

# Psychological Factors of Athletes' Competitive Readiness: a Mini Literature Review

Hermahayu<sup>1</sup>, Rayinda Faizah <sup>1\*</sup>

<sup>1</sup> Universitas Muhammadiyah Magelang

Corresponding author: rayinda.faizah@ummgl.ac.id

**Abstract:** The purpose of the current literature review is to focus on the psychological readiness of athletes to compete. Through literature review, 19 articles were found that reveal psychological factors/dimensions related to athletes' success in showing good performance during competition. The results of this study revealed that psychological readiness is considered an important factor for every athlete and can change athlete's beliefs, attitudes, and reactions in facing the race or accepting the results of the race. Furthermore, this paper supports the importance of psychological preparedness; In addition, it has an important role in the advancement of athletes' achievements. From the results of the review, we recommend four dimensions that need to be measured to determine the level of readiness of athletes to compete, namely self-regulation, adaptive emotional regulation, self-beliefs, and communication skills.

**Keywords:** psychological readiness, athlete, competition

## INTRODUCTION

The pre-competitive state in sports can be defined as the psychological and physical state experienced by an athlete in the last few days before a competition until just before they start to perform certain competitive activities. Pre-competition conditions have an important influence on the quality of an athlete's performance. That is why it is so important for athletes to be able to control such states. The success of an athlete in competing not only requires high physical, technical and tactical readiness, but also requires maximum mental effort which underlies the psychological readiness of the athlete. The general model of athlete readiness includes a number of structural components, reflecting the characteristics of the model's physical, technical, tactical and psychological readiness (Ulyayeva et al., 2020). These characteristics characterize the state of readiness that must be achieved by an athlete during competition. It is considered a parameter of sporting perfection and a guideline for the selection of athletes in the national team.

One of the main components of readiness besides physical, technical and tactical is psychological readiness. It has an important role and function to determine personal components such as motivational and mental readiness and the ability of the subject to carry out his profession (Baimenova et al., 2015). Competition mental readiness, at certain times can help or hinder athletes

in mobilizing and showing all their abilities in certain competitions (Gryn, 2015). Mental readiness involves being able to identify the best mindset for a particular task and developing ways to instill that mindset when necessary. Top performers in sports usually have well-developed rituals and routines that they adopt before competition, during competition, during breaks in competition, and also after competition. This mental readiness includes self-regulation strategies such as relaxation and/or energizing techniques to control activation levels, planned thought processes to manage critical moments, routines to better deal with performance errors, and mood management strategies (Terry, 2004).

Psychological readiness is important for athletes because it can affect their performance. If athletes are in a better psychological condition, they will be able to perform optimally in competition. However, if an athlete experiences an unfavorable psychological condition before participating in an important competition, while recovering from an injury, or after experiencing failure in a previous competition, then they may experience difficulties and fail to perform optimally in competition or may experience injury and repeated defeats.

Research shows the importance of psychological readiness to complete the tasks assigned in competition and emphasizes the need to create pre-competition mental preparation for an athlete (Platonov, 2018; Zhanneta et al., 2015). Therefore it is necessary to know the factors that have an impact on the dynamics of the psychological readiness of an athlete. It is very important to know personal indicators at the stage of preparation for the competition.

We already know the importance of athlete's psychological readiness to compete, but there is no consensus regarding the definition and dimensions of athlete's psychological readiness to compete. A number of studies use a variety of dimensions. As, in the functional approach, psychological readiness is considered as a certain state of individual mental functioning, which gives a high level of achievement in performing certain activities (Karamushka, 2000). In this case, psychological readiness can be represented as the formation of a stable and integrated personality, which includes a number of components that are adequate for certain activity requirements and conditions of activity, which together allow the subject to more or less successfully implement a number of these components. Conceptually, complex symptoms of psychological readiness for competition in sports can be identified including quality of will, direction of intellectual processes required, specialization, creative imagination, optimal level of emotional regulation, flexible attention, ability to self-regulate (Puni, 1969). Several other characteristics are used to distinguish the level of competitive psychological readiness, including by looking at athletes' motivation for

competitive activity, self-assessment, anxiety, self-regulation, performance in terms of probability of error (Kovalenko & Khrisanfova, 2017).

Although research has found many psychological dimensions related to athlete performance while competing as mentioned above, there is no consensus regarding the agreed definition and specific dimensions of the concept of athlete psychological readiness to compete. A number of studies use a variety of dimensions. This article aims to synthesize the main dimensions that are widely associated with psychological readiness through various studies that have been conducted.

## **METHOD**

The articles reviewed in this study were collected through a search engine in the Google Scholar database in January - March 2023. The journal articles being searched for had a period ranging from 2011 to 2023. This range was made long because the variable psychological readiness of athletes to compete is rarely studied. The word search strategy uses the keywords "psychological readiness" or "mental readiness" and "competition" or "performance". After finding several relevant articles, the search continues using other strategies, namely by finding relevant articles cited in articles that have been found previously. Next, the collected articles were filtered by reading the abstract to the full text.

Articles that did not discuss psychological factors related to athlete performance were deleted. Meanwhile, the relevant articles were extracted by data extraction by including existing psychological factors according to the category/theme. Finally, these psychological factors are included in an existing psychological construct.

## **RESULTS**

Based on the search results, 19 articles were found that reveal psychological factors/dimensions related to athletes' success in showing good performance during competition as seen in Table 1. Next, the psychological factors that emerged were grouped into themes as shown in Table 2. Finally, the themes that have been grouped are sought for compatibility with factors that build an existing psychological construct. Suitable psychological constructs can be seen in Table 3.

**Table 1.** Articles related to psychological readiness factors and competitive performance

No	Authors	Psychological concept	Elements
1	(Babushkin & Smolentseva, 2011)	Psychological readiness of sportsmen for competition	The psychological readiness of a sportsman for competition is an integral personal structure, which includes a number of psychological characteristics that reflect the inner state of the sportsman in general (motivation, needs, emotions, reflection, motoricity).
2	(Vodičar et al., 2012)	Psychological phenomena related to precompetitive states	Anxiety, concentration and self-confidence
3	(Omoregie et al., 2012)	Critical elements of excellence/success	Commitment, belief, full focus, positive images, mental readiness, distractions control and constructive evaluation
4	(Weissensteiner et al., 2012)	Psychological characteristics of expert cricket batsmen	The skilled batsmen scored significantly higher on mental toughness dimensions relating to motivation (Personal Bests, Task Value and Commitment), coping skill (Perseverance) and self-belief (Potential).
5	(Sotoodeh et al., 2012)	Elite athlete's mental skills	Game planning, goal setting, activation, relaxation, self-confidence and commitment
6	(Ziv & Lidor, 2013)	Psychological Preparation of Competitive	(a) imagery, (b) motivation, (c) stress, anxiety, and mood states, (d) eating attitudes and weight control, and (e) coach/athlete interactions.
7	(Anderson et al., 2014)	the optimal psychological state to the automatic psychological state of peak performance	The ability to self-regulate, take control, and trust in ability
8	(Kokurin & Maydokina, 2014)	Components of psychological preparedness	Motivational and target, Informational and evaluation, Emotional and volitional, Correction and implementation, Functional and energetic

