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The Effect of a Psychological Skill Training Package on the Mental Readiness of Taekwondo Athletes

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Abstract

This research aims to 1) explore the psychological demands and prepare a psychological skill training (PST) package for taekwondo athletes; and 2) study the effect of a PST package on the mental readiness of a taekwondo athlete. Phase 1 is a discussion about the sports psychology skills needed for athletes. The PST package was developed and confirmed by 7 experts. In phase 2, 26 amateur taekwondo athletes from the eastern region of Thailand were divided into 2 groups. The experimental group had traditional taekwondo training combined with a program supplement of sport psychology skills training and the control group had only traditional taekwondo training: physical exercise, skills, and technique. The program duration was 8 weeks (3 times a week, approximately 30 - 45 minutes for each session). The tools used in this study included: 1) the PST package consisting of breathing control, muscle relaxation, complete relaxation, self-talk, and imagery techniques; and 2) the athletes' mental readiness for competition questionnaire. A t-test was used to analyze the data. The results found that the experimental group had a higher mean score of the mental readiness in all aspects than the control group with significance at 0.05. In conclusion, the findings provide further evidence to suggest that psychological skills training packages are effective for the mental readiness of taekwondo athletes.

Keywords

Psychological Skills Training Package, Mental Readiness, Taekwondo Athletes

1. Introduction

The current sports society in Thailand applies sport science knowledge with ath-

letes to help them be successful in competition. One important factor is developing athletes so they are able to play sports to the maximum level. Elements of sports psychology help athletes prepare mentally. Strong athletes clearly recognize their potential and use this to set goals (Cox, 2002). There are very important mental components or factors in sports psychology that are becoming more and more necessary when athletes are in high-pressure situations, such as finals. The mental readiness of athletes enables them to give their best performance. Similarly, Patanamontri et al. (2008) found that Thai Olympic athletes who get training in psychological skills will have a competitive advantage, such as having more focus on training and competition, staying calmer, controlling their excitement, reducing stress, relaxing, and controlling their emotional state. It also helps athletes to achieve their potential performance.

Psychological readiness is an important factor affecting the success of sporting events. This helps athletes develop their ability to play sports at the maximum level, allowing them to show their ability to compete at a higher level due to their superior mental strength and being able to control their thoughts, emotions, feelings, and self-awareness in various fields, as well as their ability to use their potential to the fullest (Boonveerabutr, 1998). Some keys to an athlete being optimally mentally prepared include having a clear goal, adhering to personal plans, having preparation strategies, staying in the moment, minimizing the impact of distractions, being positive and optimistic (even in the face of adversity), and managing emotions. PST can play an important role in helping athletes with mental preparation in order to maximize their performance.

PST is a tailor-made program designed to combine the methods to acquire the psychological state a sport demands. There is significant understanding of the PST technique and the application of PST to assemble a successful PST program. Much research on PST techniques has found good results on athletes improving performance. Many researchers (Shivetts, 2006; Boyce et al., 2001; Di Corrado, Guarnera, Guerrera, Maldonato, Di Nuovo, Castellano, & Coco, 2020; Bülbül & Akyol, 2020; Hatzigeorgiadis, Zourbanos, Galanis, & Theodorakis, 2011; Röthlin, Birrer, Horvath, & Grosse Holtforth, 2016; Hashim & Yusof, 2011; Martarelli, Cocchioni, Scuri, & Pompei, 2011) are interested in studying the effect of a single PST technique on sport performance. It is clear that single-skill interventions can improve performance in a range of sports; however, individual differences in participants might limit the responsiveness to single-skill interventions (Blakeslee & Goff, 2007). There is no single perfect PST method in all PST programs; each program prepares for uncertain situations for the individual's mental state and the sport. However, in a competitive situation where troubleshooting occurs, a single technique might not handle in all settings.

Recently, sport psychologists proposed the PST package to enhance performance consistency and actual levels of performance. Thelwell & Greenlees (2001) was an intervention package including goal setting, relaxation, imagery, and self-talk. Thelwell & Maynard (2003) were provided with an intervention package

consisting of goal-setting, activation regulation, self-talk, mental imagery and concentration. Blakeslee & Goff (2007) examined the effectiveness of a mental skills training (PST) package that employed relaxation, imagery, goal setting, and self-talk (strategies for improving performance and perceptions through cognitive-somatic techniques. It is clear that single-skill interventions can improve performance in a range of sports; however, the individual differences of participants might limit the responsiveness to single-skill interventions. Moreover, Lim & O'Sullivan (2016) found that Korean taekwondo athletes who used psychological skills, e.g. self-talk, emotional control, automaticity, goal setting, imagery, negative thinking, anxiety management—improved their physical and mental conditions.

