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**PETTLEP IMAGERY COMPONENTS AND PHYSICAL  
TRAINING ACTIVITIES CONSIDER AS PRACTICE IN MIND  
(PIM): A COMBINATION OF COMPREHENSIVE PHYSICAL  
TRAINING PROGRAM FOR FOOTBALL PLAYERS.**

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**Abstract:**

PETTLEP imagery components consist of the Physical, Environment, Timing, Task, Learning, Emotion and perspective of each player in that team. Meanwhile, Physical Training usually focuses on speed and strength training, as well as endurance training, and may involve interval training, circuit training, fartlek training, and plyometric training. However, the training approach will depend on football player; they may employ a variety of various methods to improve all aspects of their performance. So now, Practice in Mind (PIM) Training is a program that combines imagery and physical training which consists of seven PETTLEP components. Other than motivation, visual, and kinesthetic directions, the imagery material in the PIM training program includes the facilitative imagery direction and stimulus to react to the propositions. Hence to infer that imagery in sports performance is particularly effective in settings where practical restrictions impede physical training, such as biomechanical stiffness, weak physical strength, weariness, injury risk, and restricted access to equipment. In fact, imagery therapies have been shown to increase strength tasks when combined with physical training.

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This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)**Keywords:**

Keywords: PETTLEP, Practice in Mind (PIM), Imagery Training, Physical Training, Football Players.

**Introduction**

Globally, athletes, coaches, and sports psychologists frequently stress the value of psychological skills training (PST) in improving athletic performance. Since the 1950s, according to Ryba, Stambulova, and Wrisberg (2005), PST has been used in the Soviet Union. PST has been successfully employed by researchers in conjunction with deliberate control, goal-setting, self-talk, mental control, relaxation, and imaging (Afifah & Mazlan, 2018; Beauchamp, Bray & Albinson, 2002; Hardy, Roberts, Thomas & Murphy, 2010; Ismail & Ismail, 2019; Nur Asmidar, Mazlan & Maimunah, 2016; Lange-Smith, Cabot, Coffee, Gunnell, & Tod, 2023; Vealey, 2019; Weinberg & Williams, 2019).

Athletes gained advantages from psychological skills trainings, according to sport psychologists (Thelwell, Greenlees, & Weston, 2006). Ismail and Ahmad (2014) conducted a research whereby they found possible gaps in the performance techniques employed by UiTM FC football players in the 2014 Malaysia Premier League. The researchers discovered that during practice, goalkeepers and defenders employed goal setup techniques more frequently than midfielders and forwards. During a match, the emotional control method was employed by forwards and midfielders more frequently than by goalies and defenders. As a result, the study suggested that psychological skills trainings be required in order to level the playing fields for all positions, both during practice and competition. Among other performance-enhancing techniques, image learning has found a lot of success in research and exercises in sport psychology. According to Vealey and Greenleaf (2006; 2010), imagination is a mental experience that is created or imitated utilizing many sensory modalities, including visual, kinesthetic, and auditory.

Additionally, earlier scholars discovered that vividness and controllability are characteristics of imagery (Ramsey, Cumming, & Edwards, 2008; Schwarz & Stangier, 2023). For instance, vividness requires a person to be acutely aware of every action involved in a certain talent, yet controllability is necessary to generate the intended outcome and modify visuals (Morris, Spittle, & Watt, 2005; Ramsey et al, 2008; Schwarz & Stangier, 2023). If participants desire an environment that is similar to the real scenario, they must have access to these elements (Short, Monsma, Short, & Harris, 2004).

According to Morris et al. (2005) analysis, a number of factors can affect how effectively the imaging program affects employee outcomes. For instance, both debilitating and facilitative imagery suggestions can help athletes perform better. Among the imaging therapies used by sportsmen to enhance their golfing performance is the Practice in Mind (PIM) training program. The goals of imaging in sports were increased by encouraging the growth of specific skills and mediating emotional states, such as arousal and anxiety (Weinberg & Gould, 2007). However, previous researchers discovered that athletes tend to utilize visualization more during competition rather than in practice (Cumming & Hall, 2002). Stephen, Ermalyn, Yasmin, Louise, & Juvenmille (2022) further support the importance of visualization as a potent tool for enhancing athletic performance, achieving goals, and cultivating a winning mindset,

underscoring the necessity for coaches and educators to assist athletes in developing effective visualization techniques.

