



The Impact of Overtraining on the Mental State of Taekwondo Athletes at Jeonstugi Tadulako Club, Palu City

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ABSTRACT

This study aims to examine the impact of overtraining on the mental condition of Taekwondo athletes at *Jeonstugi* Tadulako Club, Palu City. The research problem addressed was how overtraining affects the athletes' mental condition during the intensive training period preceding competitions. This study employed a qualitative method with a descriptive approach. The informants consisted of 10 participants, comprising 8 Taekwondo athletes as the main informants and 2 coaches as supporting informants, selected through purposive sampling. Data were collected through observation, semi-structured in-depth interviews, audio/video recording, and documentation, and were validated through source and technique triangulation. Data were analyzed using the interactive model of Miles and Huberman, consisting of data reduction, data display, and conclusion drawing/verification. The findings show that training intensity increased substantially as competitions approached, causing most athletes to experience physical fatigue accompanied by mental pressure such as nervousness, tension, and psychological burden. Nevertheless, these conditions did not diminish the athletes' motivation or concentration during training and competition; several athletes reported that pressure before competition even strengthened their motivation. Athletes applied various recovery strategies, including cooling down, adequate rest, regular sleep patterns, nutritious food intake, and sufficient fluid consumption, while coaches played an important role in designing training programs, monitoring athletes' conditions, providing motivation, and maintaining both the physical and mental well-being of the athletes. It is concluded that overtraining does affect the mental condition of Taekwondo athletes, but its negative impact can be minimized through appropriate training-load management, optimal recovery practices, and continuous psychosocial support from coaches.

Keywords: *Overtraining, Mental Condition, Taekwondo Athletes, Coaches*

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INTRODUCTION

High-performance sport is a developmental process requiring athletes to achieve optimal performance through planned, systematic, and sustained training. In modern sports, an athlete's success is determined not only by physical capacity but also by mental readiness to meet the demands of training and competition. Structured training load management via periodization has been shown to enhance physiological adaptation and performance without

causing negative consequences such as excessive fatigue (Issurin, 2019). International consensus also emphasizes that adequate recovery plays a crucial role in preventing negative outcomes like under-recovery and overtraining, both of which can impair an athlete's performance and psychological well-being (Kellmann et al., 2018).

Taekwondo is a martial art characterized by high training intensity, explosive movements, physical contact, and complex technical-tactical demands. Taekwondo athletes are required to possess strength, speed, endurance, and flexibility, as well as the ability to concentrate and make rapid decisions. Beyond physical demands, psychological pressures—such as performance targets, athlete selection processes, and competitive rivalry—also influence the mental state of Taekwondo athletes (Slimani et al., 2017).

During the pre-competition preparation phase, training frequency and volume typically increase. If this rise in training load is not balanced with adequate recovery, athletes risk experiencing physical and mental exhaustion—a condition known as overtraining—which can negatively impact performance (Kellmann et al., 2018). Overtraining is characterized by a decline in performance resulting from the accumulation of excessive training loads over a specific period without sufficient recovery. Recent research indicates that overtraining can trigger mental fatigue, impaired concentration, mood disturbances, heightened stress, and reduced motivation to train or compete (Symons et al., 2023).

From a psychological perspective, an athlete's mental state plays a vital role in supporting the success of the training process and the achievement of performance goals. Athletes with a healthy mental state are generally better equipped to manage stress, maintain motivation, and adapt to heavy training loads; conversely, a compromised mental state can hinder training adaptation and impair performance, even when physical condition is relatively good (Gustafsson et al., 2017). In Taekwondo, the risk of overtraining is relatively high due to the strenuous and intensive nature of training, particularly in the lead-up to competitions. Increased training schedules, high-intensity sparring, and pressure to achieve results can trigger both physical and mental fatigue. Previous research indicates that Taekwondo athletes require strong psychological skills—such as emotional control, concentration, and mental toughness—to cope with the pressures of training and competition (International Journal of Environmental Research and Public Health, 2023).

Preliminary observations at the Jeonstugi Tadulako Club in Palu City indicate that training activity tends to intensify during the pre-competition preparation period, with athletes undergoing training sessions of greater frequency and duration compared to the regular training phase. Without a balance of appropriate training loads and sufficient recovery time, this situation carries the potential for physical and mental fatigue, raising the possibility of overtraining—a condition that can impact an athlete's mental state. To date, research on overtraining has largely focused on physical and performance aspects, while studies specifically addressing its impact on athletes' mental well-being—particularly in Taekwondo—remain relatively limited. Therefore, a qualitative approach is required to explore athletes' subjective experiences regarding training loads, mental fatigue, and the coping strategies employed to manage the pressures of training and competition.

