

Psychological Characteristics of PON South Sumatra Athletes in Terms of Team Sports

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Abstract. This study aims to reveal: (1) the psychological characteristics of PON South Sumatra athletes in terms of team sports, (2) differences the psychological characteristics between male and female athletes in terms of team sports. This research approach was quantitative using survey method with research design a restrospective causal- comparative design. All subjects in the population were included in the study with a total of 56 athletes. Data collection techniques using The Psychological Skills Inventory for Sports (PSIS) questionnaire. Data analysis techniques using independent sample t-test with significance level 0.05. The results of this study showed that: (2) the psychological characteristics of PON South Sumatra athletes were reviewed from team sports in the Medium category with an average score of 42.5, (2) There were significant differences between male athletes and female athletes with a mean score of 127.15 for male athletes and 121.45 for female athletes. So it can be concluded that the psychological characteristics of PON South Sumatra athletes in terms of team sports were moderate category, and there were significant differences between the psychological characteristics of male and female athletes.

Key words: psychological; athletes PON south Sumatra; team sports.

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INTRODUCTION

Psychology is the study of mental or psychological processes. Sports psychology is the study of psychology related to sporting activities. The progress or achievement of sports, namely the development of health or body, will also have an impact on a person's mental condition. It can also be found that psychological conditions can also affect the process of achieving health or physical exercise. Both of these things affect the success of the sport.

The success or failure of athletes participating in high-achieving sports depends on the comprehensive influence of physical, tactical, technical and spiritual factors. Through this presentation, enthusiasm is one of the important factors that affect the performance of athletes. Coaches believe that if not less than 50% of success is determined by psychological factors (Weinberg & Gould, 2011).

To shape the psychological characteristics of athletes, coaches can apply psychological skills training. Psychological characteristics of athletes are psychological characteristics that will affect the success of athletes in sports consisting of motivation, self-confidence, anxiety control, the importance of the team, mental preparation, and concentration (Nopiyanto & Dimiyati, 2018). Each sport has fundamental differences in the

characteristics of each athlete's psychology. These differences can be from body movements, the rules used and the behavior of athletes arising from each sport that will form different characteristics (Herawati, 2014). Before applying psychological skills training, the coach must know the level of the psychological characteristics of the athletes he trains.

Many factors affect the achievements of south sumatra PON athletes, one of which is gender, where every athlete in a particular sport that is more specific will get a brilliant achievement. One of them is the research conducted by Nopiyanto and Alimuddin (2020), which examines the psychological characteristics of Indonesian Sea Games athletes in terms of gender in team sports and it is known that there are significant differences between male athletes and female athletes. However, until now no research has been found that discusses the psychological characteristics of south Sumatra PON athletes in terms of team sports.

METHOD

This research is a type of quantitative research. The method used is *causal comparative design* (Gay and Airasian, 2011), which is a study that aims to determine the differences in the psychological characteristics of South sumatra

PON athletes in terms of team sports. This study takes a population of athletes who will compete in PON Papua 2021, totaling 56 athletes, and the sampling technique used is *total sampling* so that the sample used is 56 athletes. The place of this research is in Palembang city. This data collection technique uses a questionnaire, *The Psychological skill inventory for sports (PSIS)*. The data analysis technique in this study used the help of *the Statistical Product and Service Solution software (SPSS) version 23.0*. Researchers formulate standards based on the average value and ideal standard deviation to determine the psychological characteristics of PON athletes, then group the data according to the following formula:

Table 1. Formulas of Characteristic Criteria for Psychological Skills

Interval	Category	Explanation
above (Mi + 1,8SD) up to (Mi+ 3SD)	ST (Very High)	Mi = Ideal Mean
above (Mi 0,6) up to (Mi + 1,8SD)	T (High)	Sdi = Ideal Standard De- viation
above (M-0,6SD) up to (Mi + 0,6SD)	S (Medium)	ST = The high-est score
above (Mi- 1,8SD) up to (Mi - 0,6SD)	R (Low)	SR = The low-est score
(Mi-3SD) up to (Mi-1,8SD)	SR (Very Low)	

RESULTS AND DISCUSSION

Results

This study was conducted in the city of Palembang in this study researchers examined 56 athletes registered as PON athletes who will compete in the 20th Papua PON which consists of 3 sports, volleyball, basketball, and football. Psychological characteristics of south sumatra PON athletes in terms of team sports in general can be seen in the following table:

Table 2. Psychological Characteristics of South Sumatra PON athletes in terms of Team Sports in General

No	category	Score	Frequency	Persentase
1	Very High	137.9 s.d 146.3	5	7.1
2	High	128.4 s.d. 136.8	19	38.1
3	Medium	118.9 s.d 127.3	21	42.5
4	Low	109.4 s.d 117.8	7	9.7
5	Very Low	100.0 s.d. 108.4	4	2.6
	Total		56	100

