

Staying In The Zone Of Combat Sports For Athletes

Rasagna Reddy^{1*}, Dr.C.N. Ramgopal², S. Kalyani³

1*Research Scholar, Faculty of Allied Health Sciences, Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education, Kelambakkam-603103, Tamil Nadu, India.

²Professor, Faculty of Allied Health Sciences, Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education, Kelambakkam-603103, Tamil Nadu, India.

³Research Scholar, Faculty of Allied Health Sciences, Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education, Kelambakkam-603103, Tamil Nadu, India.

*Corresponding Author: Rasagna Reddy

*Research Scholar, Faculty of Allied Health Sciences, Chettinad Hospital and Research Institute, Chettinad Academy of Research and Education, Kelambakkam-603103, Tamil Nadu, India.

Abstract

Objectives: This article helps in knowing the importance of psychological skills for combat athletes and how it helps them stay in the zone to achieve their goals.

Data sources: A systematic search of online databases such as Scopus, Web of Science and Research Gate was done using keywords such as Combat Sports (taekwondo, Judo, Fencing, Boxing, Wrestling, Karate), Psychological skills, Mental skill training, Para Combat Sports (Para taekwondo, Para karate, Para judo, Para wrestling, Para fencing), Performance enhancement. Certain books such as Combat sports medicine by Janel Gauthier and Human Kinetics were referred to.

Results: 50 Articles were found to be relevant at the initial screening out of which 22 articles were referred to for relevant data for the study.

Conclusion: The importance of psychological skills training along with physical training for combat sports athletes is known. It shows the need for psychological skill training such as concentration, self-efficacy, quick and effective decision-making since combat sport requires quick reaction as the whole match situation can change rapidly within seconds.

Keywords: Combat Sports (taekwondo, Judo, Fencing, Boxing, Wrestling, Karate), Psychological skills, Mental skill training, Para Combat Sports (Para taekwondo, Para karate, Para judo, Para wrestling, Para fencing), Performance enhancement, Gender Difference in combat sports.

Introduction

Combat sports is a competitive fighting sport that involves two athletes fighting against each other governed by a set of rules with changing roles of attacker and defender (Krabben et al., 2019) (Caron et al., 2017). The winner is the athlete who scores higher points based on the rules and by attacking beyond the level of defence ability of the opponent by destabilizing the opponent and taking advantage of it to score a point, basically attacking and avoiding being attacked (Araújo et al., 2006). Combat sports can be distinguished into two depending upon what style of fight or the techniques used. They are striking or grappling styles where striking style involves more stand-up fighting whereas the other is grappling techniques used during the fight. For example, Boxing and Taekwondo are striking and Judo or Wrestling is a grappling combat sport (Lee et al., 2001). It is not only the physical practice and performance that would have an impact on winning or losing but the psychological skills an athlete has or has been trained along with physical performance also have an impact on their performance (Bogdan Minjina, 2014).

"Psychological skills training (PST) refers to the methodical and continuous practice of mental or psychological skills to enhance performance, increase enjoyment, or achieve greater sport and physical activity self-satisfaction" (Weinberg RS, 2007). Optimal performance can be achieved only with a good distribution of physical practice as well as mental skill training being incorporated into the daily practice sessions and competition. (Dominteanu, 2017). There are two basic principles on which the application of sports psychology is grounded as stated by (Locke, 2008) that is "the mind can control the body and the mind must be controlled or trained in order not to have an adverse effect on the body".

Important Skills for Combat Sports

Combat sport among all the other sports requires very quick action as the situation can change within a few seconds of the game. So, for such sports, there is a need for athletes to be trained well on task-specific psychological skills which would help them in quick and right reactions improving their performance (Pedro and Durbin, 2001). Usually, it is considered that physical, tactical, and psychological training combined is what makes sports training complete for the athlete. Training proportionately on these parameters would determine how successful the athlete would be. Especially when it comes to combat sports training quick and effective decision-making, a relaxed mind and concentration are very important as the athlete needs to react within seconds using an offensive or defensive technique, destabilising the opponent without losing concentration despite the stress and anxiety they undergo during the combat (Ziv & Lidor, 2013)

(Matsumoto et al., 2009). So, based on the literature some of the skills which are important for combat sport athletes to be trained in are stress and anxiety management, motivation, concentration, imagery and mood states out of which mental imagery was one among the other skills which was widely used. (Slimani et al., 2016) (Short et al., 2005). Combat sport is not only played by able athletes but also by para-athletes where they take part in combat with the help of aids that would substitute their disability if required. Para athletes take part in combat sports such as taekwondo, judo, and wheelchair fencing.

Under what category do para-athletes take part in combat sports

Para athletes are classified within their sport based on their disability and need where they are grouped based on them to set the level of competition at par so that athletes do not face the trouble of being over or under-classified. For example, in para-taekwondo classification, there are certain eligibility criteria such as Ataxia, Impaired muscle power, Limb deficiency, Hypertonia, and Athetosis under which para-athletes are chosen to be further categorized.