After a Thai taekwondo athlete won at Olympic gold medal in the Tokyo Olympic Games 2021, taekwondo became an even more fevers sport in Thailand. Moreover, many a successful in the past Olympics game (Athens 2004; London 2012; Rio de Jairo 2016, Beijing 2008). There are 2 questions often arise in the topic of taekwondo athletes: "What are the most important psychological skills when training for taekwondo?" and "How do athletes prepare mentally for readiness in competition?" This has sparked discussion and debate between players and coaches alike. Taekwondo athletes must know how to deal with pressure and control stress and anxiety in the time preceding a competition (Lim, 2007).

After a Thai taekwondo athlete won at Olympic gold medal in the Tokyo Olympic Games 2021, taekwondo became an even more highly favors sport in Thailand, moreover, many of them successful in the past Olympics game (Athens 2004; London 2012; Rio de Jairo 2016, Beijing 2008). This has arisen our doubt about key success of taekwondo athletes: "What are the most important psychological skills when training for taekwondo?" and "How do athletes prepare mentally for readiness in competition?" which to sparked the research aims to 1) explore the psychological demands and prepare a psychological skill training (PST) package for taekwondo athletes; and 2) study the effect of a PST package on the mental readiness of a taekwondo athlete.

2. Research Methodology

2.1. Samples Included

Participants included 1) 2 excellent taekwondo coaches and 5 sport psychology experts, and 2) 26 taekwondo athletes who trained at a taekwondo club in Chonburi province. The qualification for the athletes was they had to have participated in a local or national competition within the last 2 years. We found twenty-six taekwondo athletes by the volunteer method; all were certified by a coach to be elite youth taekwondo athletes. Thirteen athletes were placed in each group—experimental and control—by using the score from a questionnaire about the athletes' mental readiness for competition. (Effect size = 1.14, alpha = 0.05 and power = 0.95.) (See **Figure 1**).

