

**Psychological Skills Characteristics of Athletics, Weightlifting, Cycling, Swimming, and Waterskiing Athletes based on the Medal Achievements in the 2017 SEA Games****Ipa Sari Kardi**

Sekolah Tinggi Ilmu Kesehatan Aisyiyah Surakarta, Indonesia

Article Info*Article History :**Received August 2018**Revised October 2018**Accepted March 2019**Available online April 2019**Keywords :**Characteristics of psychological skills, achievements of sea games athletes***Abstrak**

Tujuan penelitian ini untuk menggambarkan karakteristik keterampilan psikologis atlet cabang olahraga atletik, angkat besi, balap sepeda, renang dan ski air ditinjau dari prestasi di *SEA Games* 2017 berdasarkan perolehan medali. Menggunakan jenis penelitian kuantitatif dengan metode *ex post facto* dengan desain penelitian yaitu a *retrospective causal-comparative design*. Sampel penelitian berjumlah 36 atlet dari lima cabang olahraga yang memperoleh medali baik emas, perak dan perunggu. Variabel dalam penelitian ini yaitu karakteristik psikologis yang meliputi, aspek motivasi, percaya diri, kontrol kecemasan, persiapan mental, pentingnya tim, dan konsentrasi. Pengumpulan data menggunakan instrumen *The Psychological Skills Inventory for Sports*. Hasil penelitian menunjukkan bahwa atlet cabang olahraga atletik memiliki karakteristik keterampilan psikologis lebih tinggi dari cabang olahraga lainnya dengan perolehan tiga medali emas. Sedangkan atlet cabang olahraga balap sepeda memiliki karakteristik keterampilan psikologis lebih rendah dari cabang olahraga lainnya dengan maksimal memperoleh dua medali perak.

Abstract

The purpose of this study was to describe the mental skill characteristics of athletics, weightlifting, cycling, swimming, and waterskiing athletes based on medal achievements in the 2017 SEA Games. The study was a quantitative research with an ex-post facto method with retrospective causal-comparative design. The sample of the study were 36 athletes from five sports who gained gold, silver, and bronze medals. The variables of this study were psychological characteristics including the aspects of motivation, confidence, anxiety control, mental preparation, team emphasis, and concentration. Data collection used The Psychological Skills Inventory for Sports as the instrument. The results of the study show that athletes in athletic sports, who received three gold medals, had higher psychological skill characteristics than other sports. Meanwhile, athletes in cycling sports had lower mental skills than other sports, with a maximum gain of two silver medals.

INTRODUCTION

It is what is in the spotlight now is Indonesia's sporting achievements at the SEA Games. Things like those in sports become more complex, which can do, can be done to go in a more alarming direction. Three main challenges must be considered in games, to improve Indonesian skills, make sports an instrument of development, and decentralise sports development (Kristiyanto, 2012). At present, it cannot deny that sport has become a public concern, not only from sports society but the attention to sports began to emerge from the bureaucracy, politics, business people, intellectuals and even the general public. It happens because sports cover many things in various fields of life. Games as a global phenomenon related to all aspects of life such as politics, economics, religion, social, education and culture play an important role in solving the problems of life and life (Husdarta, 2011).

Sports achievements have been explained in Law no. 3 of 2005 article 1 paragraph (13) that, sports achievement is a sport that fosters and develops sportsmen in a planned, tiered, and sustainable manner through competitions to achieve success with the support of sports science and technology (Undang-undang Republik Indonesia, 2005). Sports performance is a very complex action that depends on many factors. Various studies prove that for achievement in sports, one of them is determined by the support of science and technology (science and technology), because success is a parameter of the progress of sports development in a country.

Sportsman is a complex total psychophysical system (Sukadiyanto, 2005). That is, humans are composed of elements of the soul and body, and then sports achievement is the actualisation of the accumulation of a combination of training results, physical and psychological potential. He further explained that physical factors, techniques, tactics and psychological aspects play a crucial role in supporting sports achievement, in other words, the accomplishment of performance in the field of sports is an accumulative result of various elements that help the realisation of success. An elite athlete is a rare combination of talent, hard work and the right psychological profile (Widohardhono, 2014). In simple terms, it can be interpreted that elite athletes are a rare combination of talent, hard work and the right psychological profile.