No	Authors	Psychological concept	Elements
9	(Namazov, 2015)	Psychological readiness of the sportsman for a competition is determined by:	Calmness (equanimity) of a sportsman in extreme competitive situations; self-confidence of a sportsman, providing reliability of actions; fighting spirits of a sportsman;
10	(Zhuina et al., 2015)	The personal traits of winner's athletes	Strong character, integrity, perseverance, balance, responsibility, perseverance, persistence, determination, persistence in achieving goals, practicality, strength, and honesty.
11	(Gryn, 2015)	Sports performance quality	The performance of an athlete depends on such personal qualities as emotional and nerve-psychic stability, anxiety, aggressiveness.
12	(Kovalenko & Khrisanfova, 2017)	Criteria of psychological readiness for competitive activity	Motivation to competitive activity, self-rating, anxiety, self-regulation, performance in terms of error probability
13	(Boitzova & Simonova, 2019)	Psychological readiness for professional activities	The totality of psychological knowledge which includes self-regulation skills, communicative competence, and emotional intelligence
14	(Pushkarev, 2019)	Mental reliability	Manifestation of emotional and motivational stability, self-regulation, stability and noise immunity
15	(Shalar et al., 2019)	Mental readiness for competition Mental readiness for competition	A sober self-confidence; the desire to fight to achieve the goal; optimal level of emotional excitation; noise immunity against knock down factors; the ability to manage their actions and behaviour.
16	(Mitić et al., 2021)	Elite athletes psychological profile	Elite athletes are characterized by a positive high score in self-efficacy, emotionality, present fatalistic time perspective, past positive time perspective, and openness to experience. They are also characterized by low past negative time perspective, emotional competence, and future time perspective.
17	(Cyшко et al., 2021)	Psychological preparedness for competitions	Motivation to win, anxiety level, stability of attention, temperament, emotional stability, communicative component
18	(Pramesti et al., 2022)	Faktor kesiapan psikologis	Coping, regulasi diri, regulasi emosi, dan kepercayaan diri

No	Authors	Psychological concept	Elements
19	(Alesi et al., 2022)	Psychological variables of sports performance	attitude, attention, self-confidence, stress control, anxiety, motivation, cohesion, self-control, emotional self-regulation, and interpersonal skills

**Table 2.** Grouping of similar factors into themes

Similar factors	Theme
Motivation; Need; Motivational and target; Determination; Motivational stability; The desire to fight to achieve the goal; Volitional; Motivation to win	Motivation
Emotionality; Mental readiness; Emotional and nerve-psychic stability; Emotional intelligence; Emotional stability; Optimal level of emotional excitation; Calmness (equanimity); Strong character; Honesty; Emotional competence; Emotional regulation; Emotional self-regulation	Emotional competence
Reflection; Concentration; Full focus; Constructive evaluation; Self-regulate; Take control; Informational and evaluation; Correction and implementation; Balance; Openness to experience; Self-control; Stability of attention; Attention	Thinking skills
The ability to manage their actions and behaviour; Motority; Activation; Functional and energetic; Practicality; Strength; Eating attitudes and weight control	Behaviour
Self-confidence; Belief; Positive images; Trust in ability; Self-rating; Self-efficacy; Present fatalistic time perspective; Past positive time perspective; Low past negative time perspective; Future time perspective	Belief
Perseverance; Fighting spirits; Integrity; Persistence	Commitment
Game planning; Goal setting	Goal setting
Coping skill; Relaxation; Imagery	Coping strategy
Attitude; Responsibility	Attitude/ character
Coach/athlete interactions; Communicative competence; Communicative component; Interpersonal skills	Communication/interactions

<b>Similar factors</b>	<b>Theme</b>
Anxiety; Agresivity; Mood states; Temperament; Stress control	Emotional states
Distraction's control; Stability and noise immunity; Noise immunity against knock down factors	Resilience

**Table 3.** Existing psychological constructs that are manifested by the accumulated factors

<b>Authors</b>	<b>Construct</b>	<b>Operational definition</b>
(Davis et al., 2019).	Communication skills	Communication skills include the ability to speak freely, feel comfortable doing so, listen, give input, constructive criticism, open communication
(Tus, 2020).	Self-perception	These psychological perceptions related to oneself include self-concept, self-esteem, and self-efficacy
(Loos, 2003)	Self-beliefs	The set of self-beliefs that make up identity is defined as self-concept, self-esteem, and self-efficacy, which are interrelated and in continuous development
(Gratz & Tull, 2010)	Adaptive emotion regulation	A multidimensional construct involving the following: (a) awareness, understanding, and acceptance of emotions; (b) the ability to engage in goal-directed behavior, and inhibit impulsive behavior, while experiencing negative emotions; (c) flexible use of situationally appropriate strategies to modulate the intensity and/or duration of emotional responses, rather than eliminating emotions entirely; and (d) willingness to experience negative emotions as part of pursuing meaningful activities in life.
(Ozhiganova, 2018)	Self-regulation	Common components that are considered important in self-regulation include motivation, standards (values, morality), goal-setting, planning the conditions needed to achieve goals, monitoring and self-control, evaluation and correction of results, capacity to show willpower and persist in achieving goals

## DISCUSSION

Based on the search results, we formulate that the concept of "psychological readiness for competition" is a multidimensional construct that describes a certain state of athlete's mental function which can be identified from the capacity of self-regulation, emotional regulation, self-related perceptions (self-beliefs), and communication. The psychological readiness factor of athletes to compete is shown in Picture 1.