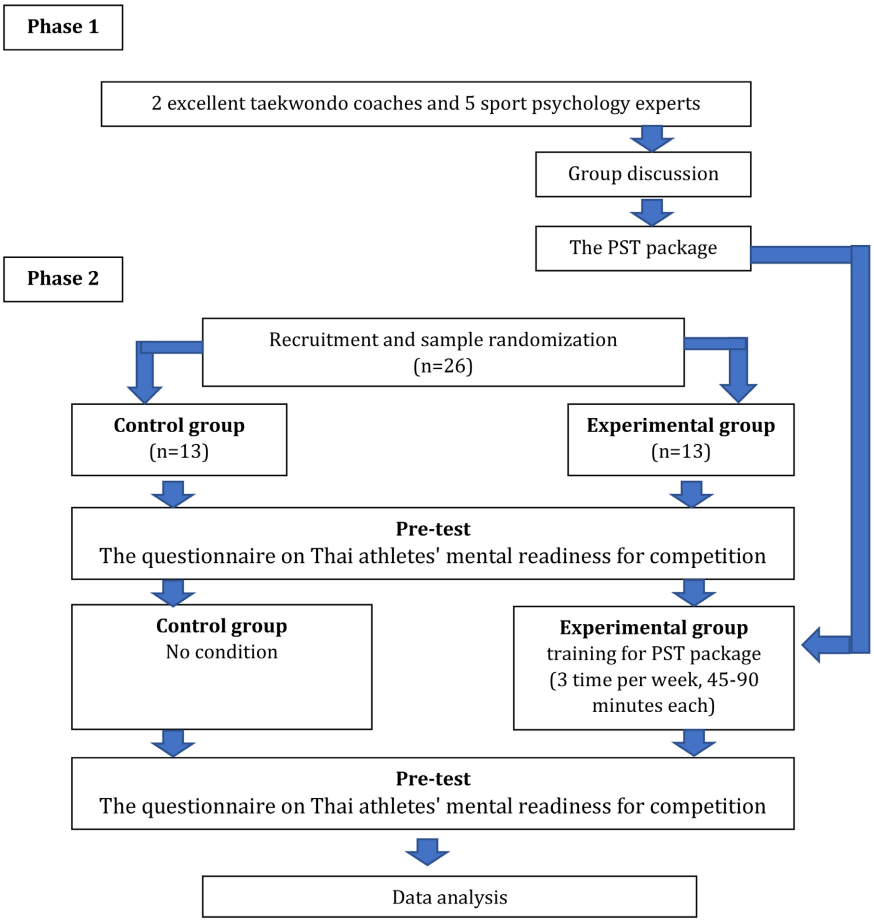

Figure 1. Flowchart of study procedure.

2.2. Tools and Measurement

1) The questionnaire on Thai athletes' mental readiness for competition was established by Patanamontri (2015). The objective of this questionnaire was to measure the mental readiness of athletes before entrance in a competition. The IOC (Index of Item-Objective Congruence) was 1.00 and reliability was 0.93. The questionnaire used a 5-point Likert scale, consisting of 20 questions that covered 4 areas:

a) Self-confidence

b) Understanding and self-worth

c) Self-control and sports psychology skills

d) Motivation and commitment for success in sports.

2) The PST package verifies the correctness of the content structure, suitability of purpose, implementation, evaluation, and improvement based on recommendations by 5 sport psychology experts. Then it was tested on 3 athletes who were not in the sample group to test the understanding of the content used. The researcher then improved the sports psychology skills training program and applied it to the subjects for 8 weeks of practice (3 sessions per week, 30 - 45 minutes each). This program follows Gill's (2000) recommendation that the PST

should be completed in 15 - 30 minute sessions, 3 - 4 times per week. The PST package consisted of 4 techniques:

a) Breathing control

b) Muscle relaxation

c) Self-talk

d) Imagery

Ethics process

This research was approved by the Burapha University ethics board (IRB1-060-2564).

Data Collection

This research was quasi-experimental, with a pretest-posttest design.

Phase 1 established the PST package especially for taekwondo

1) The researcher used the group discussion with 2 excellent taekwondo coaches (with experience in national or championship competitions in which their athlete was successful), and the research team found the significant points of taekwondo, pointed out areas for mental troubleshooting, and integrated the techniques for appropriate methods for a taekwondo athlete. The data analysis included interviews and group discussions; transcription and extraction of key messages mentioned by the experts were then analyzed.

2) The researcher combined PST needs from coaches with sports psychology based on the concepts of sports stress management and sports psychology skills training following the textbook (Julavanichpong, 2018) and research of PST needs for taekwondo athletes' use (Pan-uthai & Thienthong, 2012; Lim & O'Sullivan, 2016).

3) Summarized the PST and established the PST package.

4) Two expert taekwondo coaches and 5 sport psychologists confirmed the PST package; IOC was 1.00.

Phase 2 studied the efficiency of the PST package on the mental readiness of taekwondo athletes

The researcher recruited participants for the project and screened the participants by selecting a qualified club that met the research criteria. The researcher recruited research participants/sample groups by posting recruitment announcements for volunteers to participate in the research project at various points within the Chonburi province with the following actions:

1) Contacted and asked for permission from the club manager, and athletes. Moreover, researchers made appointments for description and orientation to participants for understanding the research processes and completing the consent form. This research was done in a way to prevent the spread of COVID-19.

2) Pre-test by using the questionnaire on athletes' mental readiness for competition, which led to the creation of 2 sample groups.

3) In the experiment period, athletes in the experimental group received training in sports psychology skills 3 times a week (Monday, Wednesday, and Friday), from 4:00PM-4:45PM, approximately 30 - 45 minutes each session, for 8

weeks. The control group was trained according to the program arranged and according to the normal schedule. At the end of the trial the control group was given the same opportunities as the experimental group to receive the same training program in sports psychology as the experimental group received from the researcher.

4) Post-test collected the data through the questionnaire on athletes' mental readiness for competition.

2.3. Data Analysis

The mean and standard deviation were used to measure the athletes' mental readiness for competition score. A t-test was used to analyze and compare the mean between the 2 groups.