Against this backdrop, this study aims to examine and describe the impact of overtraining on the mental state of Taekwondo athletes at the Jeonstugi Tadulako Club in Palu City. The findings are expected to contribute to the advancement of sports science—specifically regarding training load management and athlete mental health—and serve as a reference for coaches and club administrators in designing more balanced and sustainable training programs.

METHOD

This study employs a qualitative approach aimed at gaining an in-depth understanding of the subjective experiences and psychological states of Taekwondo athletes experiencing overtraining at the Jeonstugi Tadulako Club in Palu City. A qualitative approach was selected because it is considered more suitable for explaining complex, contextual phenomena—particularly those involving individual meanings and experiences—than a quantitative

approach, which emphasizes numerical measurement (Moleong, n.d.). Qualitative research enables the researcher to understand the "how" and "why" of a phenomenon, thereby elucidating psychological dynamics that cannot be captured through quantitative measurement alone (McCusker & Gunaydin, 2015). In this approach, the researcher serves as the primary instrument for data collection and analysis, allowing for direct engagement in the field to obtain valid, contextual data regarding changes in motivation, concentration, and the athletes' interpretations of training pressure during the overtraining period (Esposito & Evans-Winters, 2022; Lahman, 2025).

Kode	Name	Age	Status
A1	Afan Riski	13	Atlet
A2	Aisya	13	Atlet
A3	Nurul Khairani	14	Atlet
A4	Adni Batrisya	15	Atlet
A5	Muhammad Zaki	16	Atlet
A6	Ferly Ataya	16	Atlet
A7	Jesika	16	Atlet
A8	Muhammad Fardan	18	Atlet
P1	Fajar	21	Pelatih
P2	Satria Giga Bayu	24	Pelatih

This study employs a descriptive-qualitative research design. The research was conducted at two training sites of the Jeonstugi Tadulako Club—the Lasoani Urban Village Office and Vatulemo Field in Palu City—during May 2026. The research subjects were Taekwondo athletes actively training at the club, selected via purposive sampling based on the following criteria: (1) having trained regularly at the club for at least five months; (2) aged 13–18 years, aligning with active training and competition age groups; and (3) willingness to participate and provide honest information regarding their training experiences and mental state. The number of informants was determined based on the principle of data saturation—the point at which interview data begins to repeat without yielding new findings. A total of ten informants participated, comprising eight athletes as primary informants and two coaches as supporting informants.

Data were collected using five complementary techniques: (1) direct observation of the athletes' conditions, behaviors, and training situations; (2) semi-structured, in-depth interviews with athletes and coaches to explore their experiences and interpretations regarding overtraining and its impact on mental state; (3) audio and video recording during interviews to ensure the completeness and accuracy of transcribed data; (4) documentation, including photographs relevant to training and coaching activities; and (5) triangulation, encompassing source triangulation (comparing data from athletes and coaches) and method triangulation (comparing data obtained through interviews, observations, recordings, and documentation) to strengthen the credibility of the findings. Data analysis followed the Miles and Huberman interactive model, comprising three stages: data reduction (selecting, focusing, and summarizing raw data relevant to the research focus—namely training intensity, physical and mental fatigue, training motivation, athletes' emotional states, and the role of the coach); data display (organizing the reduced data into narrative descriptions, tables, and thematic matrices to reveal patterns and relationships); and conclusion drawing and verification (interpreting the displayed data to answer research questions, with conclusions continuously verified throughout the research process via source and technique triangulation to ensure a high level of validity).

RESULT AND DISCUSSION

Training Intensity

Under normal circumstances, most athletes train two to three times per week; however, this frequency increases to nearly every day leading up to competitions, reflecting a deliberate increase in training load to enhance physical and technical readiness. In competitive sports, increasing training frequency and intensity prior to competition is common practice; nevertheless, high training loads must be balanced with adequate recovery to prevent excessive fatigue. This aligns with the views of Kellmann et al. (2018), who state that overtraining can result from the repeated accumulation of high training loads over a period without sufficient recovery. Coaches report that training programs are designed according to the athletes' age and physical capabilities, demonstrating a deliberate effort to tailor training loads to each athlete's condition in order to minimize the risk of excessive fatigue (Bompa & Buzzichelli, 2019).

