



Mental Toughness Profile Of Adult Badminton Athletes In The Training Phase

Gina Denisa Maharani^{1A-E*}, Komarudin^{2B-D}, Mochamad Yamin Saputra^{3B-D}, Geraldi Novian^{4B-D}

^{1,2,3}Study Program of Sport Coaching Education, Faculty of Sport and Health Education, Universitas Pendidikan Indonesia, Bandung, Indonesia

⁴Study Program of Sport Physical Coaching, Faculty of Sport and Health Education, Universitas Pendidikan Indonesia, Bandung, Indonesia

ginadenisa20@upi.edu^{1*}, komarudin_pko@upi.edu², mochyamins@upi.edu³, geraldi.novian@upi.edu⁴

ABSTRACT

Badminton athletes often lack psychological training, so this causes several problems such as mental toughness. To overcome this problem, mental toughness is proposed as a solution. The purpose of this study was to determine the mental toughness of adult badminton athletes in the training phase. The method used in this research is a descriptive method with a quantitative approach. The research instrument used is the Mental Toughness Inventory (MTI). The samples involved in this study were 12 badminton athletes. The results of data analysis show that adult badminton athletes have good mental toughness, whereas male athletes have better mental toughness abilities than female athletes.

ARTICLE HISTORY

Received: 2024/05/28

Accepted: 2024/06/05

Published: 2024/06/21

KEYWORDS

Toughness;
Mental;
Athlete;
Badminton;
Training.

AUTHORS' CONTRIBUTION

- Conception and design of the study;
- Acquisition of data;
- Analysis and interpretation of data;
- Manuscript preparation;
- Obtaining funding

Cites this Article : Maharani, Gina Denisa; Komarudin, Komarudin; Saputra³, Mochamad Yamin; Novian, Geraldi. (2024). Mental Toughness Profile Of Adult Badminton Athletes In The Training Phase. **Competitor: Jurnal Pendidikan Kepeleatihan Olahraga**. 16 (2), pp. 403-409

INTRODUCTION

Mental skills are a very important factor because mental health is one of the variables predicting an athlete's success in living their life (Komarudin, 2018). Mental toughness is an important aspect in the world of sports, and sometimes even determines an athlete's success, especially in the sport of badminton which requires high concentration in the face of pressure. However, unfortunately, in the current era, mental toughness is still often forgotten by coaches in the training phase, not only to improve physical and technical skills but to shape their mental toughness (Komarudin, 2016). Many coaches do not think about the mental toughness of their athletes, which means that athletes will not be able to remain focused in facing the pressure they experience when competing. Most coaches do not believe that they have the skills and background required to build mental toughness and therefore many (especially at the elite level)



turn to sports psychologists to develop their mental toughness programs (Weinberg et al., 2018). In this context, the author highlights the mental toughness of badminton athletes. Athletes tend to give up easily when they are in a down state, which ultimately results in athletes not having high motivation to achieve their goals. The reason is that not all athletes have the same mental toughness. Mental toughness is considered multi-dimensional (comprising cognitive, affective, and behavioural components) and is an important psychological construct associated with successful sports performance (Mahoney et al., 2014). In the context of this research, the author highlights the leadership style of coaches in the sport of soccer, where the style used tends to vary from one coach to another. Several coach leadership styles are often used, such as authoritarian, democratic, people-centred, task-oriented, easygoing, business-like, and others (Harsono, 2017). The coach's leadership style is interpreted as a way or style used by the coach in handling athletes, either in the training or competition process (Kim & Cruz, 2016). Therefore, there is no one coach's leadership style that is considered good or bad, because the coach's leadership style can be influenced by various things, such as the coach's personality, the characteristics of the sport being handled, the situation and conditions of training, and others (Komarudin, 2016). This is in line with previous research which revealed that the coach's leadership style has a relationship with higher levels of motivation and sports performance, increased skill development and acquisition, improved welfare, increased performance, and increased motivation, satisfaction, decreased aggression, increased task/team cohesion and increased willingness to make personal sacrifices for the good of the team (Ekstrand et al., 2017).

Every athlete is required to have a good mentality in dealing with what they will face when competing. Mental toughness can make an athlete remain relaxed, calm, and enthusiastic because it can develop two skills, namely channelling positive energy such as perceiving to eliminate difficulties and thinking to behave or ignore problems, pressure, mistakes, and competition in a competition (Sholicha & W, 2020). In most achievement situations, mental toughness is usually cited as a defining attribute that allows a person to thrive in demanding situations (Gucciardi et al., 2015). In this case, mental toughness is very important for the athlete's growth and development process so that athletes can be more focused and calm in making decisions. Mental toughness also helps athletes to survive and stay focused when competing. In fact, in the field athletes will be faced with various situations that test their mental toughness, such as tight matches, long rally points, pressure from the audience, and the expectations of their coaches, and not all athletes can stay focused when competing if their mental toughness is never strong. trained. Moreover, athletes whose mental toughness is not good, such as immediately going down when competing against opponents from well-known clubs, have bigger body posters and are superior in their clubs. Athletes who do not have good concentration and this has an impact on their performance which will decline drastically are athletes who are unable to manage the various pressures that befall them (Aguss & Yuliandra, 2021)