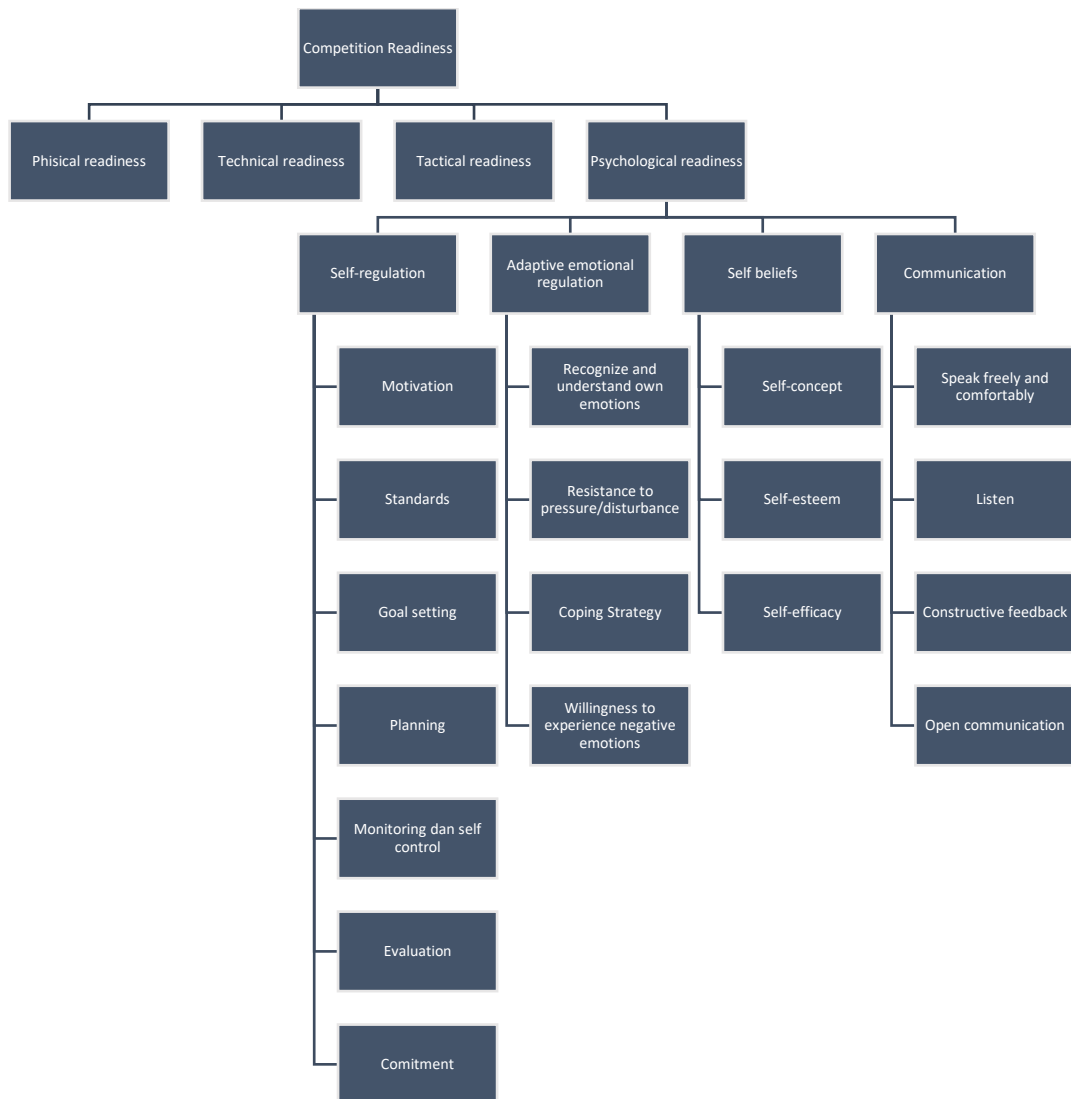


**Picture 1.** Psychological Readiness to Compete Dimensions

These four dimensions have described certain characteristics, conditions, or behaviors from the many dimensions that have been collected before. The first dimension, self-regulation, includes motivation, standards (values, morality), goal-setting, planning the conditions needed to achieve goals, monitoring and self-control, evaluation and correction of results, capacity to show willpower and persist in achieving goals (Ozhiganova, 2018). The second dimension, adaptive emotion regulation includes (a) awareness, understanding, and acceptance of emotions; (b) the ability to engage in goal-directed behavior, and inhibit impulsive behavior, when experiencing negative emotions; (c) flexible use of situationally appropriate strategies to modulate the intensity and/or duration of an emotional response, rather than eliminating the emotion entirely; and (d) a willingness to experience negative emotions as part of pursuing meaningful activities in life (Gratz & Tull, 2010). Third dimension, self-related perceptions include self-concept, self-esteem, and self-efficacy. While, last dimension is communication. It is includes the ability to speak freely, feel



comfortable doing so, listen, provide input, constructive criticism, open communication. The concept of psychological readiness of athletes more fully can be seen in Picture 2.



**Picture 2.** Position, Dimensions and factors of Psychological Readiness in athletes to competitions

The definition of each dimension and its relationship to performance is explained below.

### Self regulation

Based on theoretical analysis, self-regulation is explained as a goal-oriented controlled activity of humans as well as the ability to manage one's own psychological and physiological state. Self-regulation is studied in relation to various aspects of life: health management, well-being, self-learning, professional activity, etc., focusing on various aspects: emotional, cognitive, motivational, behavioral (Ozhiganova, 2018). Self-regulation is largely represented through the terms "capacity"

or "ability". A number of components of self-regulation have been extensively studied in various aspects. The components that are common and considered important include motivation, standards (values, morality), goal-setting, planning the conditions needed to achieve goals, monitoring and self-control, evaluating and correcting results, the capacity to show willpower and persist in achieving goals (Ozhiganova, 2018).

The study of identifying factors on the psychological readiness of athletic athletes found several factors including self-regulation (Pramesti et al., 2022). Psychological readiness for professional activities means a totality of psychological knowledge, one of which includes self-regulation skills (Boitzova & Simonova, 2019). Conditions of mental stability can also be formed depending on the manifestation of self-regulation (Pushkarev, 2019). Self-regulation is part of the human intellectual function that plays a role in various domains of human life. As explained earlier, research has supported that in sports, besides the level of physical and technical abilities of players that are considered important, team victory is also associated with psychological and intellectual readiness of athletes (Gryn, 2015). Research has found a relationship between the level of development of intellectual quality (IQ) and the efficiency of the competitive activity of female elite handball players (Strykalenko et al., 2020). Intellectual capacity is the ability to think, learn, plan, and execute with discipline. Intellectual ability in sports is a component of an athlete's skills in terms of sport theory and methodology, and is included in his tactical training (Zhanneta et al., 2015). Self-regulation or self-management as an intellectual function includes metacognition such as managing the athlete's mind to know what to do in a match, athletes imagining training sessions or images, and motivation raised by athletes.

The first sub- dimension of self-regulation is motivation. Motivation is widely associated with the athlete's readiness to perform successfully in competition (Babushkin, 2007; Baker & Young, 2014; Bozidar et al., 2014; Cole et al., 2004; Krane & Williams, 2006; Mahoney et al., 1987; Zekiöglu et al., 2017) internal and external motivation. Motivation can assist athletes in developing a positive state of mind (Ashton et al., 2014). Motivation to win is an indicator of the quality of sensorimotor psychological readiness of athletes (Babushkin & Smolentseva, 2011; Shalar et al., 2019). One of the psychological readiness criteria for competitive activity also pays attention to motivation for competitive activity (Kovalenko & Khrisanfova, 2017; Lozhkin, 2011). When detecting the psychological readiness of athletes for competition during pre-match training, one of the things that must be highlighted is motivation and needs (Shalar et al., 2019). When identifying the components of needs and motivation, the aspects that need to be considered are: the athlete's

need to achieve high results in certain competitions; competition-oriented athlete motivation; athlete's competitive motivation that is oriented towards achieving success (Babushkin & Smolentseva, 2011).

Self-regulation also consists of four levels, including 1) Psychophysiological level - the ability to self-regulate from emotional and psycho-physiological states, 2) Socio-psychological level - the ability to regulate oneself in the process of social interaction, 3) Psychological level : a) the ability to organize activities; b) the capacity for personal self-control and self-perfection; c) capacity to show willpower, mobilize energy, 4) Spiritual level — the highest capacity for self-regulation conditioned by the person's orientation to the higher values and meanings of existence. Self-regulation at the highest spiritual level is considered in this study in relation to higher self-regulation capacities, which contribute to the person's self-realization in professional activity (Ozhiganova, 2018), for example, a sense of responsibility. This spiritual level can be interpreted as a second sub-dimensional self-regulation, which is related to standards (values, morality).

The third sub-dimension of self-regulation is goal setting. Goal setting has become one of the factors in the basic psychological development of athletes (Bozidar et al., 2014; Krane & Williams, 2006). One of the mental readiness is constructed by the presence of goal-setting. (Marquardt et al., 2016). In setting goals, there is a fourth regulatory sub dimension, namely planning the conditions needed to achieve the goal. This implies that athletes must be able to think of plans to manage critical moments (Terry, 2004). Achievements can be achieved by planning a training program that has clear goal settings or goals (Wahyudi & Herdyanto, 2020).

The fifth sub dimension of regulation is monitoring and self control. When the level of activation is optimal, athletes can monitor stimuli in competitive situations and gain optimal control over their own movements (Vodičar et al., 2012). A proposed model for optimal psychological states includes identifying self-regulation and self-control as processes that help athletes to transition from experiencing a variety of psychological factors during competition to an automatic psychological state of peak performance (Anderson et al., 2014). One important component of the success of competitive activities is the ability to regulate actions, feelings, and behavior (Shalar et al., 2019). It can be assumed that metacognitive is part of the sub-dimensional monitoring and self-control. This refers to the opinion that self-regulation of learning has been defined as the extent to which individuals are metacognitively, motivated, and proactively participant behavior in their own learning process (Jordet, 2015). Metacognitive is a person's awareness to control the cognitive realm within him. If this awareness exists within the athlete, then he knows what to do when he doesn't know.

