Good
24 – 21	22	40,00%	Good
20 – 17	24	43,64%	Average
16 – 13	2	3,64%	Low
12 – 9	0	0,00%	Very Low

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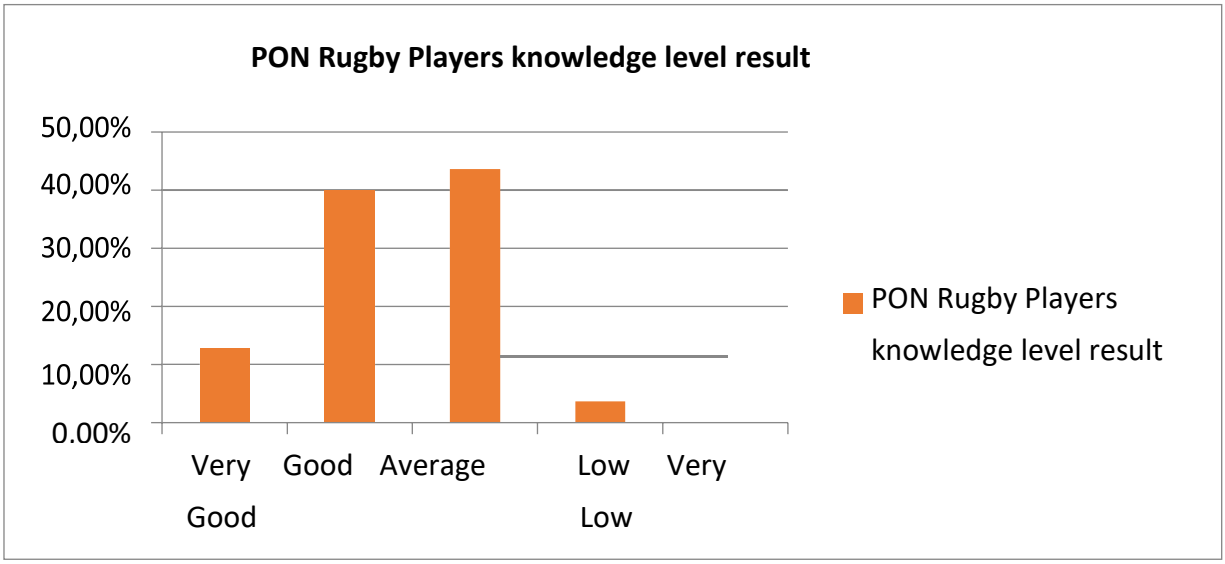
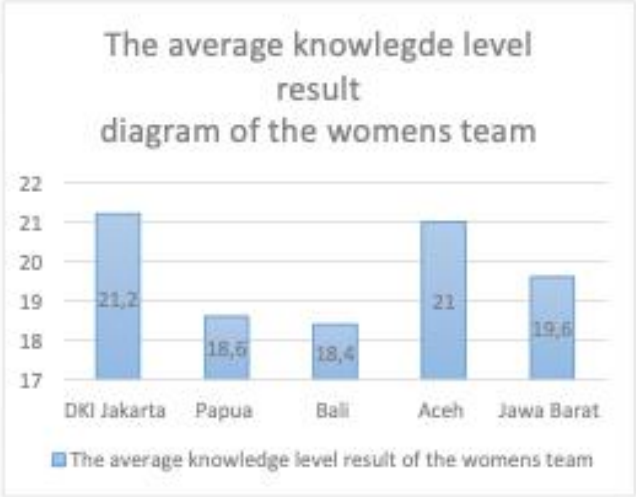


Graphic 1 PON Rugby Knowledge Level Result

Graphic 2 Men's teams



Graphic 3 Women's teams

Table 3. Men's team

No	Province	Mean
1	Papua	22,6
2	DKI Jakarta	24,6
3	Aceh	19
4	Jawa Barat	20,8
5	Banten	22

Table 4. Women's team

No	Province	Mean
1	DKI Jakarta	21,2
2	Papua	18,6
3	Bali	18,4
4	Aceh	21
5	Jawa Barat	19,6

4. Discussion

The results of the quantitative descriptive analysis show that the participants of PON XX Papua have a moderate level of rugby laws. The average value obtained is 43.64%. This survey

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shows that not all rugby teams in the province are aware of rugby laws. Every province should give special training on rugby laws theory and practical. In addition, a rugby athlete must also maintain the safety of other players during the match by avoiding any violations. Because a good understanding makes it easier for athletes to learn relatively complex skills, complete the training program given by the coach without experiencing any difficulties or misunderstandings, and will not endanger other players from injury during training or matches. The laws of Rugby (and most of the rules of other sports) are strict liability or absolute liability laws Jones et al., (2019).

The author has some difficulties, including translating the test instrument from English to Indonesian, analyzing the questionnaire items into percentages, and changing the terms in Rugby into Indonesian, which is easier for athletes to understand.

5. Conclusion

This study concludes that seven athletes (12.75%) have a very high level of knowledge, 22 athletes (40 0.00%) in the high category, 24 athletes (43.64%) in the moderate category, two athletes (3.64%) in the low category, and 0 athletes (0.00%) in the deficient category. Based on the research data results, it can be seen that the average knowledge level of PON Rugby athletes is 18.5. So it can be concluded that the level of knowledge of rugby laws of the game PON XX Papua participants is in the medium category (43.64%). The province with the highest level of knowledge for the men's team is DKI Jakarta, with an average score of 22.6, while the women's team also DKI Jakarta with an average score of 21.2.

6. Authors' Note

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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