Additionally, the prior study has shown that the majority of researchers employ a variety of technological learning aids, including audio, video, and written script, to increase athletes' effectiveness (Ram, Riggs, Skaling, Landers, & McCullagh, 2007; Smith & Holmes, 2004). For instance, e-putting picture text was shown to be beneficial to golfers during visualization practice and to boost self-efficacy and putting efficiency, according to research by Mazlan (2016). Meanwhile, PETTTLEP imaging is a different approach to problems using motor imagery programs (Holmes & Collins, 2001). PETTTLEP model consists of Physical, Emotion, Task, Timing, Learning, Environment and Perspective.

The most obvious is that PETTTLEP imaging has the potential to significantly improve athletic performance. Additionally, data clearly implies that PETTTLEP functions better as an integrated whole than when only a few of its components are employed (Collins & Carson, 2017). This is also proven by Wakefield, Smith, Hogard, Ellis, and Parry (2020) in their study on the using of PETTTLEP imaginary, where, the group that underwent training based on all seven PETTTLEP components of the model demonstrated significant improvement in performance after receiving response training. Even, the same things also state by Smith, Wright, Allsopp, and Westhead (2007) in their study that focusing on a hockey penalty flick and a gymnastics beam skill, they found that as more PETTTLEP components were introduced in the imagery intervention, there was a stronger effect on performance.

## Literature Review

### *PIM Training and Anxiety in Sport*

Practice In Mind (PIM) is a systematic imagery training program that has been shown to enhance golfers' putting (Mazlan, 2014b, 2015), self-efficacy (Mazlan & Wan, 2016b), and moods (Mazlan, 2016a). The seven PETTTLEP components: physical, environment, timing, task, learning, emotion, and perspective make up the six-week PIM training program and the elements came from the functional resemblance between the execution of a motor task and visualization (Holmes & Collins, 2001). In addition to motivating, visual, and kinesthetic directions, the imagery content in the PIM training program incorporates stimulus-response propositions and facilitative imagery direction. Prior studies (Nur Asmidar & Mazlan, 2016; Nur Asmidar et al., 2016) and Fared et al. (2016) discovered that PIM training enhanced the shooting and kicking abilities of netball and rugby players, respectively. According to Mohd Fared, Mazlan, and Afizan. (2016), the rugby players' anxiety levels were lowered and their self-confidence increased as a result of the training.

Sports scholars have also brought up the issues of varying performance and different match locations. According to earlier studies, team sports participants employ various psychological techniques when competing (Ismail, 2019). Football, for instance, is an open sport with conditions-dependent problems (Arvinen-Barrow et al., 2007; Coelho et al., 2007). Football players therefore require various forms of cognitive and motivational imagery based on their mental capacities and situational situations (Williams, Ward, & Chapman, 2003). Football is another activity that demands rigorous training and a competitive environment; as such, psychological work specific to the sport must be tailored to the unique needs of a football team or club (Dosil, 2006).

### ***Practice in Mind (PIM) Training and Self-Efficacy in Sport***

Mazlan (2015) conducted research on the efficiency of a self-efficacy PIM training program for golfers when they are putting from a six-foot range. Sixty-three male golfers with one to three years of experience participated in the study. The PIM group and the conventional group both engaged in imagery and physical practices. ANOVA has been utilized in this study's one-way repeated measures across three experiments. The outcomes showed that the PIM group increased self-efficacy compared to the traditional imagery and control group. The outcome suggests that increasing the golfer's self-efficacy through PIM training is a good idea. Even with the input and output variables that specify emotional imagery with a diagrammatic description of the direction of influence on the brain process, it is crucial to assess how well the PIM training program has worked to raise the self-efficacy of female golfers prior to the putting task.

### ***Practice in Mind (PIM) Training and Mood in Sport***

The effectiveness of PIM training using an e-putting imagery script to evaluate golfers' putting scores and moods has been the subject of recent research (Mazlan, 2016a). 63 male golfers, ages 18 to 25, with 1-3 years of experience participated in this study. Three tests were administered to three randomly allocated groups: the PIM group, the traditional imagery group, and the control group. These findings demonstrate that the PIM Group was able to better control negative mood and enhance happy mood in comparison to the traditional imagery and control group. In the PIM training program, coaches have recommended using an e-putting imagery script. Mazlan (2016a) suggests that ladies, elite players, and players of all ages should be the subject of future research.