3. Results

3.1. Phase 1

The data from the coach's discussion, we found the specific mental requirements of breathing control, muscle relaxation and complete relaxation, self-talk, and imagery to be of a higher ranking in PST needs. These are combined with theoretical sport psychology and research, and the consensus was summarized in the mental demands analysis (Table 1).

From Table 2, the combined PST needs expressed by coaches based on sports psychology theory follow the concepts of sports stress management and sports psychology skills training (Julavanichpong, 2018). Pan-uthai & Thienthong (2012) studied the sports psychology skills frequently used in sports contexts, and Lim & O'Sullivan (2016) identified the effect of systematic mental skills training (PST) for Korean taekwondo athletes. There were 4 psychological skill techniques that included breathing control, muscle relaxation and complete relaxation, self-talk, and imagery, which was similar to the information received from the coaches.

3.2. Phase 2

Applying the PST package to training combine with daily physical training of study the effect of the PST package to integrate into the daily physical training of taekwondo athletes for 8 weeks

1) Study the mental readiness of taekwondo athletes for sports competitions in pre and post-test session

From Table 3 the data show the beginning of the study the control group was mentally ready in all aspects at a high level (3.57 ± 0.24); the experimental group was also mentally ready in all aspects at a high level (3.50 ± 0.46). There are moderate to high level of the mental readiness of taekwondo athletes for sports competitions in pre-test session.

Table 4 shows the mental readiness of taekwondo athletes for sports competitions in pre-test sessions. The control group was mentally ready in all aspects at

Table 1. The PST package training for 8 weeks.

Week	Intervention	Describe
1	Breathing control	1) Relaxation style. Take a slow deep breath in 4:4 ratios—count from 1 to 4 during inhale, count from 1 to 4 during exhale. 2) Inhale and hold style. Inhale for a count of 6, hold breath for a count of 4, and then exhale for a count of 4. 3) Exhale and hold style. Exhale and count to 6, hold breath and count to 4, then inhale and count to 4 quickly. 4) Nose and mouth style. Alternate inhale or exhale from nose to mouth or vice versa.
2	Muscle relaxation	1) Clench your fist at 20% strength and increase to 50%, 75%, and 100% (maximum tension), then loosen the tightness of the clenching starting from 100%, decreasing to 75%, 50%, 20%, until 0 (total relaxation). 2) Flex your arm muscles at 20% and increase to 50%, 75%, and 100% (maximum tension), then relax the muscles by starting at 100%, decreasing to 75%, 50%, 20%, and (total relaxation). 3) Clench your leg muscles at 20% and increase to 50%, 75%, and 100% (maximum tension), then relax the muscles starting at 100%, decreasing to 75%, 50%, 20%, and finally 0 (total relaxation). 4) Lay down and tense your body starting at 20% increasing to 50%, 75%, and 100% (maximum tension), then relax the tightness from 100%, decreasing to 75%, 50%, 20%, and finally 0 (total relaxation).
3	Self-talk	Make phrases to establish self-talk and write them down. Practice using phrases like: "I'm trying my best"; "it's going to be okay"; "I can do it"; "let's go"; "fight"; "I want to be a success"; "mindful and focused"; "deep breathing"; and "calm down and go slowly". The self-talk practice included writing down reminders like the above. After the athlete got up in the morning or before a match, they would look at this paper, read what was on it, and either say the phrases out loud or in their head.
4	Imagery	Use 5 senses (sight, sound, touch, smell, and taste), start relaxing, feel relaxed, concentrate on breathing, see gymnasiums, see teammates, see and feel our movement, feel enjoyment and happiness with training, and be satisfied with training.
5 - 8	Combination PST package	Start session (depending on situation): - Breathing control - Try to relax - Imagery - Talk with yourself

Table 2. The psychological demand analysis of PST matching.

Problem Issue (Mentioned by coaches)	Matching PST with Problems
Excited until sleepless before the match	PMR training
Fear (of losing)	Self-talk
More conscious	Imagery and self-talk
Overthinking	Instructional self-talk
Choking under pressure	Breathing control and instructional self-talk
Losing confidence before the competition	Self-talk and imagery
Change in behavior	Increase confidence
Losing control	Breathing control and focus

Table 3. The mental readiness of taekwondo athletes for sports competitions in pre-test session.