Based on the history and available data, Indonesia's achievements in the SEA Games are quite good, when compared to several other ASEAN member countries. It found on data that Indonesia has participated in the SEA Games 21 times and won the overall ten times throughout its participation. But gradually, Indonesia's achievements in the SEA Games suffered a decline. Even the last few years, namely in the 2015 XXVII SEA Games in Singapore, Indonesia was only able to finish in the fifth position, this made Indonesia failed to meet the government's target, in this case, was Kemenpora. Even so, the results of the 2017 SEA Games in Malaysia Indonesia can only finish in the fifth position with 38 gold medals. It must use as an evaluation of why achievements in the SEA Games tend to decrease.

The cause of the low achievement of athletes is not single, but rather multifactorial, even so, I argue that cultural factors that are core to mental attitudes, habits, and behaviour are fundamental issues (Maksum, 2007). Therefore, a review of all the factors causing the decline in achievement must be carried out comprehensively, transparently and objectively, through this in-depth study, meaningful feedback will be generating for the improvement of national sports guidance to the next SEA Games.

Various studies prove that success in sports is determined by, among other things, the support of science and technology. One of the help of science and technology in supporting athletes' achievements is through a psychological approach. Sport and exercise psychology is the scientific study of people and their behaviours in sport and exercise activities and the practical application of that knowledge (Weinberg & Gould, 2011). Sports psychology is a field of psychology in sports settings to boost the quality of the athlete's personality and individual performance, characterized by some interactions with other individuals and external situations that stimulate it.

The psychological characteristics of athletes are the main elements of mental aspects that must be known and considered as the basis for the appearance of achieving the top achievements in various events, including the SEA Games. Sports coaches and coaches in Indonesia need to be aware of the importance of these mental aspects in achievement sports coaching.

Therefore psychic training for athletes needs to be prepared for a long period as well as physical training, techniques and tactics. Hopefully this can improve the athlete's performance.

Psychological factors are one thing that needs to be prepared carefully. As with physical skills, psychological skills such as maintaining and focusing attention, setting arousal levels, increasing confidence, and maintaining the motivation of athletes also need to be systematically trained (Weinberg & Gould, 2011). Nine mental skills that contribute to sports success: (1) Choose and maintain a positive attitude, (2) Maintain a high level of self-motivation, (3) Set high, realistic goals, (4) Deal effectively with people, (5) Use positive self-talk, (6) Use positive mental imagery, (7) Manage anxiety effectively, (8) Manage their emotions effectively, (9) Maintain concentration (Lesyk, 2007).

An athlete needs an excellent psychological condition because by having a good mental state most likely an athlete will have psychological rigidity in each competition or championship. Among the psychological characteristics of elite athletes are, commitment, internal motivation, learning capability, control, competitiveness, self-confidence, adaptability and mental toughness, (Eklund dan Tenenbaum, 2014). Further explained that Psychological profile appears to be correlated to the peak performance for most athletes. More specifically, this ideal mind/body state consists of the following: (1) feelings of high self-confidence and expectations of success, (2) being energized yet relaxed, (3) feeling in control, (4) being concentrated entirely, (5) having a keen focus on the present task, (6) having positive attitudes and thoughts about performance, and (7) being strongly determined and committed.

The mental state typically associated with poorer performances in sport seems to be marked by feelings of self-doubt, lacking concentration, being distracted, being overly focused on the competition outcome or score, and feeling over or under-aroused (Harmison, 2011). Besides elite athletes repeatedly have to perform under high pressure, and therefore it is not surprising that psychological characteristics become their successful differentiator at the highest standards of their less successful counterparts (Elferink Gemser, M.T., Visscher, C., and Lemmink, 2005).

Various studies have shown the relationship and influence of psychological training programs to im-

prove the psychological skills of athletes in helping athletes achieve optimal performance. The elite sports environment is not only viewed as the pinnacle arena for sports performers and their coaches, but also by those involved in the sports science support network who work closely with elite athletes in the build-up, preparation, and during these sports competitions (Sharp, Hodge, & Danish, 2014). It further explained that recent research reports the perception of the effectiveness of consultation as the ability to build relationships with athletes to create positive behavioural changes, in consultation relationships that meet the needs of athletes. Substantial progress has been made in recent years in identifying the characteristics and qualities needed for effective sports psychology consultation from the perspective of athletes, teams and coaches.