From table 2. it can be seen that the psychological characteristics of South sumatra PON athletes in terms of team sports generally

consist of 5 athletes belonging to the very high category, 19 athletes belonging to the high category, 21 athletes belonging to the very high category. moderate, 7 athletes included in the low category, 4 athlete included in the very low category. When viewed from the percentage, it can be seen that known that in general 7.1% of athletes are in the very high category, 38.1% of athletes are in the high category, 42,5% included in the moderate category, 9.7% athletes included in the low category, 2.6% included in the very low category. So it can be concluded that the psychological characteristics of South sumatra PON athletes in terms of team sports are generally in the moderate category. The results of each category can be seen in Figure 1 on a diagram of the psychological characteristics of south sumatra PON athletes in terms of team sports in general.

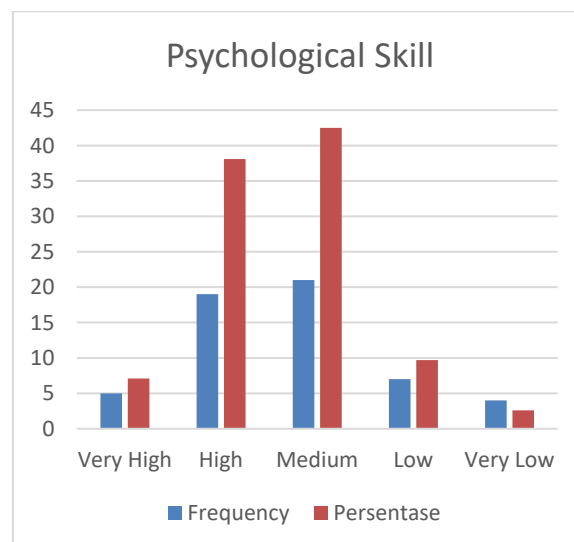


Figure 1. Psychological Skill Of BengkuluSouth Sumatra PON Athletes Viewed from Team Sports In General

Hypothesis Test Results

Hypothesis testing I aimed to find out whether there were significant differences in the psychological characteristics of South Sumatra PON athletes in terms of branch sports team sports between male athletes and female athletes . To test the hypothesis, a different test was conducted using the t test, the *Independent Sample t test*. The hypothesis of this research is that there are differences in the psychological characteristics of athletes in terms of team sports between male athletes and female athletes. Criteria: If sig. < 0.05 then Ho is rejected. So there is a significant difference between the groups being compared.

Tabel 3. Result of Group Statistics:

Group Statistics					
	Gander	N	Mean	Std. Deviation	Std. Error Mean
Characteristics	Male	30	127,15	7.597	1.589
Psychological	female	26	121,45	9.488	2.092

Based on the table above, it can be seen that the value of $t_{count} = 2.091$ with a $sig. = 0.041 < 0.05$ then H_0 is rejected. So it can be concluded that there is an average difference between the psychological characteristics of male athletes and the psychological characteristics of female athletes.

Discussion

1. Psychological Characteristics of South Sumatra PON Athletes in terms of team sports

a. Motivation

Based on the results of data analysis, it is known that the athlete's motivation in terms of individual sports is in the high category with an average value of 38.1. The results of this study are also supported by the results of previous studies which state that high motivation is needed by athletes and cannot be separated from athletes to achieve success (Anwar & Dimiyati, 2019). To be a successful athlete, very high motivation is needed, even motivation cannot be separated from individual sports because to achieve success in PON Papua requires high motivation.

b. Self Confidence

Based on the results of data analysis, it is known that the athlete's confidence in terms of team sports is in the moderate category with an average value of 59.5. One of the main capital and absolute requirements to achieve who excel in sports achievements are self-confidence (Husdarta 2010: 92). The results of this study are supported by the results of previous studies which state that there is a positive relationship between self-confidence and performance in sports. Research shows that outstanding athletes in terms of team sports such as archery must have good self-confidence (Bebetsos, 2015). In addition, self-confidence cannot be separated from team sports because to achieve success in PON Papua requires high self-confidence. As it is known that successful elite athletes have a high level of self-confidence (Dongoran et al, 2019).

c. Anxiety Control

Based on the results of data analysis, it is known that the athlete's anxiety control in terms of team sports is in the high category with an average value of 45.2. The results of research

conducted by Singh, Sunderlal, and Ranjit (2014) stated that individual sports (archery, cycling, table tennis, wrestling, fencing, athletics, weightlifting, judo, boxing and taekwondo) had higher levels of anxiety when compared to team sports (hockey, handball, kabaddi, soccer). - takraw and volleyball). The anxiety level of athletes in terms of individual sports is higher when compared to athletes in team sports (Bookani, Sadeghi, Alipour, Zarga and Aghdam 2015).