The uniqueness of combat sports

The kind of mental skills required or the training for athletes depends upon the demands of each sport and its structure from which the kind of mental challenges faced by the athletes can be understood as sport-specific (Moran, 2012). The combatant aims to achieve dominance over the opponent through suitable techniques of the nature of sport such as grappling, striking or locking to avoid further movement. Combat sports are mainly contact sports where the fight is between two combatants governed by certain rules and techniques to have a proper competition and to avoid unwanted injuries (Miller et al, 2009). Even though injuries in various sports occur highly due to unintentional or accidental movements of self or the opponents, combat sport requires such actions to attack, defend and achieve the goal and gain points. Though this is the nature of the sport there have been regulations for the sports competition to reduce the risk of injury for the competitors (Miller et al, 2009). Despite this physical stress, there is also a great level of mental stress especially when a point is lost as scoring points by attacking is always felt to be less stressful than scoring points which are lost (Matsumoto et al 2009).

Method

Search Strategy

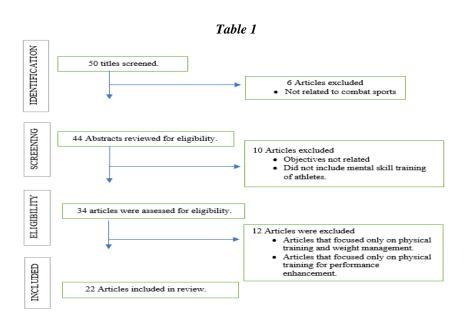
Various journals such as the Journal of Sports and Exercise Psychology, Sports Medicine, and Sports Science for Health, were referred for articles on the effect of psychological skills on the combat sports athletes that are needed for both able and para-athletes enhanced performance apart from physical training. Also, a search was done to know what factors that keep combat athletes in the zone during a match. Keywords such as Combat Sports (taekwondo, Judo, Fencing, Boxing, Wrestling, Karate), Psychological skills, Mental skill training, Para Combat Sports (Para taekwondo, Para karate, Para judo, Para wrestling, Para fencing), and Performance enhancement were used. The data collected was further analyzed for this article.

Inclusion/Exclusion Criteria

This review article consists of a) Research, review and meta-analysis, b) Articles that consist of data related to the psychological skills used by combat sports athletes, c) Articles that consist of data about the psychological skills of para-athletes in combat sports, d) Studies include all types of combat sports for both able and para-athletes.

Studies were not considered in this review if a) It included only physical training in combat sports and not PST.

Results Study Selection



These are the results obtained after literature search as shown in Table 1. A qualitative study was done to find the effect and usage of imagery where a sample of 36 elite Korean judokas was considered. It was found that there was a difference between elite and no elite athletes in the way they visualised the judo competition and also reported that they didn't use imagery in matches they lost (Han, 1996). A study was conducted by Gould et al. (1987) to rate what psychological characteristics are important to know whether a person would succeed in wrestling in which 82% of the trainers had concluded that mental toughness was the most important of them all in combat sports as well. To have optimal levels of mental toughness and for it to sustain during the competing years there is a need for mental skills training. Athletes who generally use psychological skills or strategies related to the sports specifically during practice and competition tend to be high-ranking or highly achieving athletes (Ryska, 1998). To achieve this there is a need for training in psychological skills which can help In identifying or realising any weakness of an athlete and finding ways to improve it and also to know what skills the athletes are already good at for them to maintain it to their advantage during the years of sport participation (Jones et al., 2007). Mental skills training is also important to maintain mental toughness in combat sports athletes (Weinberg, 2013). Concepts such as flow, zone, and peak performance are usually used when the athlete is at his optimal performing state where they are within their optimal consciousness. Relaxation, calmness, anxiety management, channelling energy and enjoyment, self-confidence and mental focus were some of the psychological skills that were identified that help in maintaining the required mental state to obtain peak performance (Loehr 1986). Along with these skills such as emotional intelligence, goal setting, imagery and avoiding negative self-talk would enhance the mental ability (Jackson et al., 2001). The ideomotor principle can give us an understanding of how mental imagery works in improving performance. When an athlete imagines the techniques or the moves in his sport the nervous system sends electrical impulses which activates his muscles in a way that it would be when they are physically playing. This also shows the mind-body relationship. Especially in combat sports the athlete cannot lose focus even for a second or get diverted cause they need to always observe and be aware of the opponent's move and intention only then they would be able to choose their technique of attack or defend at the right time (Ziv and Lidor 2013)

Conclusion

There is very minimal research done on the psychological skills specific to combat sports. There is a need for more research to be conducted on the psychological skills training needed for para-combat athletes which would help in improving their performance. In combat sports there is a great amount of demand for emotional and intellectual stability and wellbeing as there is a need to avoid thoughts of injury and quick decision-making on the techniques that need to be used can also be stressful. So Athletes need a great amount of psychological skill training especially in contact sports when compared to other sports since they usually tend to have neuroticism trait problems. There has been a significant increase in the academic study for combat sport athletes but there are not sufficient interventions or practical training for them. With increased training programs on psychological skills, there can be an enhancement in their performance levels also leading to overall development (Alexandro et al., 2021)