Based on this explanation the psychological aspects contribute to supporting the achievements of athletes who need to work together with the team and also the coach. It illustrates that all elements are essential to be trained and developed in preparation for sports events including psychological aspects of athletes. Athletics, swimming, cycling, waterskiing and weightlifting numbers have the characteristic that the athlete does not deal directly with his opponent; the hardest opponent for athletes who pursue the branch is himself. These sports have a strategic value in sports coaching, especially in multi-game events, because they compete for a lot of medals with a relatively small number of athletes and can hold various match numbers, (Ria Lumintuarso, 2008). Besides that, an accurate analysis system because of its objective nature and cannot be manipulated through the subjectivity of race officials. Another unique thing is the limit that has been determined whether it's time, distance, or load. So that athletes try to reach or even exceed the limits set by each sport.

Based on this, the purpose of this study is to describe the Psychological Skill Characteristics of Athletics, Weightlifting, Cycling, Swimming and Waterskiing Athletes Judging from the Achievement of the 2017 SEA Games Medal. Characteristics of psychological skills referred to in this paper are motivation, confidence, anxiety control mental preparation, team emphasis and concentration. The six psychological aspects will be revealed using instruments The Psychological Skills Inventory for Sport.

METHOD

This research uses descriptive quantitative research method with an ex-post facto method with the research design that is a retrospective causal-comparative design. Used to describe the characteristics of athlete's psychological skills based on the achievements of the SEA Games 2017 regarding gold, silver and bronze medals. The population in this study were Indonesian athletes who participated in the 2017 SEA Games in Malaysia which were determined purposively namely athletes in athletics, weightlifting, cycling (track and road race), swimming and waterskiing. Sampling uses non-probability sampling with quota sampling technique. Quota sampling used because conditions in the field do not allow to collect all athletes' data so that only the athletes that can be found are collected, and only athletes get gold, silver and bronze medals. The athletes as the sample of this study were aged between 17 - 34 years with a total of 23 male athletes and 13 female athletes, bringing the total sample to 36 athletes.

Tabel 1. Samples

No	Sports	Athlete
1	Weightlifting	2
2	Athletics	9
3	Cycling	10
4	Swimming	5
5	Waterskiing	10
	Total	36

Tabel 2. Instrument The Psychological Skills Inventory for Sports

Variable	Dimensions	items
Psychological characteristics	Motivation	8
	Confidence	7
	Anxiety Control	7
	Mental Preparation	6
	Team Emphasis	4
	Concentration	6
Total		38

Data collection techniques using an instrument in the form of a questionnaire adapted from "The Psychological Skills Inventory for Sports" (Mahoney, Gabriel & Perkin, 1987) which revealed six aspects of psychological skills with 44 questions, after validation and empirical tests obtained 38 valid statement items. Data on the psychological characteristics of athletes collected in February - April 2017 when the National Training Program (Pelatnas) held before departing to compete in the 2017 SEA Games in Malaysia. While the medal acquisition obtained from secondary data, namely the results of the SEA Games 2017. Data analysis used descriptive statistical analysis.

RESULT

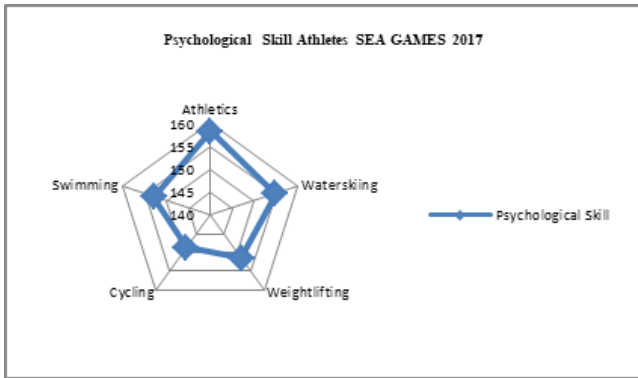
Psychological Skills Characteristics

Based on data analysis obtained the characteristics of the athlete's mental skills as follows :