The cognitive domains that can be controlled in athletes are planning, supervising, and reflecting on every situation they face.

Athletes with high mental readiness show common sense when choosing their starting level of competition, which allows them to adequately evaluate their psycho-emotional state and set a high level of “real goals” and a sufficiently high level of “ideal goals” (Oliylyk & Voitenko, 2020). Operating the level of real and ideal goals in individual aspirations shows the operational ability to self-evaluate in current activities. The ability to evaluate is the sixth subdimensional of self-regulation. In sports competitions or practice, the evaluation of an athlete's performance is generally carried out by coaches, agents and the mass media, etc., or by the athlete himself by means of self-evaluation. This evaluation is carried out to identify the strengths and weaknesses possessed. By comparing self-evaluation results with athletes who are successful in a particular sport, athletes can see areas that need improvement, and training programs can be modified accordingly. In this way valuable training time can be used more efficiently. This is related to the subdimensional planning.

The last sub-dimension of self-regulation is willpower and persistence in achieving goals. This can also be interpreted as a commitment. In various sports psychology literature, commitment is cited as an important component that underlies persistence, motivation, and goal achievement in sports (Hall, 1993). Commitment as a force that binds individuals to take actions that are relevant to certain goals (Meyer & Herscovitch, 2001). Commitment is an important aspect in the process of developing talented football players (Andreu & Ramirez, 2021), which is characterized by persistence, will or determination (Notario-Alonso et al., 2022). Thus, athletes who are committed to carrying out their duties and obligations will always be motivated and persistent in achieving the targets to be achieved. Research has also concluded that mentally tough athletes have characteristics that appear to contribute to their success, and demonstrating these characteristics increase their chances of success. One of the characteristics of mentally tough athletes is their high commitment and persistence to achieve goals in their sport despite pressure or difficulty, which in turn results in their increasing focus on goals and looking for ways to identify and select tasks to optimally lead to success (Jones et al., 2007).

Research in sports has shown that the element of success that ensures an optimal level of mental readiness to achieve successful results is commitment (Omoregie et al., 2012). In qualitative interviews, athletes at the Olympic/world championship level stated that they were highly committed to achieving their goals in sports (Jordet, 2015).

One of the components of mental readiness must include regulatory and behavioral components (Lozhkin, 2011). Other research on the mental state of athletes, found that the readiness of athletes to compete in self-regulation is directly related to the disclosure of self-regulation and the psycho-emotional potential of athletes, both of which are important to achieve the expected victory (Popovych et al., 2022). This psycho-emotional potential is summarized and explained next in the dimension of emotion regulation.

### **Adaptive emotion regulation**

One of the mental conditions of athletes as part of their mental readiness is indicated by an optimal level of emotional excitement (Shalar et al., 2019). Conceptually, the complex symptoms of psychological readiness for competition in sports can be identified from the optimal level of emotional regulation (Dmitriieva, 2020; Puni, 1969). An athlete's psychological readiness to compete is an integral personal structure, which includes a number of psychological characteristics that reflect the athlete's inner state, one of which is emotion (Babushkin & Smolentseva, 2011). The results showed that elite athletes, compared to those who were less successful, scored higher on emotionality. They are also characterized by emotional competence (Mitić et al., 2021). When identifying emotions, the following points need to be considered: 1) anxiety as an inner state; 2) emotional intelligence tendencies; 3) the ability to control one's own emotional state; 4) emotional state (Babushkin & Smolentseva, 2011).

From the practice of sports activities it is known that the results of an athlete's performance depend on personal qualities such as emotional and neuro-psyche stability, anxiety, aggressiveness, and others (Gryn, 2015). An indicator of the quality of psychological readiness to take part in major competitions in elite athletes includes emotional stability (Сушко et al., 2021). Research results have shown that emotional responses have a very critical role in motor performance that underlies athlete performance in various sports (Baker & Young, 2014; Beatty et al., 2016). Given the fundamental and profound influence of emotions, optimal performance often requires athletes to regulate and manage their emotional experiences effectively and efficiently. The study of identifying the psychological readiness factors of athletic athletes shows several factors of psychological readiness of athletes including emotion regulation (Pramesti et al., 2022).

Emotion regulation, including the athlete's ability to regulate emotions in training and competition and focus on training and competition. Research on psychological readiness training in shooting athletes pays great attention to the ability to regulate emotional states (emotional

regulation) (Dmitrieva, 2020). Emotion regulation is defined as the initiation, maintenance and management of emotional arousal to enable individuals to achieve their goals, and adapt to social life (Cole et al., 2004; Cristian-Mihail et al., 2016).

Emotion regulation refers to the capacity to manage negative and/or challenging emotions and has been defined as “the process by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998). Moreover, emotion regulation should be considered as the ability to manage and adaptively respond to negative emotions, rather than the process by which troublesome emotions are controlled, inhibited, or eliminated (Gratz & Roemer, 2004). In accordance with this view, adaptive emotion regulation has been conceptualized as a multidimensional construct involving the following: “(a) awareness, understanding, and acceptance of emotions; (b) the ability to engage in goal-directed behavior, and inhibit impulsive behavior, when experiencing negative emotions; (c) flexible use of situationally appropriate strategies to modulate the intensity and/or duration of an emotional response, rather than eliminating the emotion entirely; and (d) a willingness to experience negative emotions as part of pursuing meaningful activities in life” (Gratz & Tull, 2010).

The first sub-dimensional adaptive emotion regulation is awareness, understanding, and acceptance of emotions. This is how one aspect of emotional intelligence is recognizing one's own emotions. Recognizing one's own emotions is the ability to recognize feelings as they occur. A number of studies have supported that perceived emotional intelligence is an important part of psychological readiness (Babushkin & Smolentseva, 2011; Boitzova & Simonova, 2019). It has been recommended that in order to perform optimally in competition, an athlete must have a number of psychological abilities, including not being easily angered by mistakes, always focusing on the next defensive action and not thinking too much about actions and failures (o'g'li et al., 2022).

The second subdimension of adaptive emotion regulation is the ability to engage in goal-directed behavior, and inhibit impulsive behavior, when experiencing negative emotions. This can be interpreted as the athlete's emotional stability in various situations, emotional control, or resistance to shocks and disturbances. Conditions of mental stability can be formed depending on the manifestation of emotional stability (Pushkarev, 2019). Research results have shown that most successful athletes are more cognitively and somatically anxious, more often emotional control (Bois et al., 2009). It has also been proven that one of the important elements of an athlete's mental readiness to be able to successfully show successful performance is the ability to control distraction

(Omoregie et al., 2012). It is believed that the readiness of athletes is determined, among other things, by the will to fight to the end to achieve goals and win together as well as resilience to shocks (Shalar et al., 2019; Yakovlev & Babushkin, 2016).

The ability to continue to engage in goal-directed behavior despite experiencing negative emotions can also be interpreted as the resilience or mental toughness of an athlete. This athlete's endurance is believed to be a determinant of athlete's readiness to compete (Shalar et al., 2019; Yakovlev & Babushkin, 2016). Conditions of mental stability can be formed depending on the manifestation of stability and resistance to disturbance (Pushkarev, 2019). It appears that several basic factors emerge in the development of basic psychological characteristics. These factors are Mental Toughness (Bozidar et al., 2014; Krane & Williams, 2006). The current study also found that mental toughness is a basic and effective factor in sporting success in differentiating between successful and unsuccessful athletes (Zandi & Mohebi, 2016). Mental toughness represents a set of personal attributes that influence the way in which difficulties, challenges, and goals are assessed and approached (Gucciardi et al., 2009). It has been recommended that athletes need to have the ability to keep fighting for every opportunity and strive to achieve goals even in a losing position to be able to perform optimally (o'g'li et al., 2022).