In this context, the author reviews how important mental toughness is for adult badminton athletes in the training phase. This mental toughness is closely related to the athlete's ability to overcome various pressures that the athlete will face so that the athlete remains focused on maintaining high performance even in difficult situations. Mental toughness is a popular and

highly valued concept, especially in contexts (e.g., business, education, medicine, military) where high performance supports innovation, success, and competitive advantage (Gucciardi et al., 2015). Some authors even state that mental toughness is fundamental to success in life (Dari et al., 2014). Maheswari(Nisa & Jannah, 2021) explains that mental toughness itself is a positive attitude that individuals have to be able to overcome obstacles and challenges to achieve the goals they want to achieve. Mental toughness can also help them to manage stress, maintain calm, and again focus on the athlete's main goals. Athletes who have good mental toughness tend to be more persistent, don't give up easily, and are more enthusiastic about achieving their goals. Therefore, coaches can design more effective training programs to increase athletes' mental toughness, so that coaches can evaluate athletes' mental readiness and develop more targeted training programs.

Mental toughness has been linked to collective processes that enable individuals to pursue goals with effort and persistence, overcome challenges in achieving goals, and experience positive and adaptive experiences throughout their encounters (Dari et al., 2014). Mental toughness is defined as struggle as the efforts made by individuals to achieve achievement tasks (Swann & Perry, 2015). We believe that the concepts of striving, surviving, and thriving, despite varying conceptual spaces, are largely distinguishable from one another.

METHODS

The research method used is a descriptive method with a quantitative approach (Lindawati, 2016). The sample involved in this research was 12 badminton athletes, and students at the Indonesian University of Education, aged 18-20 years. The sample is athletes who are actively training and preparing for open competitions. The research instrument used was the Mental Toughness Inventory (MTI) (Tibbert, 2013) which is a questionnaire to measure athletes' mental toughness. The MTI consists of 36 items on a scale of 1-8 ranging from "not like me" to "like me". Data analysis was carried out by presenting the percentage of results

RESULTS AND DISCUSSION

Results

Table 1.
Sample Demographic Data

Gender	N	Mean	Std. Deviation
Overall	12	21.25	1.712
Man	5	21.4	2.191
Female	7	21.14	1.464

Based on **Table 1**, it can be seen that the total sample size is 12 athletes, consisting of 5 men and 7 women. Overall, the sample had a mean age of 21.25 with a standard deviation of 1,712 years. If we look at gender, male athletes have an average age of 21.4 with a standard deviation of 2,191 years, while female athletes have an average age of

21.14 with a standard deviation of 1,464 years. Next, the author presents a statistical description, which can be seen in Table 2.

Table 2.
 Statistical Descriptive

Variable	Gender	Min.	Max.	Sum	Mean	Std. Deviation
Mental Toughness	Overall	175	277	2888	240.67	27.499
	Man	214	277	1215	243	23.098
	Female	175	273	1673	239	31.984

Based on **Table 2**, it can be seen that overall the lowest value is 175, the highest value is 277, the total value is 2888, the average value is 240.67, and the standard deviation is 27,499. If we look at gender, male athletes have the lowest score of 214, the highest score is 277, the total score is 1215, the average score is 243, and the standard deviation is 27,499, while female athlete has the lowest score of 175, the highest score is 273, the total value is 1673, the average value is 239, and the standard deviation is 31,984. Next, the author presents the percentage of mental toughness of male athletes, which can be seen in Image 1.

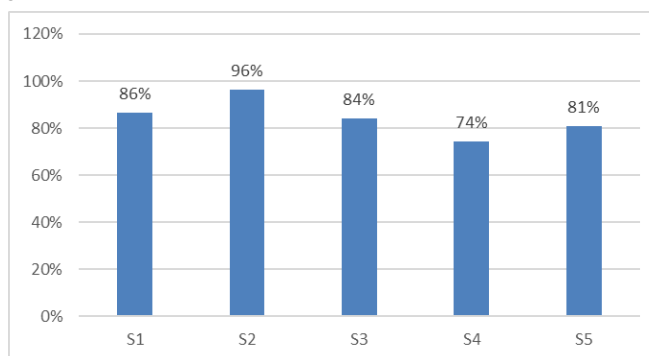


Image 1.

Percentage of Mental Toughness of Male Adult Badminton Athletes

Based on **Image 1**, it can be seen that male athletes have the highest percentage of mental toughness at 96% and the lowest at 74%. Next, the author presents the percentage of mental toughness of male athletes, which can be seen in **Image 2**.