### ***Enhancing Footballers' Training: PETTLEP Imagery & PIM Approach***

In the pursuit of maximizing athletic performance, researchers and coaches are constantly exploring innovative training methodologies. Absolutely, coaches must delve into the concept of "Practice in Mind" (PIM) and its integration with the PETTLEP (Physical, Environment, Task, Timing, Learning, Emotion, and Perspective) imagery components to enhance their athletes' training and performance. The aim is to enhance the comprehensive physical training program for footballers, unlocking their full potential on the field. PIM is a comprehensive imagery training program that combines physical exercise on the same day with all seven PETTLEP imagery components (Mazlan, 2015). In order to create effective skills, the picture material utilized in the script integrates the aspects of facilitative guidance, stimulus, and reactions proposition with the idea of the entire routine in the brain and body. Experimental investigations have demonstrated the functional equivalency (PETTLEP components) potential of PIM training (Afifah & Mazlan, 2018; Mohd Fared et al, 2016; Nur Asmidar & Mazlan, 2016; Mazlan, 2014a, 2015, 2016a).

Bandura (1997; 2006) acknowledged that mood effects have a role in the self-efficacy of athletes, including how they perceive their prior performance experiences. In other words, people who lose when they are pleased to overestimate their skills, and people who win when they are unhappy underestimate their abilities. According to the researchers, an athlete's effectiveness is more than just their negative emotions. For example, exhaustion coupled with fear and frustration (Feltz & Lirgg, 2001; Kavussanu, Boardley, Jutkiewicz, Vincent, & Ring, 2008) as well as a negative mood linked to anxiety may also mediate performance, particularly in an ability task that affects an athlete's effectiveness.

Regardless, an ideal amount of anxiety may play a vital role in the decisive outcome of a match in physically demanding sports like rugby (Neil, Mellalieu, & Hanton, 2006). According to Woodman and Hardy (2003), when anxiety is effectively managed, it may boost an athlete's sense of confidence throughout a competition. Thus, an athlete's ability to control their emotional responses while competing is key to their success in sports (Baron, Moullan, Deruelle, & Noakes, 2011; Wagstaff, 2014). Previous studies also have found that the PIM program, which combines physical exercise and all of the PETTLEP imaging components will enhance athletes' skill performance (Mohd Fared et al, 2016; Nur Asmidar & Mazlan, 2016; Nur Asmidar et al., 2016; Mazlan, 2014a, 2015, 2016a; Ismail & Ismail, 2019).

### **How PIM Help Football Players?**

It can be said that the imagery in sports was broadened by facilitating the development of certain skills and mediating emotional states such as arousal and anxiety (Weinberg & Gould, 2007). While numerous studies have looked into how imagery and physical performance affect anxiety on different levels (Mohd Fared et al., 2016; Mazlan, 2016; Ramsey et al., 2010; Woodman & Hardy, 2003). Additionally, according to Ramsey et al. (2010), Morone et al., (2022), Wakefield et al. (2020) and Butt, Din, Adnan, Khan, Saeed, Naim, & Asghar (2016), the imagery can be used to take advantage of anxiety in order to enhance athletic performance. When it came to comprehending anxiety symptoms, researchers thought the emotion-based group had somewhat better results than the skill-based imagery group. Therefore, athletes' performance in competition is largely impacted by anxiety (Ortiz & Grange 2006; Raglin & Hanin, 2000), and this is especially true for football players who are aware of how worry might affect a game's outcome (Hosseini, Zahra & Seyed, 2016). Thus, the use of imagery in treatment may seem to be crucial for improving results in sports activities (Mazlan, 2015; Morris et al., 2005; Nordin & Cumming, 2005; Ramsey et al., 2010; Short, Tenute, & Feltz, 2005; Short, Bruggeman, Engel, Marback, Wang, Willadsen, & Short, 2002).