The third subdimensional adaptive emotion regulation relates to the flexible use of situationally appropriate strategies to modulate the intensity and/or duration of emotional responses, rather than eliminating the emotion entirely. It's like how athletes use strategies to deal with stress and pressure. That is, athletes must have coping strategies to deal with stress and pressure. A coping strategy is a way or method that is used by each individual to overcome and control situations or problems that are experienced and seen as obstacles, painful challenges, and threats that are detrimental. Coping includes managing the pressure received, knowing what to do when under pressure in both training and competition, and being able to solve things that are difficult or annoying. The study of identifying the psychological readiness factors of athletic athletes shows that one of the psychological readiness factors of athletes is coping (Pramesti et al., 2022) or anxiety control (Mahoney et al., 1987).

There are many different conceptualizations of coping strategies, but five common types of coping strategies are problem-focused coping, emotion-focused coping, social support, religious coping, and meaning-making. Several studies have shown that the strategies athletes use to manage their emotions can vary, such as relaxation and self-talk (Marquardt et al., 2016), and mood management strategies (Terry, 2004). When an athlete is struggling to achieve optimal

competitive behavior, the amount of stress needs to be taken into account as well as the athlete's ability to cope with stress and control their pre-competition anxiety needs to be considered (Tušak, 1995).

More successful athletes are also characterized by higher levels of emotionality and openness to experiences. Emotionality consists of subordinate aspects: Fear, Anxiety, Addiction, and Sentimentality, and high scores on this scale are achieved by people who are afraid of physical harm from injury, they feel anxiety as a response to life's pressures and the need for emotional support by others, have empathy and sentimentality towards others (Ashton et al., 2014). This illustrates the existence of a fourth subdimensional adaptive emotion regulation related to the willingness to experience negative emotions as part of pursuing meaningful activities in life.

Experts who have studied the cognitive and somatic aspects of anxiety (Cox, 1994; Hardy & Parfitt, 1991; Masten et al., 2014; Ussher & Hardy, 1986) agree that cognitive aspects affect competitive success much more than somatic aspects. The somatic aspect of anxiety is a normal and healthy response to stressful situations and the way individuals are able to cope with situations often provides an indicator of individual readiness for competition (Tušak & Tušak, 2003). At the psychological level, the optimal level of activation will lead to positive emotions, self-confidence, optimism, optimal level of attention, feeling of being in control of the situation as well as optimal movement and muscle performance.

## **Self-beliefs**

Self-related perception is an important subject in competitive sports, given its impact on athlete behavior and performance. This self-related psychological perception includes self-concept, self-esteem, and self-efficacy (Tus, 2020). A set of self-beliefs that make up identity is defined as self-concept, self-esteem, and self-efficacy, which are interrelated and in continuous development (Loos, 2003). Self-beliefs help determine how bad a particular situation is and determine the coping process by considering the available resources (Rodriguez & Loos-Sant'Ana, 2015).

Self-concept as one of the sub-dimensions of self-beliefs is defined as an organized cognitive structure that includes attitudes, beliefs, and values that cross all aspects of experience and action, regulates various habits, abilities, ideas, and feelings displayed by a person (Cardenal & Fierro, 2003). These structures are unstable over time, and their development occurs from experience, self-reflection, and feedback from others. Self-concept is a hierarchical and complex self-model, which is built based on Bayesian inference, whose role is to facilitate adaptation to the



social environment. To denote the adaptive functioning of the self, the term adaptive self-concept (ASC) is used; (Jankowski & Bąk, 2021). ASC makes it possible to organize information about oneself into a coherent self-belief system and use these self-beliefs to predict one's behavior, as well as the behavior of others in relation to oneself (Limanowski & Blankenburg, 2013; Moutoussis et al., 2014). Adaptive self-concept has two main aspects – self-awareness (dynamic aspect) and self-knowledge (content-structural aspect) (Jankowski et al., 2022). Self-concept plays an important role in self-regulation (especially when referring to long-term goals), as well as determining certain emotions. This self-assessment becomes one of the criteria of psychological readiness for competitive activity (Kovalenko & Khrisanfova, 2017).

Self-esteem is an overall assessment of one's self-worth or self-worth. It reflects a continuum, with people ranging from "low" to "high" self-esteem. Those with low self-esteem, in extreme cases, actively dislike themselves and feel unworthy. Those with high self-esteem like themselves and strongly believe in their innate worth as individuals (Jordan et al., 2020). Individuals who have high self-esteem will see themselves positively and are aware of the strengths they have (Aditomo & Retnowati, 2004). When experiencing a failure or unpleasant situation, individuals who have high self-esteem tend to be more able to overcome it and adapt to change (Sativa & Helmi, 2013). Empirically it has been proven that an athlete's self-esteem is a key parameter of self-regulation of an athlete who strives for victory. Self-esteem is an accumulation of mental and psychological formations with high assimilation abilities. Self-esteem, self-control, and self-regulation abilities of athletes can be latent psycho-emotional resources that will increase the readiness of an athlete's self-regulation which can ensure high expected rewards (Popovych et al., 2022).

Next is self-efficacy or self-confidence. Psychological readiness for one or another type of activity including in competitive sports presents a belief system (Boitzova & Simonova, 2019). The terms self-efficacy and self-confidence are used interchangeably in the sports psychology literature to describe a person's perceived ability to achieve a certain level of performance (Bandura, 1997). Self-efficacy belief refers to the level of confidence that individuals have in themselves to achieve the desired results. This belief is also related to the evaluation of elements of self-concept, and the results can vary due to the abilities and resources that the person has, but also because of the ability to organize to deal with the situation (Bandura, 2006). Confidence and belief in one's self-efficacy are considered as one of the most influential psychological variables that affect

achievement efforts in sports. Research has confirmed that athlete readiness is determined by a strong belief in their strength (Shalar et al., 2019; Yakovlev & Babushkin, 2016).

When analyzing precompetitive behavior, this level of self-confidence should be an important concern (Tušak, 1995). This view of self-confidence differs from the global trait view which takes into account overall performance optimism (Feltz et al., 2008). The level of specificity at which self-efficacy beliefs are measured is determined by the context of the performance situation, and the situation in which one wishes to generalize (or predict) (Feltz & Öncü, 2014). The concept of sport confidence is defined as the degree of certainty that individuals have about their ability to be successful in sports (Vealey, 1986). Sports confidence has been conceptualized into components such as traits and statuses, with the former being associated with more enduring beliefs (such as being confident of performing successfully in a competition one is about to enter), and the latter being associated with more specific sporting contexts. The use of the terms self-confidence or self-efficacy both have concepts related to cognitive processes in which athletes make judgments about their capabilities to achieve certain goals in sports (Feltz & Öncü, 2014). Assessment of self-efficacy is about what a person thinks he or she can do (e.g., I think I can pass the entire hurdle with perfect technique), not just about what the person has (e.g., I have long, strong legs) or self-esteem (such as, I rate myself as a sprinter).

Research on the psychological readiness of athletes shows that several factors are associated with the psychological readiness of athletes, including self-confidence. Confidence includes self-evident confidence such as belief in one's abilities. High self-confidence is usually accompanied by high expectations of success. Confidence helps improve concentration, increases pleasant emotions and increases satisfaction and the effort made to achieve a goal. The correlation between self-confidence and competitive performance is one of the most important aspects of competitive performance for athletes.