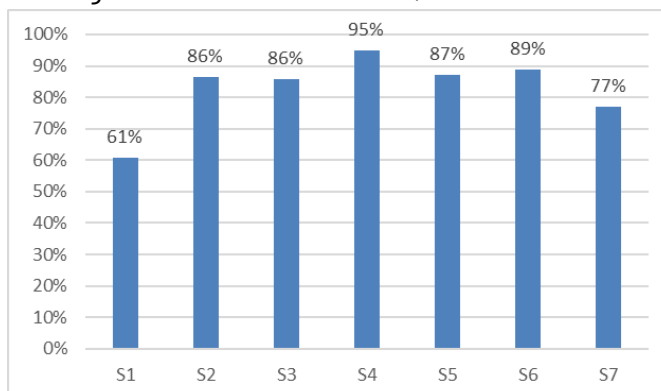


Image 2.

Percentage of mental toughness of male athletes

Based on **Image 1**, it can be seen that male athletes have the highest percentage of mental toughness at 95% and the lowest at 61%. Next, the author presents the percentage of mental toughness of male athletes, which can be seen in **Image 3**.

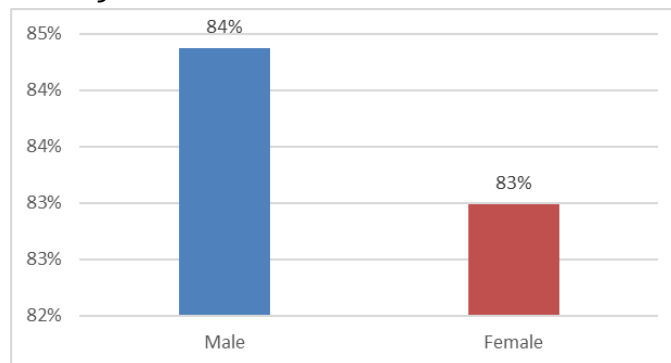


Image 3.

Comparison of the Percentage of Mental Toughness of Male and Female Adult Badminton Athletes

Based on **Image 3**, it can be seen that male athletes have an average mental toughness score of 84%, while female athletes have an average mental toughness score of 83%. These results show that the mental toughness of male athletes is higher than that of female athletes.

Discussion

Based on the results of the data that has been taken, it is proven that not all athletes at the Indonesian University of Education have mental toughness. This is because coaches still do not pay attention to the mental toughness of their athletes. Because mental toughness itself is defined as an athlete's ability to remain consistent in showing their best performance, even under pressure, difficulty, or unfavourable conditions. Mental toughness can be said to be a process that emphasizes self-actualization, where self-actualization concerns the extent to which individuals meet their psychological heights and reflects human growth and development (Mahoney et al., 2014). This means that mental toughness is involved in an athlete's performance in mastering emotions, and making decisions even under pressure.

Mental toughness prioritizes the psychology that athletes will face in the future. How athletes can take action calmly and without emotion. To achieve this, coaches must develop strategies that can be applied to develop mental toughness, such as match simulation training to create training situations that resemble real match conditions. Then the coach must also approach the athlete to provide positive support, mental coaching is also needed to strengthen the athlete's self-confidence and motivation. individuals tend to exert less effort over time or lose their effort altogether if their psychological needs are not met (Dari et al., 2014).

The relationship between the ideas of struggle, survival, and thriving. For example, surviving adversity often results in increased perceptions of competence, which promotes goal attainment (Mahoney et al., 2014). Feelings of vitality and the

perception that one is learning (i.e., growing), as opposed to feelings of stagnation and boredom, often drive effort due to the lack of obstacles and during goal attainment (Sholicha & W, 2020). This interaction is reciprocal. That is, because of the personal meaning that goal achievement can bring to an individual's life, individuals who strive hard often report higher levels of success (Syah & Jannah, 2021).

Self-determination theory (Sholicha & W, 2020) is a meta-theory of human motivation that considers the extent to which an individual's actions are freely chosen and executed (i.e., self-determined) versus controlled. SDT consists of five minor theories, one of which can be applied specifically to the reconceptualization of mental toughness, namely the basic psychological needs theory (Mahoney et al., 2014). In this mini theory, the extent to which three psychological needs – autonomy, competence, and relatedness – are met is intended to influence the extent to which an individual will undergo positive psychological growth and development.

The main principle of SDT is that the satisfaction or failure of psychological needs depends on the surrounding social contextual factors. According to (Wajdi, 2018), an environment that supports autonomy is characterized by providing choices, reasons for task involvement, recognition of feelings, opportunities for independent learning, and acknowledgement of negative feelings. (Mahoney et al., 2014) reported that coaches can facilitate the development of mental toughness in their athletes by forming trusting, respectful, and positive relationships (i.e. paying attention to relatedness), designing challenging and stressful activities (e.g. paying attention to competence), and engaging athletes in their activities.