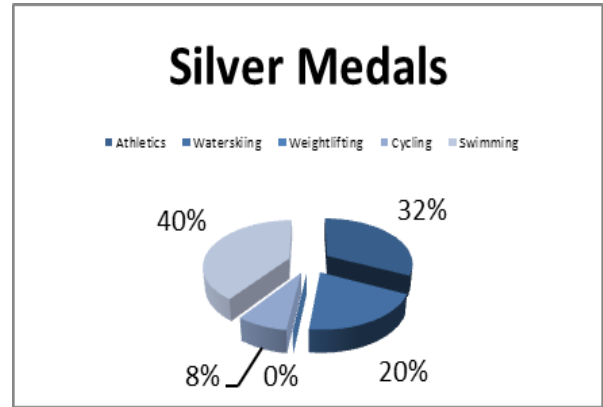
Tabel 3. Characteristics Pshycological

Sports	Psychological Skill	Score
Athletics	High	158.2
Waterskiing	High	154.8
Weightlifting	High	151.5
Cycling	High	148.8
Swimming	High	153

It is clear that a radar diagram is used to see the difference in scores for each sport. Based on the data concluded that athletes athletic athletes have higher psychological skills characteristics, while athletes sporting bicycle racing have the attributes of lower mental skills. Generally, SEA games athletes have good psychological characteristics, but from the six psychological aspects studied, they are motivation, confidence, anxiety control, mental preparation, team importance and concentration. Athletes in bicycle racing sports have lower scores than other games. Therefore, it is necessary to pay attention to the psychological aspects needed by athletes in every game, especially for athletes in cycling (track and road race).



Picture 1. Characteristics Psychological Skill Athletes SEA Games 2017

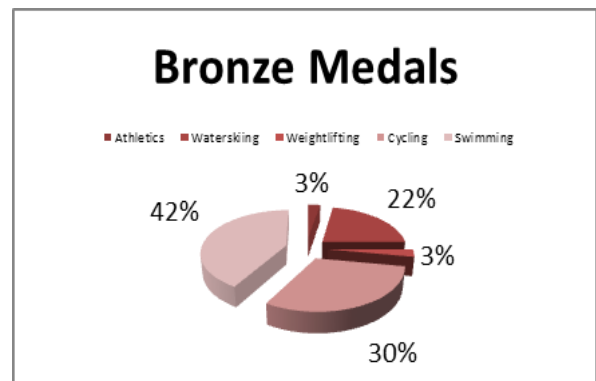


Picture 2. Silver Medals

Acquisition of 2017 SEA Games Athlete Medals

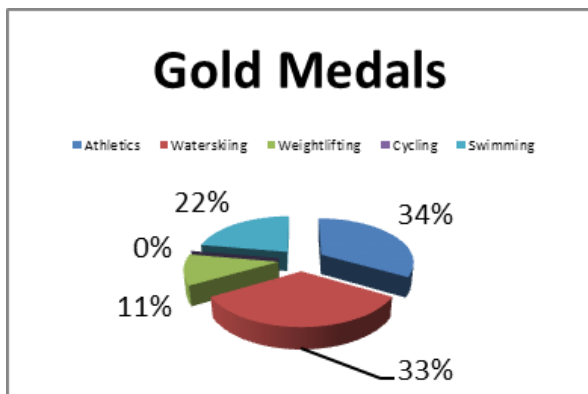
Tabel 4. Acquisition of 2017 SEA Games

Sports	Gold	Silver	Bronze	Total
Athletics	3	8	1	12
Waterskiing	3	5	8	16
Weightlifting	1	0	1	2
Cycling	0	2	11	13
Swimming	2	10	15	27



Picture 3. Bronze Medals

Medal acquisition is one of the benchmarks for achieving an exercise program that has been prepared to face an event such as the SEA Games. Based on data from the Indonesian athletes' medal in the 2017 SEA Games, the number of sports branches did not reach the predetermined target. In detail, pie charts are used to describe medal gains in athletics, cycling (track and road race), weightlifting, waterskiing and swimming.



Picture 2. Gold Medals

DISCUSSION

Talking about the psychological aspects of achievement motivation possessed by a person, especially an athlete has been revealed by sports psychologists. Achievement motivation is a desire that exists in a person who encourages the person to try to achieve a standard or measure of excellence (Rohmah, Kawuryan, & Ahyani, 2016).