A number of studies confirm the positive effect of self-confidence on competitive success (Omoregie et al., 2012; Vealey, 1986; Weinberg & Gould, 1995). Confidence is reported by most athletes as an inherent part of their best performance or competitive success (Gould et al., 1989). The results show that elite athletes, compared to those who are less successful, have high scores in self-efficacy (Mitić et al., 2021). One of the elements of success in sports that ensures optimal mental readiness for successful results among others also includes belief/self confidence. The sub-dimensionality of mental readiness is also constructed in a complex way that includes self-confidence (Marquardt et al., 2016). A proposed model for optimal psychological states identifies

self-regulation, self-control, and belief as processes that help athletes to transition from experiencing a variety of psychological factors during competition to an automatic psychological state of peak performance (Anderson et al., 2014).

This can be interpreted that athletes must be able to reflect on their internal and external conditions. Reflection is one of the things that needs to be highlighted when detecting athletes' psychological readiness for competition during pre-match training (Babushkin & Smolentseva, 2011). When identifying the ability to reflect, it is necessary to consider the following: 1) confidence in the successful performance of the competition to be followed; 2) perception of opponent's ability; 3) the athlete's desire to take part in the competition; 4) subjective perception of athlete's ability by other people (coach); 5) the personal significance of participation in the competition to be followed for athletes (Babushkin & Smolentseva, 2011).

## **Communication skills**

Research has shown the role of the communicative component as an indicator of the quality of psychological readiness to take part in major competitions in elite athletes (Boitzova & Simonova, 2019; Сущко et al., 2021). Communication skills include the ability to speak freely, feel comfortable doing so, listen, provide input, constructive criticism, open communication (Davis et al., 2019). The quality of communication, especially between athletes and coaches, can have an impact on motivation, physical self-concept, and learning for athletes (Sagar & Jowett, 2012). The communication strategy is the mechanism by which the quality and satisfaction of the coach-athlete relationship is related. With good relationship quality and satisfaction it is more likely for coaches to manage conflict, to express their motivations and more easily show their support (Davis et al., 2019).

A quality athlete and coach relationship is an important factor for athlete success. These relationships are characterized by high levels of trust, respect, appreciation, and commitment (or a strong intention to maintain a close long-term relationship), and cooperation where there is assurance and support as well as approachability and responsiveness are more likely to experience high levels of satisfaction. This relates to how they are treated, trained and instructed by coaches and how they perform. So it can be said that communication affects the quality of the athlete and coach relationship, and the quality of this relationship has an impact on the athlete's motivation and confidence in facing competition.

## CONCLUSIONS

The dynamics of the state of psychological readiness of an athlete in the pre-competition period serves as one of the necessary prerequisites for psychological preparation of athletes for a major competition. Psychological support for the preparation of an athlete for a competition should be based on monitoring changes in the psychological readiness of a particular athlete at the stage of immediate preparation for competition and their deviations from the set parameters. Therefore, it is very important to know the dynamics of the psychological readiness of a particular athlete. We need to know personal indicators of this situation in the immediate preparation stage for a competition by looking at the components of psychological readiness which include self-regulation, emotional regulation, self-beliefs, and communication. Self-regulation measures cognitive capacity more, emotion regulation emphasizes the athlete's emotional competence, self-belief measures the athlete's intrapersonal image, and communication highlights the athlete's intrapersonal skills. These four components are interrelated with one another in forming the psychological readiness of athletes to perform successfully.

## Conflict of Interest

All authors do not have conflict of interest in regard to this research or its funding.

## Acknowledgment

This research was supported by the Institute for Research and Community Service Universitas Muhammadiyah Magelang, Indonesia.

## REFERENCES

- Aditomo, A., & Retnowati, S. (2004). Perfeksionisme, Harga Diri, Dan Kecenderungan Depresi Pada Remaja Akhir. *Jurnal Psikologi*, 31(1), Article 1. <https://doi.org/10.22146/jpsi.7033>
- Alesi, M., Gómez-López, M., & Borrego, C. C. (2022). Editorial: Psychological Factors in Physical Education and Sport. *Frontiers in Psychology*, 12. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.826291>
- Anderson, R., Hanrahan, S., & Mallett, C. (2014). Investigating the Optimal Psychological State for Peak Performance in Australian Elite Athletes. *Journal of Applied Sport Psychology*, 26, 318–333. <https://doi.org/10.1080/10413200.2014.885915>

- Andreu, J. M. P., & Ramirez, A. (2021). *Percepción de jugadores de fútbol jóvenes sobre el entorno deportivo*. <https://doi.org/10.47197/retos.v0i39.77014>
- Ashton, M. C., Lee, K., & de Vries, R. E. (2014). The HEXACO Honesty-Humility, Agreeableness, and Emotionality Factors: A Review of Research and Theory. *Personality and Social Psychology Review*, 18(2), 139–152. <https://doi.org/10.1177/1088868314523838>
- Babushkin, G. D. (2007). *Psychological and pedagogical support of the sportsmens preparation for competitions: Textbook*. Omsk: Siberian State University of Physical Education and Sport Press.
- Babushkin, G. D., & Smolentseva, V. N. (2011). *Immediate diagnostics of the pre-competition psychological readiness of a sportsman*. Scientific works of Siberian State University of Physical Education and Sport.
- Baimenova, B., Bekova, Z., & Saule, Z. (2015). Psychological Readiness of Future Educational Psychologists for the Work with Children in the Conditions of Inclusive Education. *Procedia - Social and Behavioral Sciences*, 205, 577–583. <https://doi.org/10.1016/j.sbspro.2015.09.082>
- Baker, J., & Young, B. (2014). 20 years later: Deliberate practice and the development of expertise in sport. *International Review of Sport and Exercise Psychology*, 7(1), 135–157. <https://doi.org/10.1080/1750984X.2014.896024>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Macmillan.
- Bandura, A. (2006). Guide for constructing self-efficacy scales. In *Self-efficacy beliefs of adolescents* (Vol. 1, pp. 307–337). IAP.
- Beatty, G. F., Cranley, N. M., Carnaby, G., & Janelle, C. M. (2016). Emotions predictably modify response times in the initiation of human motor actions: A meta-analytic review. *Emotion*, 16, 237–251. <https://doi.org/10.1037/emo0000115>
- Bois, J. E., Sarrazin, P. G., Southon, J., & Boiché, J. C. S. (2009). Psychological Characteristics and Their Relation to Performance in Professional Golfers. *The Sport Psychologist*, 23(2), 252–270. <https://doi.org/10.1123/tsp.23.2.252>
- Boitzova, A., & Simonova, N. (2019). “Psychological readiness”. *Definition and approaches*. 21–24. <https://doi.org/10.2991/ispcpep-19.2019.5>
- Bozidar, G., Ivana, P., Milan, Z., & Miran, K. (2014). *Psychological Characteristics of Young Tennis Players; Correlation with Feedback and Coaching Leadership Style*. 39–45.
- Cardenal, V., & Fierro, A. (2003). Factors and correlates of self-concept according to the Piers-Harris Scale. *Studies in Psychology*, 24(1), 101–111. <https://doi.org/10.1174/021093903321329094>
- Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion Regulation as a Scientific Construct: Methodological Challenges and Directions for Child Development Research. *Child Development*, 75(2), 317–333. <https://doi.org/10.1111/j.1467-8624.2004.00673.x>
- Cox, R. H. (1994). *Sport psychology: Concepts and applications*. Madison. Brown and Benchmark.
- Cristian-Mihail, R. U. S., Liliana-Elisabeta, R. A. D. U., & Gynett, I. V. (2016). Motivation for Participating to Sports Competitions in School—ProQuest. *Revista de Cercetare Si Interventie Sociala*, 52, 195.