CONCLUSION

This research concludes that adult badminton athletes have good mental toughness, whereas male athletes have better mental toughness abilities than female athletes. So the author recommends that badminton coaches pay more attention to athletes' mental toughness because it can help athletes to be more optimal in carrying out training programs in the training phase.

REFERENCES

- Aguss, R. M., & Yuliandra, R. (2021). The effect of hypnotherapy and mental toughness on concentration when competing for futsal athletes. *Medikora*, 20(1), 53–64. <https://doi.org/10.21831/medikora.v20i1.36050>
- Dari, J., Mahoney, J. W., Gucciardi, D. F., Ntoumanis, N., Mallet, C. J., & Latihan, I. (2014). *Ketangguhan Mental dalam Olahraga : Anteseden Motivasi dan Asosiasi Dengan Kinerja dan Kesehatan Psikologis*. 281–292.
- Ekstrand, J., Lundqvist, D., Lagerbäck, L., Vouillamoz, M., Papadimitiou, N., & Karlsson, J. (2017). Is there a correlation between coaches' leadership styles and injuries in elite football teams? A study of 36 elite teams in 17 countries. *British Journal of Sports Medicine*, 52(8), 527–531. <https://doi.org/10.1136/bjsports-2017-098001>

- Gucciardi, D. F., Hanton, S., Gordon, S., Mallett, C. J., & Temby, P. (2015). The Concept of Mental Toughness: Tests of Dimensionality, Nomological Network, and Traitness. *Journal of Personality*, 83(1), 26–44. <https://doi.org/10.1111/jopy.12079>
- Harsono. (2017). *Kepelatihan Olahraga: Teori dan Metodologi*. PT. Remaja Rosdakarya.
- Kim, H. D., & Cruz, A. B. (2016). The influence of coaches' leadership styles on athletes' satisfaction and team cohesion: A meta-analytic approach. *International Journal of Sports Science and Coaching*, 11(6), 900–909. <https://doi.org/10.1177/1747954116676117>
- Komarudin. (2016). *Psikologi Olahraga*. PT. Remaja Rosdakarya.
- Komarudin, K. (2018). Peningkatan Motivasi Atlet Melalui Pelatihan Brain Jogging Pada Cabang Olahraga Beregu Dan Perorangan. *Jurnal Sositoteknologi*, 17(1), 21–29. <https://doi.org/10.5614/sostek.itbj.2018.17.1.3>
- Lindawati, S. (2016). Penggunaan Metode Deskriptif Kualitatif Untuk Analisis Strategi Pengembangan Kepariwisata Kota Sibolga Provinsi Sumatera Utara. *Seminar Nasional APTIKOM (SEMNASTIKOM), Hotel Lombok Raya Mataram*, 833–837.
- Mahoney, J., Ntoumanis, N., Mallett, C., & Gucciardi, D. (2014). The motivational antecedents of the development of mental toughness: a self-determination theory perspective. *International Review of Sport and Exercise Psychology*, 7(1), 184–197. <https://doi.org/10.1080/1750984X.2014.925951>
- Nisa, K., & Jannah, M. (2021). Pengaruh kepercayaan diri terhadap ketangguhan mental atlet bela diri. *Character: Jurnal Penelitian Psikologi*, 8(3), 36–45.
- Sholicha, I. F., & W, A. D. (2020). Motivasi Berprestasi Dan Ketangguhan Mental Atlet. *PSIKOSAINS (Jurnal Penelitian Dan Pemikiran Psikologi)*, 15(1), 91. <https://doi.org/10.30587/psikosains.v15i1.2004>
- Swann, C., & Perry, J. (2015). *Perbedaan Kepribadian dan Individu Hubungan antara ketangguhan mental dan kesejahteraan psikologis pada mahasiswa sarjana*. 75, 170–174.
- Syah, M. V. A., & Jannah, M. (2021). Perbedaan ketangguhan mental ditinjau dari status atlet individu dan beregu pada siswa SMA X. *Character : Jurnal Penelitian Psikologi*, 8(8), 145–152.
- Tibbert, S. J. (2013). *Mental toughness and overtraining behaviours*. October, 1–371.
- Wajdi, F. (2018). Leadership Support and Employee Creativity: A Meta-Analysis. *Jurnal Optimasi Sistem Industri*, 17(1), 55–63. <https://doi.org/10.25077/josi.v17.n1.p55-63.2018>
- Weinberg, R., Freysinger, V., & Mellano, K. (2018). How can coaches build mental toughness? Views from sport psychologists. *Journal of Sport Psychology in Action*, 9(1), 1–10. <https://doi.org/10.1080/21520704.2016.1263981>