Football is a dynamic sport that requires a variety of measurements to be taken, and several tests are frequently used to analyse football players' athletic prowess (Rampinini, Coutts, Castagna, Sassi & Impellizzeri, 2007). Additionally, according to Morris et al. (2005), the learning stage at which imagery is employed may have an impact on its effectiveness. Whereas, athletes should focus on imaging training, according to research by Munroe-Chandler, Hall, & Fishburne, (2008), and it was further confirmed by Abma, Fry, Li, and Relyea (2002) and Short et al. (2004), who claimed that employing various functions of imagery material might help athletes' self-confidence and self-efficacy. Yet, the different match sites and inconsistent outcomes are a couple of the difficulties brought up by sport researchers. Team sports employed psychological differences in the competition's environment, according to earlier academics (Ismail, 2019; Ismail & Ismail, 2019). Therefore, depending on their physical state and mental capacity, football players require varied forms of cognitive and motivating images (Williams et al., 2003; Ismail & Ismail, 2019). Due to the intense training and competitive nature of football, a psychological study of the sport must take into account the unique needs of a football team or club (Dosit, 2006; Ismail & Ismail, 2019).

Meanwhile, if kicking is one of the ways rugby players may score points, then footballers can do the same thing, which makes it crucial to train the psychological as well as the physical aspects of the game (Baktash, Hy, Muir, Walton, & Zhang, 2009). When the distance to the post is greater, the physical ability may take precedence, but it is still crucial to developing the

psychological component since both components interact to give the best outcomes (Jackson & Baker, 2001). The utilization of problem-solving techniques such as self-talk, imagery, goal setting, and activation by football players was discovered to be boosted by imagery scripts on the field, according to a study by Ismail and Ismail (2019). Therefore, validated the earlier research and suggested that team sports players may benefit from PIM training (Mohd Fared et al., 2016; Nur Asmidar & Mazlan, 2016; Nur Asmidar et al., 2016) thus its need various components and other exercises.

Therefore, the purpose of this study is to investigate how PIM training effects football players, with a focus on improving skills performance. Despite the apparent relevance of imagery material in enhancing treatment-related mood, anxiety, and self-efficacy in PIM training, further study is required to examine the relative efficiency with those psychological aspects. Therefore, it is crucial to investigate in this study if PIM training might help football players' self-efficacy, anxiety, and mood.

### **Methodology**

A purposive sampling technique will be used to select a diverse sample of footballers from various teams and skill levels. The study will combine quantitative data collection methods. Participants will complete self-report questionnaires to assess their use of PETTLEP imagery components, engagement in physical training activities, and perceptions of the "Practice in Mind" (PIM) approach. The Competitive State Anxiety Inventory-2 (CSAI-2) will be used to measure anxiety levels. The quantitative data will be analyzed using descriptive statistics and correlation analysis. The research aims to explore how the combination of PETTLEP imagery and physical training in the PIM approach can enhance footballers' comprehensive physical training program, providing valuable insights for sports training and performance improvement. Ethical considerations will be adhered to, ensuring informed consent, confidentiality, and anonymity for the participants.

### **Conclusion**

In conclusion, the findings from the previous study conducted by Gaggioli, Morganti, Mondoni, and Antonietti (2013) and Kiefer (2011) provide valuable insights into the effects of using PETTLEP imagery on anxiety levels during skill tasks. The participants in the PIM (PETTLEP imagery) group demonstrated a significant reduction in both somatic anxiety and cognitive anxiety. This suggests that imagery can effectively help individuals manage their anxiety levels while performing skill-based activities. These results align with earlier research conducted in the context of football and basketball, which also showed similar benefits of imagery in anxiety management.

The success of PETTLEP imagery can be attributed to several key components, as highlighted by the researchers. First, appropriate tools and techniques were employed to facilitate effective imagery. Second, the skill tasks were carefully chosen to align with the athletes' specific needs and goals, enhancing the imagery's relevance and impact. Third, sufficient quality time was allocated for practicing and refining the imagery techniques, allowing athletes to develop greater proficiency and control over their emotions during skill execution. These factors collectively contribute to the successful integration of imagery in athletic performance.

Overall, the findings from these studies further support the notion that imagery can play a crucial role in enhancing an athlete's performance by positively influencing their emotional

state. As experts continue to explore and promote the effective use of imagery techniques, it becomes evident that mastering imagery skills can lead to improved athletic outcomes and contribute significantly to an athlete's overall success and mood.