Readiness dimensional	Control (n = 13)			Experiment (n =13)		
	$\bar{X}$	S.D.	Interpretation	$\bar{X}$	S.D.	Interpretation
1. Self confidence	3.75	0.40	High	3.62	0.44	High
2. Understanding and self-worth	3.45	0.29	High	3.45	0.50	High
3. Self-control and use of sports psychology skills	3.29	0.36	Moderate	3.19	0.57	Moderate
4. Motivation and commitment to success in sporting events	3.80	0.37	High	3.75	0.52	High
Total	3.57	0.24	High	3.50	0.46	High

Table 4. Mental readiness in sports competitions of taekwondo athletes in post-test.

Readiness dimensional	Control (n = 13)			Experiment (n = 13)		
	$\bar{X}$	S.D.	Interpretation	$\bar{X}$	S.D.	Interpretation
1. Self confidence	3.72	0.35	High	4.20	0.46	High
2. Understanding and self-worth	3.95	0.35	High	4.20	0.42	High
3. Self-control and use of sports psychology skills	3.35	0.36	Moderate	4.17	0.47	High
4. Motivation and commitment to success in sporting events	3.83	0.42	High	4.28	0.44	Highest
Total	3.71	0.27	High	4.21	0.39	Highest

a high level (3.71 ± 0.27), but the experimental group was mentally ready in all aspects at a higher level (4.21 ± 0.39). After 8 weeks, the control groups had a slightly increased mean score of mental readiness in all aspects. The experimental group had a dramatically increasing in mean score of mental readiness in all aspects.

2) The analysis of mean score differences in mental readiness of taekwondo athletes between the experimental group and the control group after the 8-week experiment.

From Table 5 found that the experimental group had a significantly higher mean score in all aspects of the mental readiness than the control group, significant at 0.05.

4. Discussion

4.1. Establish the PST Package for the Special Demands of Taekwondo

As previously discussed, it is clear that single-skill interventions cannot improve performance in all athlete settings because there are many different stimuli that require various PST therapies. The development of this PST package was based on previous recommendations (Lim, 2007; Weinberg & Gould, 2003) and followed an adaptable workflow of planning, orientation, PST, application, and evaluation. With regard to an athlete willing to follow an existing PST package, the strengths and weaknesses of their current package need to be reinforced. When considering the results of the present study and their interpretation, it is

Table 5. Analysis of mean score differences in mental readiness of taekwondo athletes between the experimental group and the control group after 8 weeks.

Readiness dimension	Experimental (n = 13)	Control (n = 13)	t	df	*P*
	$\bar{X}$ ± S.D.	$\bar{X}$ ± S.D.			
1. Self confidence	4.20 ± 0.46	3.72 ± 0.35	2.99*	24	0.006
2. Understanding and self-worth	4.20 ± 0.42	3.95 ± 0.35	1.64	24	0.115
3. Self-control and sports psychology skills use	4.17 ± 0.47	3.35 ± 0.36	4.99*	24	0.000
4. Motivation and commitment to success in sporting events	4.28 ± 0.44	3.83 ± 0.42	2.62*	24	0.015
Total	4.21 ± 0.39	3.71 ± 0.27	3.81*	24	0.001

*$P < 0.05$.

vital to note they are only based on the PST package specifically designed for one single athlete and thus cannot be applied to everyone, like research of PST packages in the past (Mamassis & Doganis 2004; Lim & O'Sullivan, 2016; Blakeslee & Goff, 2007) which found the results showed a marked improvement in the results after the trials in the practice group.

Not only were qualitative and quantitative methods applied in this study, but a behavioral interview was also performed to further consider individual characteristics. The interview provided insights into how easy and efficient communication was vital between the coach and the athlete. If a coach can help the athlete maintain their nerves then they can give them a boost in confidence (Lim, 2007).

In this study the coach also participated in a PST designed with researchers to meet requirements of athlete need because coaches had close relationships with athletes when establishing more detailed explanations for the preparation and performance. Co-working with a sport psychologist to establish an intervention for athlete training is a good process for designing the PST package.

4.2. Efficiency of PST Package on Mental Readiness in Taekwondo Athletes

The analysis of the mean score differences in the mental readiness of taekwondo showed that the experimental group had significantly higher mean scores on all aspects of mental readiness (self-confidence readiness, self-control, skills in sports psychology use, the motivation and commitment for sporting success) than the control group, significant at 0.05. However, the understanding and self-esteem dimensions were not statistically significant.