Based on the results of previous studies, it can be concluded that the level of anxiety in terms of individual sports is in the high category. For this reason, South Sumatra PON athletes in terms of team sports must have high anxiety control. Anxiety control cannot be separated from team sports because to achieve success in PON Papua, high anxiety control is needed.

d. Mental Preparation

Based on the results of data analysis, it is known that the mental preparation of athletes in terms of team sports is in the low category with an average value of 42.5. The results of this study indicate that South Sumatra PON athletes have made mental preparations that include cognitive, emotional, behavioral aspects and Psychological. Mental preparation is as important as physical and technical preparation (Harsono, 2015).

e. The Importance of Teams

Based on the results of data analysis, it is known that the "importance of the team" athletes in terms of team sports is in the moderate category with an average score of 50.0. Although team sports are carried out individually, to achieve success requires collaboration between athletes, coaches, sports psychologists. South sumatra PON athletes have good cooperation values so that they will prioritize common interests rather than personal interests. The results of a similar study also state the same thing that to get good performance, it is necessary to take steps that prioritize the interests of the team compared to individual interests (Nopiyanto, Dimiyati, & Dongoran, 2019).

f. Concentration

Based on the results of data analysis, it is known that the athlete's concentration in terms of team sports is in the high category with an average value of 31.0. The results of this study are in accordance with the theory which states that concentration is one of the psychological factors that affect the appearance of athletes. Concentration is very important role in sports because if it is disturbed it will cause problems.

The problem that most often arises due to impaired concentration is the reduced accuracy of throws, punches, kicks and shots so that they do not hit the target (Mardhika & Dimiyati, 2015). With concentration, these activities will run smoothly and as desired. And when concentration is disturbed, the accuracy of throwing, punches and shots will decrease so that things that should have accuracy in doing so fail because of the lack of concentration levels possessed by a person (Komarudin, 2015). All sports that are included in PON Papua require high concentration, so it is not surprising that the results of this study show that south sumatra PON athletes have high concentration.

2. Differences Psychological Characteristics Athlete in south sumatra Branch team sports Based on Gender

Based on the results of data analysis can be seen that the average value of male athlete of the branch individual sports of 7.597 and female athletes of 9.488 and $t_{count} = 2.091$ with a *sig.* of 0.041 $p < 0.05$ then H_0 is rejected. So it can be concluded that there are significant differences in the psychological characteristics of south sumatra PON athletes in terms of team sports based on gender. The results of this study are in accordance with previous studies which stated that there were significant differences in the psychological characteristics of male and female athletes in terms of team sports. Similar research was also stated by (Nopiyanto, 2020) which stated that there were significant differences between the psychological characteristics of male and female athletes. Deanar, Carter, Joyner, Hunter (2015) found that male athletes have a higher interest in competing and winning as a motive for achievement in sports while goal orientation is stated the same between female athletes and male athletes. However, based on other research conducted by (Nopiyanto, Raibowo, & Ugo, 2021) which examines the psychological characteristics of the south sumatra Province Student Education and Training Center (PPLP) athletes, it is known that there is no significant difference between male and female athletes, because athletes male and female athletes in PPLP have the same goal to get the best performance, there is no difference in psychological characteristics also because the subjects in this study are still teenagers and are students.

CONCLUSION

Based on the results of the research and discussion that have been described, it can be concluded that the psychological characteristics of south sumatra PON athletes in terms of team sports are mostly in the high category, consisting of aspects of motivation in the high category with a score of 38.1; self-confidence in the moderate category with a score of 59.5; anxiety control in the high category with a score of 45.2; mental preparation in the medium category with a score of 42.5; the importance of the team in the High category 50.0; and concentration in the medium category with a score of 42.5. There are significant differences in the psychological characteristics of South sumatra PON athletes in terms of team sports based on gender. The average value of male athletes from team sports is 127.15 and female athletes are 121.45.

REFERENCES

- Anagnostopoulos, V., Carter, & Weissbrod. (2015). Pre-Competition Anxiety and Self-Confidence in Collegiate Track and Field Athletes: A Comparison Between African American and Non-Hispanic Caucasian Men and Women. *The Sport Journal*.
- Bookani, A. N., Sadeghi, O., Alipour, K., Zarga, K., & Aghdam, B. L. (2015). Analyzing effects of anxiety and selfconfidence on athletic performance,“. *Indian Journal of Fundamental and Applied Life Sciences*, Retrieved from: <http://www.cibtech.org/sp.ed/jls/2015/01/41-JLS-S1-044-> (6). pdf. Accessed on, 9,.
- Deaner, R. O., Carter, R. E., Joyner, M. J., Hunter, S. K. (2015). Men are More Likely Than Women to Slow in The Marathon. *Medicine and Science in Sports and Exercise*, 47, 607–616.
- Dongoran, M., Nopiyanto, Y., Saputro, D., & Nugroho, A. (2019, November). Comparison of Psychological Skills of Pencak Silat and Boxing Athletes (Study on Indonesian Training Camp athletes). In *International Conference on Social Science 2019 (ICSS 2019)* (pp. 182-186). Atlantis Press.
- Effendi, H. (2016). Peranan psikologi olahraga dalam meningkatkan prestasi atlet. *NUSANTARA: Jurnal Ilmu Pengetahuan Sosial*, 1(1).
- Garratt, R. J., Weinberger, C., & Johnson, N. (2013). The state street mile: Age and gender differences in competition aversion in the field. *EconomicInquiry*, 51(1), 806-815.