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### References

- Abma, C. L., Fry, M. D., Li, Y., & Relyea, G. (2002). Differences in imagery content and imagery ability between high and low confident track and field athletes. *Journal of Applied Sport Psychology, 14*(2), 67-75.
- Afifah, A., & Mazlan, I. (2018). The effect of practice in mind (pim) training on jumping performance of high jumpers. *International Journal of Sports Science, 8*(1), 38-42.
- Baktash, S., Hy, A., Muir, S., Walton, T., & Zhang, Y. (2009). The effects of different instep foot positions on ball velocity in place kicking. *International Journal of Sports Science and Engineering, 3*(2), 85-92.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. *Self-efficacy beliefs of adolescents, 5*(1), 307-337.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Baron, B., Moullan, F., Deruelle, F., & Noakes, T. D. (2011). The role of emotions on pacing strategies and performance in middle and long duration sport events. *British Journal of Sports Medicine, 45*(6), 511-517.
- Beauchamp, M. R., Bray, S. R., & Albinson, J. G. (2002). Pre-competition imagery, self-efficacy and performance in collegiate golfers. *Journal of Sports Sciences, 20*(9), 697-705.
- Butt, Z. I., Din, B. M. U., Adnan, M. A. J., Khan, A., Saeed, N., Naim, J. A., & Asghar, W. (2016). MEASURING THE EFFECT OF IMAGERY ON 60M HURDLER. *Science International (Lahore), 28*(4), 3681-3688, 2016.
- Collins, D., & Carson, H. J. (2017). The future for PETTLEP: a modern perspective on an effective and established tool. *Current opinion in psychology, 16*, 12-16.
- Cumming, J., & Hall, C. (2002). Athletes' use of imagery in the off-season. *The Sport Psychologist, 16*(2), 160-172.
- Dosil, J. (Ed.). (2006). *The sport psychologist's handbook: A guide for sport-specific performance enhancement*. John Wiley & Sons.
- Feltz, D. L., & Lirgg, C. D. (2001). Self-efficacy beliefs of athletes, teams, and coaches. *Handbook of sport psychology, 2*(2001), 340-61.
- Gaggioli, A., Morganti, L., Mondoni, M., & Antonietti, A. (2013). Benefits of combined mental and physical training in learning a complex motor skill in basketball. *Psychology, 4*(9A), 1-6.

- Hardy, L., Roberts, R., Thomas, P. R., & Murphy, S. M. (2010). Test of Performance Strategies (TOPS): Instrument refinement using confirmatory factor analysis. *Psychology of Sport and Exercise, 11*(1), 27-35.
- Holmes, P. S., & Collins, D. J. (2001). The PETTLEP Approach to Motor Imagery: A Functional Equivalence Model for Sport Psychologists. *Journal of Applied Sport Psychology, 13* (1), 60-83.
- Hosseini, S., Zahra, H., & Seyed, R. A. H. (2016). Comparative analysis of competitive state anxiety among team sport and individual sport athletes in Iran. *Physical education of students, 20*(5), 57-61.
- Ismail, M. (2019). Performance strategies across team and individual sports of Negeri Sembilan athletes. *Pertanika Journal of Social Science and Humanities, 27*(1), 685-692.
- Ismail, M., & Ahmad, M. (2014). Malaysian professional university soccer players Performance strategies based on different positions of play. *International Journal of Enhanced Research in Educational Development, 2*(4), 80-83.
- Ismail, M., & Ismail, A. N. (2019). The Effects of Practice in Mind (PIM) Training on Performance Strategies used by Professional University Football Players. *Pertanika Journal of Social Sciences & Humanities, 27*(2).
- Jackson, R. C., & Baker, J. S. (2001). Routines, rituals, and rugby: Case study of a world class goal kicker. *The Sport Psychologist, 15*(1), 48-65.
- Kavussanu, M., Boardley, I. D., Jutkiewicz, N., Vincent, S., & Ring, C. (2008). Coaching efficacy and coaching effectiveness: Examining their predictors and comparing coaches' and athletes' reports. *The Sport Psychologist, 22*(4), 383-404.
- Kiefer, R. (2011). Improvement of soccer penalty kick precision through mental training.
- Lange-Smith, S., Cabot, J., Coffee, P., Gunnell, K., & Tod, D. (2023). The efficacy of psychological skills training for enhancing performance in sport: a review of reviews. *International Journal of Sport and Exercise Psychology*. <https://doi.org/10.1080/1612197X.2023.2168725>
- Mazlan, I. (2014a). Golf Putting: Shorter Putts are easier, Is this really true? *International Journal of Enhanced Research in Educational Development (IJERED), Vol. 2* (Issue 1), 22-27
- Mazlan, I. (2014b). Practice in mind: Help to improve golf putting from the Hardest Distance. *International Journal of Enhanced Research in Education Development (IJERED), 2*, 7-12.
- Mazlan, I. (2015). The Idea of Using PIM Training Program to Improve the Self Efficacy of the Golfers. *International Journal of Enhanced Research in Educational Development (IJERED), Vol. 3*(Issue 2), (27-32).
- Mazlan, I. (2016). Effectiveness of "PIM" Training on Putting Performance and Pre-Competitive Anxiety of the Golfers. *International Journal of Golf Science, 5*(1), 26-37.
- Mazlan, I. (2016a). 'PIM' training with e-putting imagery script helps to improve putting scores and moods of the golfers, is this really true. In S.I Ismail et al. (eds), Proceeding of the 2nd International Colloquium on Sport Science, Exercise, Engineering and Technology 2015 (ICOSSEET 2015) (pp.15-23). Singapore: Springer.
- Mazlan, I. & Wan, R. (2016b). The relationship between self-efficacy and 6 feet golf putting distance. In S.I Ismail et al. (Eds.), *Proceedings of the 2<sup>nd</sup> International Colloquium on Sports Science, Exercise, Engineering and Technology 2015 (Icosseet 2015)* (pp. 247-252). Singapore: Springer.