The secondary purpose of this study was to investigate the effect of PST package integration in a taekwondo training program on mental readiness in taekwondo. There were noticeable improvements in all of the measured variables. PST is a useful tool to facilitate athletes who participate in training to become mentally prepared. Athletes who practice sports psychology skills become more aware of their feelings. They get to know the experience directly, come to understand their potential, and use their potential to the fullest with the confidence to guide themselves toward reaching their goals (Blakeslee & Goff, 2007; Thelwell

& Maynard, 2003). A PST package provides athletes with the highest mental readiness. This maximum mental readiness enables athletes to play sports at their best and to show their best abilities because it creates a state of mental and physical relaxation, and allows them to have the self-confidence to stay calm and focused on the present; they become lively, active, aware, and alert. Their self-control does not depend on the external environment. Athletes should practice the different types of sports psychology skills suitable for the characteristics of their sport and appropriate to the situations they face. Stamatelopoulou et al. (2018) mentioned that an elite athlete who shows the best of his abilities is an athlete with a clear purpose, focuses attention on matters related to the work at hand, and reviews the skills in his mind. Such traits are associated with ultimate performance in athletes. Mind strength in athletes helps them more clearly perceive their potential (Cox, 2002) and they tend to have greater competitiveness. Having superior mental strength enables athletes to control their thoughts, emotions, feelings, and perceptions, and they will be able to use their potential to the fullest. Preparing mentally can be challenging; athletes need to be relaxed and have focus and emotional control. They need preparation and mental program integration with a training program to develop physical and mental skills.

4.3. Breathing Control

Breathing control is a psychophysiological process that has direct effects on the body because the body and mind are interlinked. Breathing control also affects how an athlete feels (awareness) while breathing, their control of arousal, as well as reducing anxiety. When someone is anxious they breathe from their upper chest; the breathing is rapid and shallow. Breathing control helps performers breathe slowly and steadily from the diaphragm. Performers can use different exercises to control their breathing. Some studies show that simple, paced breathing can also achieve positive effects on physiological indicators of arousal, including changes in cardiac rhythm (Sargunaraj et al., 1996), heart rate, and heart rate variability (HRV) (Kobayashi, 2009).

4.4. Muscle Relaxation and Complete Relaxation

Relaxation, both physical and mental, is the basis of techniques and methods for dealing with stress and anxiety that occur in sports. Relaxation can help an athlete perform better in a competition or stressful situation. All humans have contractions of different muscles, including spasticity, as a symptom of mental pressure. These symptoms are a barrier to performance because contractions make smooth and agile movement impossible, making various errors possible. Relaxation, whether musculoskeletal or mental, will help reduce the symptoms of spasticity and result in movement and performing athletic skills with minimal obstacles. Progressive Muscle Relaxation (PMR) focuses on tightening and relaxing specific muscle groups of the body to achieve a state of relaxation (Goldman, 2014). The goal of PMR is to achieve a state of relaxation by tensing and

relaxing specific muscles of the body. It provides the simple knowledge of how to relax at the first signs of tension. This process allows participants to distinguish between a relaxed muscle and a tensed one—a tense muscle usually being accompanied by anxiety and stress (Charalambous et al., 2016). PMR emphasizes the difference in sensation between a tensed and relaxed muscle (Rizal, Hajar, Savardelavar, Kueh, & Kuan, 2019). The knowledge gained from this may help participants be aware when they are stressed and thus improve their coping style, reducing stress and fatigue (Ozgundondu & Gok Metin, 2019).

4.5. Self-Talk

Self-talk is a powerful tool that can be used for motivation to induce a positive psychological state (Hatzigeorgiadis et al., 2004). Its positive effects have been shown to improve golf scores (Hayslip Jr. et al., 2010), increase concentration, and reduce negative and disruptive thoughts (Hatzigeorgiadis et al., 2004). Self-talk consists of repeated and organized positive thoughts about oneself, correcting what is wrong, and eliminating discouraging thoughts that enter the brain or thoughts that hinder the learning of new skills. Self-talk prepares the mind before competition and helps athletes concentrate, creates a good mood, and helps the mind get ready to compete. It is used to build self-confidence in athletes.