- Davis, L., Jowett, S., & Tafvelin, S. (2019). Communication Strategies: The Fuel for Quality Coach-Athlete Relationships and Athlete Satisfaction. *Frontiers in Psychology, 10*. <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.02156>
- Dmitrieva, N. S. (2020). *Features of formation of psychological readiness of athletes in shooting for competitive activity*. <http://enpuir.npu.edu.ua/handle/123456789/33320>
- Feltz, D. L., & Öncü, E. R. M. A. N. (2014). Self-confidence and self-efficacy. In *Routledge companion to sport and exercise psychology* (pp. 417–429).
- Feltz, D. L., Short, S. E., & Sullivan, P. J. (2008). *Self-efficacy in Sport*. Human Kinetics.
- Gould, D., Hodge, K., Peterson, K., & Giannini, J. (1989). An exploratory examination of strategies used by elite coaches to enhance self-efficacy in athletes. *Journal of Sport & Exercise Psychology, 11*, 128–140.
- Gratz, K. L., & Roemer, L. (2004). Multidimensional Assessment of Emotion Regulation and Dysregulation: Development, Factor Structure, and Initial Validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 26*(1), 41–54. <https://doi.org/10.1023/B:JOBA.0000007455.08539.94>
- Gratz, K. L., & Tull, M. T. (2010). Emotion regulation as a mechanism of change in acceptance-and mindfulness-based treatments. In *Assessing Mindfulness and Acceptance Processes in Clients: Illuminating the Theory and Practice of Change* (pp. 107–133). New Harbinger Publications.
- Gross, J. J. (1998). The Emerging Field of Emotion Regulation: An Integrative Review. *Review of General Psychology, 2*(3), 271–299. <https://doi.org/10.1037/1089-2680.2.3.271>
- Gryn, O. R. (2015). Psychological and training support of qualified athletes. *Olympic Literature, Kyiv*, 276.
- Gucciardi, D. F., Gordon, S., & Dimmock, J. A. (2009). Advancing mental toughness research and theory using personal construct psychology. *International Review of Sport and Exercise Psychology, 2*(1), 54–72. <https://doi.org/10.1080/17509840802705938>
- Hall, T. (1993). *Determinants of elite athletes' commitment to sport: Examination of the sport commitment model in the professional sport domain*. <https://doi.org/10.15760/etd.5434>
- Hardy, L., & Parfitt, G. (1991). A catastrophe model of anxiety and performance. *British Journal of Psychology, 82*(2), 163–178. <https://doi.org/10.1111/j.2044-8295.1991.tb02391.x>
- Jankowski, T., & Bąk, W. (2021). In Search for the Adaptive Self: A Model of Adaptive Self-Concept. *Roczniki Psychologiczne, 23*(4), 309–328.
- Jankowski, T., Bak, W., & Miciuk, Ł. (2022). Adaptive self-concept: Identifying the basic dimensions of self-beliefs. *Self and Identity, 21*(7), 739–774. <https://doi.org/10.1080/15298868.2021.1997796>
- Jones, G., Hanton, S., & Connaughton, D. (2007). A Framework of Mental Toughness in the World's Best Performers. *The Sport Psychologist, 21*(2), 243–264. <https://doi.org/10.1123/tsp.21.2.243>
- Jordan, C. H., Zeigler-Hill, V., & Cameron, J. J. (2020). Self-Esteem. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. 4738–4748). Springer International Publishing. [https://doi.org/10.1007/978-3-319-24612-3\\_1169](https://doi.org/10.1007/978-3-319-24612-3_1169)

- Jordet, G. (2015). Psychological Characteristics of Expert Performers. In *Routledge Handbook of Sport Expertise*. Routledge.
- Karamushka, L. M. (2000). Psykhohohiya upravlinnya zakladamy seredn'oyi osvity [Psychology of management of secondary education institutions][Monograph]. In *Kyiv*.
- Kokurin, A. V., & Maydokina, L. G. (2014). The problem of development of psychological competency in the system of training athletes of various qualifications. *Theory and Practice of Physical Culture*, 8, Article 8.
- Kovalenko, A. N., & Khrisanfova, N. V. (2017). Anxiety as readiness criterion of young athletes, specializing in middle distance running, for competitive activity. *Педагогико-Психологические и Медико-Биологические Проблемы Физической Культуры и Спорта*, 12(2), 136–140.
- Krane, V., & Williams, J. M. (2006). Psychological characteristics of peak performance. In *Applied sport psychology: Personal growth to peak performance* (pp. 207–227).
- Limanowski, J., & Blankenburg, F. (2013). Minimal self-models and the free energy principle. *Frontiers in Human Neuroscience*, 7. <https://www.frontiersin.org/articles/10.3389/fnhum.2013.00547>
- Loos, H. (2003). *Atitude e Desempenho em Matemática, Crenças Auto-Referenciadas e Família: Uma Path-analysis (Doctoral dissertation)*. Retrieved from Digital Library of UNICAMP (Accession: vtls000303246).
- Lozhkin, G. V. (2011). Psychology of Sports: Schemes, Comments, Workshops. *Education of Ukraine, Kyiv*, 484.
- Mahoney, M. J., Gabriel, T. J., & Perkins, T. S. (1987). Psychological Skills and Exceptional Athletic Performance. *The Sport Psychologist*, 1(3), 181–199. <https://doi.org/10.1123/tsp.1.3.181>
- Marquardt, N., Hannig, C., & Hannig, S. (2016). Mental Readiness and Performance under Stress. *International Journal of Psychology*, 51, 766.
- Masten, R., Stražar, K., Žilavec, I., Tušak, M., & Kandare, M. (2014). Psychological response of athletes to injury. *Kinesiology*, 46.(1), 127–134.
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review*, 11(3), 299–326. [https://doi.org/10.1016/S1053-4822\(00\)00053-X](https://doi.org/10.1016/S1053-4822(00)00053-X)
- Mitić, P., Nedeljković, J., Bojanić, Ž., Franceško, M., Milovanović, I., Bianco, A., & Drid, P. (2021). Differences in the Psychological Profiles of Elite and Non-elite Athletes. *Frontiers in Psychology*, 12. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.635651>
- Moutoussis, M., Fearon, P., El-Deredy, W., Dolan, R. J., & Friston, K. J. (2014). Bayesian inferences about the self (and others): A review. *Consciousness and Cognition*, 25, 67–76. <https://doi.org/10.1016/j.concog.2014.01.009>
- Namazov, A. K. (2015). The value of psychological preparation of wrestlers. *Здоровье – Основа Человеческого Потенциала: Проблемы и Пути Их Решения*, 10(1), Article 1.
- Notario-Alonso, R., Prieto-Ayuso, A., García-Notario, A., & Contreras-Jordán, R. (2022). *The sports commitment in football players and its relationship with the coach performance: A systematic review*.