Based on the data obtained by all athletes who won medals in the SEA Games 2017, they have very high psychological skills. It illustrates that a professional athlete needs prime motivation to reach the peak of achievement. Research has revealed that motivation can influence the choice of activity, perseverance, effort in training and competition, and quality of performance (Britton W. Brewer, 2009). Coaches identified administration, athlete motivation, colleagues, parents, professional development, time, and work-life as having the largest impact on them. In Study 2, 424 coaches report-

ed on their perceptions of the factors identified in Study 1 and their psychological needs, motivation, and interpersonal behaviors (Rocchi & Pelletier, 2017).

From the results of this study, athletes in swimming and athletic sports have a high level of motivation, followed by weightlifting, waterskiing and bicycle racing. Self-confidence means a sense of trust in your ability or ability to achieve specific achievements (Husdarta, 2011). Confidence can be considered as a soul changer because belief appears to change how athletes feel, respond, and think about everything that happens to athletes in sports (Britton W. Brewer, 2009). Other than that Athletes know two things about confidence, one, faith makes them feel bulletproof, and two, athletes also know that trust is fragile (Hanrahan & Andersen, 2010).

Based on the results of the research and the opinions of experts, it can conclude that self-confidence is one of the essential aspects that athletes need in supporting their performance both during training and during the race. From the results of the research, athletes from athletic sports have a very high category of confidence, followed by top classes in water skiing, weightlifting, swimming, and bicycle racing.

Anxiety is a negative emotion that can interfere with the performance of athletes in sports. But at a certain degree of concern, it can help athletes be more vigilant and able to support their achievements and must consider the nature of individuality because every individual is different and every branch of sport is separate. Anxiety is defined as a negative emotional state (feeling fearful and uncomfortable, experiencing dread) characterized by nervousness, worry, and apprehension and associated with activation or arousal of the body (Hanrahan & Andersen, 2010). The sports arena, whether in the preparation or competition phase, anxiety will always be present and painful and even unavoidable, however, it is possible to be regulated in minimizing the exposure to stress in athletes. Based on the results of the research, anxiety control athletes are in the high category in each sport with the sequence of athletics, swimming, weightlifting cycling and waterskiing.

Mental preparation is a person's mental state where the sources of his soul ability are the reason, will and emotion are ready to do the task according to his ability. Mental readiness is an extraordinarily important factor that influences the appearance of athletes

(Gunarsa, 2008). The results showed that doing mental preparation did affect the performance of athletes in sports, when compared to athletes who did not mentally prepare, however, there was no consistent mental preparation technique favored (Britton W. Brewer, 2009). Facing the match athletes must have mental readiness in addition to physical and technical readiness, and tactics. Poor mental preparedness will result in athletes not being able to bear the psychological burden that they should be able to carry.

Based on the results of the research the mental preparation of athletes is in the high category, but there is a gradation that shows the difference in scores with the sequence of waterskiing, athletics, swimming, cycling, and weightlifting. Every athlete is a member of a particular sports association, who regularly conducts training and match activities. It is in this team that each athlete gains experiences in both sports knowledge and skills. The effectiveness of a team depends on two things, namely, the skills of its members and the ability of the leader to facilitate the process (Setiadi & Passaribu, 2005). Although sports such as weightlifting, waterskiing, swimming, cycling, and athletics are dominant on an individual basis, some numbers prevent athletes from working together on teams, such as relay running.

Based on the results of the research, the team emphasis is in the high category with the sequence of waterskiing, athletics, cycling, weightlifting, and swimming. Concentration is such an important aspect of sports, not only during matches but also during training (Satiadarma, 2000). Agree with state about Without question, at the top level, concentration is a big part of a player's game, whether they're a keeper or outfield (Hanrahan & Andersen, 2010). Concentration is the ability to maintain focus on relevant environmental cues (Weinberg & Gould, 2011).

Based on the results of a concentration study of athletes in cycling sports are in the very high category. While other games are in the top category with the order of swimming, athletics, weightlifting, and waterskiing. Based on the results of the research on the psychological skills characteristics of athletes affect the medal gain in the 2017 SEA Games, despite the many factors that influence the achievement of athletes, the mental aspect is one of the things that need to be considered. The gold medal in the cycling sport is targeted

to miss the estimates set by the coach and coach. It correlates with aspects of motivation and self-confidence that need to be improved.