- Mohd Fared, Y., Mazlan, I. & Afizan, A. (2016). The idea of using practice in mind training program for rugby players to improve anxiety and kicking performance. *International Journal of Sports Science*, 6(2), 70-75.
- Morone, G., Ghoshch, S. G., Pulcini, C., Spangu, E., Zoccolotti, P., Martelli, M., ... Iosa, M. (2022). *applied sciences Motor Imagery and Sport Performance : A Systematic Review on the PETTLEP Model*.
- Morris, T., Spittle, M., & Watt, A. P. (2005). *Imagery in sport*. Human Kinetics.
- Munroe-Chandler, K., Hall, C., & Fishburne, G. (2008). Playing with confidence: The relationship between imagery use and self-confidence and self-efficacy in youth soccer players. *Journal of sports sciences*, 26(14), 1539-1546.
- Neil, R., Mellalieu, S. D., & Hanton, S. (2006). Psychological skills usage and the competitive anxiety response as a function of skill level in rugby union. *Journal of sports science & medicine*, 5(3), 415.
- Nordin, S. M., & Cumming, J. (2005). Professional dancers describe their imagery: Where, when, what, why, and how. *The Sport Psychologist*, 19(4), 395-416.
- Nur Asmidar, A. H., & Mazlan, I. (2016). The effects of practice in mind (PIM) training on netball standing shooting performance. *Proceedings of the 4th Global Summit on Education, Kuala Lumpur, Malaysia*.
- Nur Asmidar, A. H., & Mazlan, I. & Maimunah, S. S. (2016). The idea of using systematic imagery-physical practice on netball jump shot performance. *International Journal of Sports Science*, 6(4), 159-162.
- Ortiz, J., & Grange, L. L. (2006). Efficacy of relaxation techniques in increasing sport performance in women golfers. *The sport journal*, 9(1).
- Raglin, J. S., & Hanin, Y. L. (2000). Competitive anxiety. *Emotions in sport*, 93-111.
- Ram, N., Riggs, S. M., Skaling, S., Landers, D. M., & McCullagh, P. (2007). A comparison of modelling and imagery in the acquisition and retention of motor skills. *Journal of Sports Sciences*, 25(5), 587-597.
- Rampinini, E., Coutts, A. J., Castagna, C., Sassi, R., & Impellizzeri, F. M. (2007). Variation in top level soccer match performance. *International journal of sports medicine*, 28(12), 1018-1024.
- Ramsey, R., Cumming, J., Edwards, M. G., Williams, S., & Brunning, C. (2010). Examining the Emotion Aspect of PETTLEP-based Imagery with Penalty Taking in Soccer. *Journal of Sport Behavior*, 33(3), 295-314.
- Ramsey, R., Cumming, J., & Edwards, M. G. (2008). Exploring a modified conceptualization of imagery direction and golf putting performance. *International Journal of Sport and Exercise Psychology*, 6(2), 207-223.
- Ryba, T. V., Stambulova, N. B., & Wrisberg, C. A. (2005). The Russian origins of sport psychology: A translation of an early work of AC Puni. *Journal of Applied Sport Psychology*, 17(2), 157-169.
- Schwarz, S. M., & Stangier, U. (2023). Contents and characteristics of mental imagery and their association with emotional intensity in adolescents: A pilot study. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 41(4), 838-855.
- Short, S. E., Bruggeman, J. M., Engel, S. G., Marback, T. L., Wang, L. J., Willadsen, A., & Short, M. W. (2002). The effect of imagery function and imagery direction on self-efficacy and performance on a golf-putting task. *The Sport Psychologist*, 16(1), 48-67.
- Short, S. E., Monsma, E. V., Short, M. W., & Harris, A. C. (2004). Is what you see really what you get? Athletes' perceptions of imagery's functions. *The Sport Psychologist*, 18(3), 341-349.