4.6. Imagery

Internal and external methods of imagery include competitive situations, the stadium, and particular strategic actions that need to be used to maintain an ideal psychological state (Cumming, Nordin, Horton, & Reynolds, 2006). For a taekwondo athlete this must be taken into consideration to ensure that while they are practicing they are in a state of mind that is as close to competition performance as possible. Thus, if done regularly, imagery can help create a positive psychological state during both practice and competition, and can help prepare the athlete to conquer their anxiety, control confidence, and perform at their best. High speed reaction is required in a taekwondo competition (O'Sullivan et al., 2009). The time to execute taekwondo's most popular attack kick—the turning kick—takes approximately 30 ms from the time the player's foot leaves the ground to the time it hits the target, either the body or the head. Similarly, as an athlete's body moves in and out of rhythm, "bouncing" and "feinting", it becomes more difficult for a defending athlete to predict their opponent's attack. External imagery can, therefore, provide an opportunity to learn the bouncing and feinting pattern of an opponent, as has been used in soccer (Thelwell & Maynard, 2003). Imagery helps build self-confidence in athletes because seeing yourself doing it before actually doing it helps with the execution of the move, reducing mistakes in athletic performance. Imagination can help athletes learn skills and how to play, as well as help them be stimulated and motivated to do so continuously. This increase in mental readiness affects subsequent proficiency levels. Imagery is a skill-learning method that has been recognized to help learn

skills quickly. The skills are remembered for a long time and can be used in relevant situations in the future as well. The use of imagery can improve athletes' ability (Cumming, Nordin, Horton, & Reynolds, 2006).

In practice, many coaches have had experience using the mental strategies combination to enhance performance. A PST package for taekwondo athletes has greater benefit for increasing mental readiness, motivation and determination for success. Hardy et al. (2001) research suggests that an impact on physical performance improvement would likely occur when PST packages are used in combination. This result is similar to the research of Slimani et al. (2014) which found that mental training packages are effective in enhancing self-confidence and managing emotions. Some advantages may be derived from combining mental strategies, and support the use of two or more psychological strategies for enhancing performance.

The PST package helps athletes learn important sports psychology skills and how to apply them to the needs and variations of different situations. For example, during training, athletes use breath control during stand-up practice, see the skills that need to be practiced, contracting and loosening muscles tensions while standing, and use self-talk to recognize skill or focus on their skill when it comes to actual training. In addition, they use imagery during the pre-performance routine and training review. During breaks, athletes use complete breathing control to relieve fatigue. Muscle contraction and relaxation or using rapid breathing to encourage readiness. Moreover, athletes use PMR and breathing control to sleep well.

However, comprehension and self-esteem aspects in the experimental group were not statistically significantly higher than the control group. As for skills training in sports psychology, this is an experience organized to create expertise (mastery experience) in applying skills in sports psychology, in both the training and competition of athletes. Using PST leads to greater self-awareness and self-esteem in athletes. Similarly, Lim & O'Sullivan (2016) identified the psychological skills—e.g., self-talk, emotional control, automaticity, goal setting, imagery, negative thinking, anxiety management, and physical and mental conditions—that helped improve a Korean taekwondo Olympic gold medalist athlete.

Thus, the research result shows the most important how to implement PST into physical practice to enhance the athlete mental readiness. Therefore, the research team was found the specific psychological needs of taekwondo athletes to prepare the most effective PST training for them. The research results will be used as a guideline for improving the mental performance of taekwondo athletes. The research results will also be used in planning athletes' training sessions and as a guideline for trainers to develop athlete competence in various programs for success in sporting events.

The strength of this study was exploring the need for PST use in taekwondo athletes, which was particularly sought by experienced coaches and then used to integrate into daily practice. Athletes learned mental training along with physical

and skill training. It was used in daily practice as well.

Future studies should take into consideration that a PST package uses and collects physical variables or skill data (score and skill performance). Further considerations should include confounding factors, such as physical strength, skill acquisition, and strategy improvisation, which relate to experience and may affect the significance of the results when comparing groups.

5. Conclusion

In conclusion, the findings provide further evidence to suggest that psychological skills training packages (breathing control, muscle relaxation, self-talk, and imagery) are effective for the mental readiness of taekwondo athletes. PST packages help improve self-confidence, understanding and self-worth, and create more self-control, motivation, and commitment to reach an athlete's goals in competition.

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Conflicts of Interest

The authors declare no conflicts of interest.

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