Reference

- 1. Alexandro Andrade, F. H. (2021). Many medals, but few interventions: the paradox of sports psychology research and Olympic combat sports. Sport Sciences for Health.
- Araújo, D., Davids, K., & Hristovski, R. (2006). The ecological dynamics of decision making in sport. Psychology of Sport and Exercise, 7(6), 653–676. https://doi.org/10.1016/j.psychsport.2006.07.002
- 3. Blumenstein B., Lidor R., Tenenbaum G. (2005) Periodization and planning of psychological preparation in elite combat sport programs The case of judo. International Journal of Sport and Exercise Psychology 3, 7-25
- 4. Caron, R. R., Coey, C. A., Dhaim, A. N., & Schmidt, R. C. (2017). Investigating the social behavioural dynamics and differentiation of skill in a martial arts technique. Human Movement Science, 54, 253–266. https://doi.org/10.1016/j.humov.2017.05.005
- Dominteanu, Teodora. (2017). The Role of Psychological Preparation in the Performance Sports Activity. Moldavian Journal for Education and Social Psychology. 1. 7-13. 10.18662/mjesp/2017.0101.01.
- 6. Gould, D., Hodge, K., Peterson, K., & Petlichkoff, L. (1987). Psychological foundations of coaching: Similarities and differences among intercollegiate wrestling coaches. The Sport Psychologist, 1, 293-308.
- 7. Han M.W. (1996) Psychological profiles of Korean elite judoists. American Journal of Sports Medicine 24, S67-S71
- 8. Kijima, A., Kadota, K., Yokoyama, K., Okumura, M., Suzuki, H., Schmidt, R. C., & Yamamoto, Y. (2012). Switching Dynamics in an Interpersonal Competition Brings about "Deadlock" Synchronization of Players. PLoS ONE, 7(11), e47911.
 - https://doi.org/10.1371/journal.pone.0047911
- 9. Krabben, K., Orth, D., & van der Kamp, J. (2019). Combat as an Interpersonal Synergy: An Ecological Dynamics Approach to Combat Sports. Sports Medicine, 49(12), 1825–1836. https://doi.org/10.1007/s40279-019-01173-y
- 10. Lee, T. D., Chamberlin, C. J., & Hodges, N. J. (2001). Practice. In R. N. Singer, H. A. Hausenblas, & C. M. Janelle (Eds.), Handbook of sport psychology (2nd ed., pp. 115-143).
- 11. Wiley. Locke, Abigail (2008) Managing agency for athletic performance: a discursive approach to the zone. Qualitative Research in Psychology, 5 (2). pp. 103-126.

- 12. Matsumoto, D., Konno, J., & Ha, H. Z. (2009). Sport psychology in combat sports. In R. Kordi, N. Maffulli, R. R. Wroble, and W. A. Wallace (eds.). Combat Sports Medicine (pp. 41-54). London, England: Springer-Verlag Publishing
- 13. Miller, F.P., Vandome, A.F., & Mc Brewster, J. (2009). Combat Sport. VDM Publishing.
- 14. Minjina, Bogdan. (2014). The mental skills training in combat sports. Optimizarea factorilor psihologici prin intermediul antrenamentul deprinderilor mentale in sporturile de luptă. STUDIA UNIVERSITATIS BABEȘ-BOLYAI EDUCATIO ARTIS GYMNASTICAE. 59. 51 67.
- 15. Moran, A. (2012). Sport and Exercise Psychology: A Critical Introduction. Second Edition. New York: Routledge.
- 16. Pedro J., Durbin W. (2001) Judo: Techniques and tactics. Champaign, IL: Human Kinetics
- 17. Ryska, T.A. (1998). Cognitive-behavioural strategies and pre-competitive anxiety among recreational athletes. The psychological record, 48, 697-708.
- 18. Short SE, Tenute A, Feltz DL (2005) Imagery use in sport: mediational effects for efficacy. J Sports Sci 23(9):951–960 16.
- 19. Slimani, M., Chamari, K., Boudhiba, D., & Chéour, F. (2016). Mediator and moderator variables of imagery usemotor learning and sport performance relationships: a narrative review. Sport Sciences for Health, 12(1), 1–9. https://doi.org/10.1007/s11332-016-0265-1
- Weinberg RS, Gould D. Foundations of sport and exercise psychology, 4th ed. Champaign, Illinois: Human Kinetics, 2007
- 21. Weinberg, R. (2013). Mental toughness: what is it and how to build it. Article downloaded on the 26th October 2013, from http://periodicos.uem.br/ojs/index.php/RevEducFis/ article/ download / 17523/11478
- 22. Ziv, G., & Lidor, R. (2013). Psychological preparation of competitive judokas a review. Journal of sports science & Medicine, 12(3), 371–380.