- o'g'li, I. M. X., Axmatovich, X. M. M., & o'g'li, B. F. R. (2022). The development of the psychological readiness of goalkeeper in handball sport game. *Web of Scientist: International Scientific Research Journal*, 3(6), Article 6. <https://doi.org/10.17605/OSF.IO/5BTR8>
- Oliylyk, N. A., & Voitenko, S. M. (2020). *Psychological features of sports activities*. VNAU.
- Omoriege, P. O., Adjei, A. T. O., & Akuru, B. G. (2012). Preparing athletes and ensuring optimum mental readiness for success outcome. *Benin Journal of Educational Studies*, 21(1), 15–34.
- Ozhiganova, G. V. (2018). Self-regulation and self-regulatory capacities: Components, levels, models. *Вестник Российского Университета Дружбы Народов. Серия: Психология и Педагогика*, 15(3), Article 3.
- Platonov, V. (2018). The structure and content of the direct training of high-qualified athletes for the main competitions. *Nauka v Olympyiskom Sporte*, 2, 17–41.
- Popovych, I., Semenov, O., Hrys, A., Aleksieieva, M., Pavliuk, M., & Semenova, M. (2022). Research on mental states of weightlifters' self-regulation readiness for competitions. *Journal of Physical Education and Sport*, 22(5).
- Pramesti, A. D., Hermahayu, H., & Faizah, R. (2022a). Study of identifying factors for the developing measuring instrument on the psychological readiness of athletic athletes. *Jurnal SPORTIF: Jurnal Penelitian Pembelajaran*, 8(3), 17–36. [https://doi.org/10.29407/js\\_unpgri.v8i3.18807](https://doi.org/10.29407/js_unpgri.v8i3.18807)
- Pramesti, A. D., Hermahayu, H., & Faizah, R. (2022b). Study of identifying factors for the developing measuring instrument on the psychological readiness of athletic athletes. *Jurnal SPORTIF: Jurnal Penelitian Pembelajaran*, 8(3), Article 3. [https://doi.org/10.29407/js\\_unpgri.v8i3.18807](https://doi.org/10.29407/js_unpgri.v8i3.18807)
- Puni, A. T. (1969). *Psihologicheskaja podgotovka k sorevnovaniju v sporte [Psychological preparation for competition in sports]*.
- Pushkarev, A. V. (2019). Planning of the University student basketball team training sessions on the basis of taking into account the functional state of athletes by types of their temperament. *Педагогико-Психологические и Медико-Биологические Проблемы Физической Культуры и Спорта*, 14(3), 77–82.
- Rodriguez, S. N., & Loos-Sant'Ana, H. (2015). Self-concept, self-esteem and self-efficacy: The role of self-beliefs in the coping process of socially vulnerable adolescents. *Journal of Latino/Latin American Studies*, 7, 33–44. <https://doi.org/10.18085/1549-9502-7.1.33>
- Sagar, S. S., & Jowett, S. (2012). Communicative Acts in Coach–Athlete Interactions: When Losing Competitions and When Making Mistakes in Training. *Western Journal of Communication*, 76(2), 148–174. <https://doi.org/10.1080/10570314.2011.651256>
- Sativa, A. R., & Helmi, A. F. (2013). Syukur dan harga diri dengan kebahagiaan remaja. *Wacana*, 5(2), Article 2. <https://doi.org/10.13057/wacana.v5i2.9>
- Shalar, O., Strykalenko, Y., Huza, V., Шалар, О. Г., & Стрикаленко, Є. А. (2019). *Psychological readiness of handball players for the competition*. <http://dspace.ksu.ks.ua/handle/123456789/12375>
- Sotoodeh, M. S., Talebi, R., Hemayattalab, R., & Arabameri, E. (2012). *Comparison of Selected Mental Skills Between Elite and Non-Elite Male and Female Taekwondo Athletes*.



- Strykalenko, Y., Shalar, O., Huzar, V., Voloshinov, S., Yuskiv, S., Silvestrova, H., & Holenko, N. (2020). The correlation between intelligence and competitive activities of elite female handball players. *Journal of Physical Education and Sport*, 20(1), 63–70.
- Terry, P. C. (2004). *Mood and emotions in sport: Vol. 2nd ed* (T. Morris & J. Summers, Eds.). John Wiley & Sons Australia, Ltd. <https://eprints.usq.edu.au/4381/>
- Tus, J. (2020). Self–concept, self–esteem, self–efficacy and academic performance of the senior high school students. *International Journal of Research Culture Society*, 4(10), 45–59.
- Tušak, M. (1995). *Analiza predtekmovalnega stanja in vedenja (Analysis of pre-competition state and behavior)*.
- Tušak, M., & Tušak, M. (2003). *Psihologija športa* (P. Prašnikar, Trans.; 3. dopolnjena izd). Znanstveni inštitut Filozofske fakultete.
- Ulyaeva, L., Rodionova, I., Sivitskiy, V., Melnik, E., Voskresenskaya, E., Radnaguruev, B., & Ulyaeva, G. (2020). Scientific and Methodological Support of Psychological Care of Sports Activities. *Revista de Psicología Del Deporte (Journal of Sport Psychology)*, 29(2), 177–184.
- Ussher, M. H., & Hardy, L. (1986). The effect of competitive anxiety on a number of cognitive and motor subsystems. *Journal of Sports Sciences*, 4, 232–233.
- Vealey, R. S. (1986). Conceptualization of Sport-Confidence and Competitive Orientation: Preliminary Investigation and Instrument Development. *Journal of Sport Psychology*, 8(3). <https://web.s.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=0163433X&AN=20722914&h=%2bzSk9I063PivLtmk9ulqlADCSDSvCdmTG9HWC4Vhef8Xdft35tn1ncDapvL1dLnTOshF3XiprPjF7vxVYdVOgA%3d%3d&crl=c&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d0163433X%26AN%3d20722914>
- Vodičar, J., Kovač, E., & Tušak, M. (2012). Effectiveness of athletes'pre-cimpetition mental preparation. *Kinesiologia Slovenica*, 18(1).
- Wahyudi, & Herdyanto, Y. (2020). Analisis Program Latihan Atlet Pencak Silat SMA Negeri Olahraga Sidoarjo. *Jurnal Prestasi Olahraga*, 3(1). <https://ejournal.unesa.ac.id>
- Weinberg, R. S., & Gould, C. (1995). *Foundations of sport and exercise psychology*. Human Kinetics, 2007.
- Weissensteiner, J. R., Abernethy, B., Farrow, D., & Gross, J. (2012). Distinguishing psychological characteristics of expert cricket batsmen. *Journal of Science and Medicine in Sport*, 15(1), 74–79. <https://doi.org/10.1016/j.jsams.2011.07.003>
- Yakovlev, K., & Babushkin, G. D. (2016). *Psychology of physical culture: A textbook*.
- Zandi, H. G., & Mohebi, M. (2016). Investinvestigating distinctive psychological characteristics of successful and unsuccessful elite Iranian Taekwondo athletes. *Journal of the International Association for Taekwondo Research*, 3(1).
- Zekiöğlü, A., Tatar, A., Bahadır, E., & Afacan, E. (2017). Zihinsel hazır oluşun ölçülmesi: Ölçek geliştirme çalışması. *SPORMETRE Beden Eğitimi ve Spor Bilimleri Dergisi*, 15(2), 57–64. [https://doi.org/10.1501/Sporm\\_0000000308](https://doi.org/10.1501/Sporm_0000000308)

- Zhanneta, K., Irina, S., Tatyana, ., Olena, R., & Anna, I. (2015). The applying of the concept of individualization in sport. *Journal of Physical Education and Sport*, 15(2), 172.
- Zhuina, D. V., Zazykin, V. G., & Maydokina, L. G. (2015). Empirical Study of the Psychology of the Winner (On the Example of the Republic of Mordovia Athletes). *Modern Applied Science*, 9(5), p211. <https://doi.org/10.5539/mas.v9n5p211>
- Ziv, G., & Lidor, R. (2013). Psychological Preparation of Competitive Judokas – A Review. *Journal of Sports Science & Medicine*, 12(3), 371–380.
- Сушко, Р. О., Борисова, О., Нагорна, В., Павленко, Ю., Шутова, С., Мутко, А., Шльонска, О., Перетяцько, А., & Ткаченко, М. (2021). Psychological readiness of elite and well-trained billiard players for the main competitions of the macrocycle. *SportMont*, 19(S2), 101–106.