- Husdarta, H. J. S. (2010). Psikologi olahraga. Bandung: Alfabeta.
- Jahja, Y. (2011). Psikologi perkembangan. Kencana.
- Maksum, A. (2011). Psikologi Olahraga Teori dan Aplikasi. Surabaya: Universitas Negeri Surabaya.
- Mardhika, R., & Dimiyati, D. (2015). Pengaruh Latihan Mental dan Keyakinan Diri Terhadap Keberhasilan Tendangan Penalti Pemain Sepak Bola. *Jurnal Keolahragaan*, 3(1), 106-116.
- McNamara, A., Button, A., & Collins, D. (2010). The role of psychological characteristics in facilitating the pathway to elite performance. *The Sport Psychologist*, 24, 52-73.
- Nopiyanto, Y. E., & Alimuddin, A. (2020). Perbedaan Karakteristik Mental Atlet Sea Games di Lihat dari Sisi Gender. *Sporta Saintika*, 5(1), 72-80.
- Nopiyanto, Y. E., & Dimiyati, D. (2018). Karakteristik psikologis atlet Sea Games Indonesia ditinjau dari jenis cabang olahraga dan jenis kelamin. *Jurnal Keolahragaan*, 6(1), 69-76.
- Nopiyanto, Y. E., Dimiyati, D., & Dongoran, F. (2019). Karakteristik Psikologis Atlet Sea Games Indonesia Ditinjau Dari Cabang Olahraga Tim. *Sporta Saintika*, 4(2), 27-46.
- Nopiyanto, Y. E., Raibowo, S., & Prabowo, G. U. (2021). Psychological Characteristics of Athletes at Student's Education and Training Center in Bengkulu. *Journal Sport Area*, 48-57.
- Olmedilla, A., Torres-Luque, G., García-Mas, A., Rubio, V. J., Ducoing, E., & Ortega, E. (2018). Psychological profiling of triathlon and road cycling athletes. *Frontiers in Psychology*, 9(JUL), 1-8. doi:10.3389/fpsyg.2018.00825
- Parnabas, V. (2015) Identifying the Gender Differences on the Level of Competitive state Anxiety and sport Performance Among Track and Field Athletes. *The International Journal of Indian Psychology*, 2.
- Razon, S., & Tenenbaum, G. (2007). Measurement in sport and exercise psychology. *Exploring Sport and Exercise Psychology* (3rd Ed.), (1995), 279-309. doi:10.1037/14251-013.
- Reilly, T., Williams, A. M., Nevill, A., & Franks, (2000). A multidisciplinary approach to talent identification in volleyball. *Journal of Sports Sciences*, 18(9), 695-702. doi:10.1080/02640410050120078.
- Sadeghi, H., Jamalis, M., Ab-Latif, R., & Chahrдах Cheric, M. (2010). The Mental Skills Training of University volleyball Players. *International Education Studies*, 3(2), 82-90. doi:10.1007/s10585-014-9650-9.
- Singh, S., Sunderlal, S., & Ranjit, S. (2014). Comparison of sports anxiety in three different stages between team and individual players. *IOSR Journal of Sports and Physical Education (IOSR-JSPE)*, 1, 4, 20-24. Retrived from: <http://www.iosrjournals.org/iosr-jspe/papers/vol1-issue4/E0142024.pdf>
- Simão de Freitas, Cláudia Dias, A. F. F. (2013). What do Coaches Think about Psychological Skills Training in volleyball? A Study with Coaches of Elite Portuguese Teams. *International Journal of Sports Science*, 3(3), 81-91. doi:10.5923/j.sports.20130303.04.
- Taylor, J., & Wilson, G. (2005). *Applying Sports Psychology: Four Perspectives*. Champaign, IL: Human Kinetics.
- Williams, A. M., Ford, P. R., Eccles, D.W. (2011). Perceptual-Cognitive Expertise in Sport and Its Acquisition: Implications for Applied Cognitive Psychology. *Applied Cognitive Psychology*, 25(3), 432-44