CONCLUSION

Every sport has advantages in different psychological aspects. The Athletes are in cycling sports lack in the elements of motivation and confidence. Water skiing athletes lack in aspects of anxiety control and concentration. Athletes in weightlifting sports are lacking in the issues of mental preparation and swimming athletes requiring in the team emphasis. Based on the results of the study concluded that the psychological aspects are fundamental to support athletic achievement in addition to physical exercise, techniques, and tactics. The results showed that athletic sports had higher mental skills characteristics than other games, and the sport of cycling had attributes of lower psychological skills than other sports.

REFERENCES

- Britton W. Brewer. (2009). Handbook of Sports Medicine and Science Sport Psychology. Handbook of Sports Medicine and Science Sport Psychology. <https://doi.org/10.1002/9780470757116>
- Elferink Gemser, M.T., Visscher, C., and Lemmink, K. A. P. M. (2005). Chapter VI Psychological characteristics of talented youth athletes in field hockey, basketball, volleyball, speed skating, and swimming, 87–101.
- Gunarsa, S. D. (2004). Psikologi olahraga prestasi. Jakarta: PT BPK Gunung Mulya
- Hanrahan, S. J., & Andersen, M. B. (2010). Routledge Handbook of Applied Sport Psychology A comprehensive guide for students and practitioners Publication details David Tod Published online on: 13 Oct 2010 How to cite: - David Tod . 13 Oct 2010, Training and professional development in applied. <https://doi.org/10.4324/9780203851043.ch3>
- Harmison, R. J. (2011). Peak performance in sport: Identifying ideal performance states and developing athletes' psychological skills. *Sport, Exercise, and Performance Psychology*, 1, 3–18. <https://doi.org/10.1037/2157-3905.1.S.3>
- Husdarta. (2011). Sejarah dan Filsafat Olahraga. Bandung: Alfabeta.
- Kristiyanto, A. (2012). Pembangunan olahraga: Untuk kesejahteraan rakyat & kejayaan bangsa. Surakarta: Yuma Pustaka.
- Lesyk, J. (2007). The nine mental skill of a successful athletes. Diakses pada tanggal 21 April 2016, dari <http://www.podiumsportsjournal.com>.
- Maksum, A. (2007). Kualitas Pribadi Atlet: Kunci Keberhasilan Meraih Prestasi Tinggi. *Anima, Indonesian Psychological Journal*, 22(2), 108–115.
- Ria Lumintuarso. (2008). TOT Parameter Tes Cabang Olahraga Atletik, (November), 1–9.
- Rocchi, M., & Pelletier, L. G. (2017). The antecedents of coaches' interpersonal behaviors: The role of the coaching context, coaches' psychological needs, and coaches' motivation. *Journal of sport and exercise psychology*, 39(5), 366–378.
- Rohmah, M. H., Kawuryan, F., & Ahyani, L. N. (2016). Hubungan antara secure attachment dan kecerdasan adversitas dengan motivasi berprestasi pada siswa single parent. *Universitas Muria Kudus*, 97–110.
- Satiadarma, M. P. (2000). Dasar-dasar psikologi olahraga. Jakarta: Pustaka Sinar Harapan
- Sukadiyanto. (2006). Perbedaan reaksi emosional antara olahragawan body contact dan non body contact. *Jurnal psikologi Universitas Gadjah Mada*, 33, 50–62. Diakses pada tanggal 21 April 2016, dari <http://jurnal.ugm.ac.id/jpsi>.
- Setiadi, M. W. R. & Passaribu, M. (2005). Dinamika kelompok. Universitas Indonesia: Program Doktor Strategic Management. Diakses pada tanggal 23 Maret 2016, dari <http://dinamika-kelompok-r3.pdf>.
- Sharp, L. A., Hodge, K., & Danish, S. (2014). Sport psychology consulting at elite sport competitions. *Sport, Exercise, and Performance Psychology*, 3(2), 75–88. <https://doi.org/10.1037/spy0000011>
- Undang-undang Republik Indonesia. (2005), (1), 1–52.
- Weinberg, R. S., & Gould, D. (2011). Foundations of Sport and Exercise Psychology Fifth Edition. Foundations of Sport and Exercise Psychology Fifth Edition.
- Widohardhono, R. (2014). Psychological Capital Profile of Student Athletes in Senior High School of Sport (p. 348).