- Short, S. E., Tenute, A., & Feltz, D. L. (2005). Imagery use in sport: Mediation effects for efficacy. *Journal of sports sciences*, 23(9), 951-960.
- Smith, D., & Holmes, P. (2004). The effect of imagery modality on golf putting performance. *Journal of Sport and Exercise Psychology*, 26(3), 385-395.
- Smith, D., Wright, C., Allsopp, A., & Westhead, H. (2007). It's all in the mind: PETTLEP-based imagery and sports performance. *Journal of Applied Sport Psychology*, 19(1), 80-92.
- Stephen, F. A., Ermalyn, L. P., Yasmin, M. B., Louise, L. J. D., & Juvenmile, T. B. (2022). A Voyage into the Visualization of Athletic Performances: A Review. *American Journal of Multidisciplinary Research and Innovation*, 1(3), 105-109.
- Thelwell, R. C., Greenlees, I. A., & Weston, N. J. (2006). Using psychological skills training to develop soccer performance. *Journal of Applied Sport Psychology*, 18(3), 254-270.
- Vealey, R. S. (2019). A periodization approach to building confidence in athletes. *Journal of Sport Psychology in Action*, 10(1), 26-37.
- Vealey, R. S., & Greenleaf, C. A. (2010). Seeing is believing: Understanding and using imagery in sport. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (6th ed., pp. 267-304). New York: McGraw-Hill.
- Vealey, S., & Greenleaf, C. A. (2006). Seeing is believing: Understanding and using imagery in sport. In JM Williams (Ed), *Applied sport psychology: Personal growth to peak performance* (pp 247-269) San Francisco.
- Wagstaff, C. R. (2014). Emotion regulation and sport performance. *Journal of sport & exercise psychology*, 36(4).
- Weinberg, R. S., & Williams, J. M. (2019). Psychological skills training. In D. Hackfort, R. Schinke, & B. Strauss (Eds.), *Dictionary of sport psychology: Sport, exercise and performing arts* (pp. 230-231). Elsevier.
- Weinberg, R. S., & Gould, D. (2007). Imagery. *Foundations of Sport and Exercise Psychology* (p.295-321). Champaign, IL: Human Kinetics.
- Wakefield, C. J., Smith, D., Hogard, E., Ellis, R., & Parry, C. (2020). Using PETTLEP imagery as a simulation technique in nursing: Research and guidelines. *Nurse Education in Practice*, 43(January). <https://doi.org/10.1016/j.nepr.2020.102700>
- Williams, A. M., Ward, P., & Chapman, C. (2003). Training perceptual skill in field hockey: Is there transfer from the laboratory to the field? *Research quarterly for exercise and sport*, 74(1), 98-103.
- Woodman, T. I. M., & Hardy, L. E. W. (2003). The relative impact of cognitive anxiety and self-confidence upon sport performance: A meta-analysis. *Journal of sports sciences*, 21(6), 443-457.