Experiences with Excessive Training Loads

Most athletes report experiencing fatigue following high-intensity training—commonly described as tiredness, muscle soreness, and reduced energy—yet many view this as a normal part of the training process in competitive sports. Such fatigue is a natural physiological response to intense physical activity. Hu et al. (2026), in their study on the relationship between training load and injury risk in Taekwondo athletes, explain that uncontrolled increases in training load can trigger prolonged physical fatigue and heighten the risk of overreaching or overtraining. Jelínek et al. (2024) add that subjective indicators of fatigue—such as decreased energy, persistent soreness, and reduced fitness—serve as early warning signs that require monitoring before overtraining progresses; this pattern is also supported by Symons et al. (2023). Ostapiuk-Karolczuk et al. (2025) further note that combining biochemical and psychological fatigue markers, including athletes' subjective reports, is effective for detecting accumulated fatigue early, allowing for interventions before severe overtraining develops. Nevertheless, most athletes in this study were able to continue training effectively, supported by close monitoring from coaches and strong personal motivation to excel; this aligns with findings by Billa et al. (2025), who observed that athletes in supportive training environments are better able to withstand fatigue from intensive training without suffering significant psychological decline. Coaches reported recognizing early signs of fatigue through athletes' breathing patterns, facial expressions, and overall training capacity—underscoring the coach's role in continuous monitoring. Kellmann et al. (2018) identified this as a key element of effective training load management, as early detection enables program adjustments before more serious consequences of overtraining occur.

Athletes' Mental State

Athletes' mental responses to intensive training and upcoming competitions vary. Some report nervousness, pressure, and mental fatigue leading up to a competition, while others view these states as a necessary part of the journey toward achievement. This variation reflects differences in the capacity to adapt to the pressures of training and competition—influenced by factors such as age, competitive experience, self-confidence, and social support—aligning with Weinberg and Gould (2019), who state that an athlete's mental readiness is shaped by psychological factors including self-confidence, anxiety management, and competitive experience. These findings support the view that overtraining affects not only physical condition but also psychological well-being; Symons et al. (2023) explain that excessive training loads without adequate recovery can trigger anxiety, reduced motivation, and mood swings that impact overall mental readiness, while Valdesalici et al. (2026) report that non-functional overreaching and overtraining syndrome are associated with mood disturbances, heightened psychological stress, and emotional exhaustion in athletes exposed to sustained high training loads. Nevertheless, some athletes manage this pressure effectively, viewing intensive training as a means to build mental resilience—an interpretation consistent with Noordiansyah and Jannah (2025), who found that athletes with higher self-efficacy are better able to cope with training pressures without experiencing significant

psychological decline, and with Park et al. (2022), who found that the stress and mental health of Taekwondo athletes are significantly influenced by the training environment, social support, and individual coping capacity.

Motivation and Concentration

Most athletes report that high-intensity training does not diminish their motivation or concentration; some even state that their motivation increases as competition approaches, driven by the desire to perform well. This motivation is reinforced by consistent support from coaches and parents—reflecting both intrinsic drive and external support—consistent with Self-Determination Theory (Ryan & Deci, 2020), which posits that motivation arises from a combination of intrinsic motivation (the athlete's own desire to improve and excel) and extrinsic motivation (support from coaches, family, and the training environment). Most athletes are also able to maintain focus despite experiencing fatigue, aligning with Weinberg and Gould (2019), who state that strong motivation helps athletes sustain concentration and execute training programs effectively. These findings indicate that high-intensity training does not automatically undermine motivation and concentration; when managed well and supported by coaches and family, intensive training can actually strengthen an athlete's focus and readiness for competition.

Recovery Strategies and the Role of Coaches

Athletes report employing various recovery strategies following intense training, including cool-downs, adequate rest, regular sleep, nutritious dietary intake, sufficient fluid consumption, and avoiding staying up late. Such recovery practices are crucial in high-performance sports, as adequate recovery enables the body to repair damage caused by fatigue and helps maintain psychological balance; without this, the risk of prolonged fatigue and overtraining increases. This aligns with Kellmann et al. (2018), who emphasize that the balance between training load and recovery is a key factor in sustaining performance and mental health. Collette et al. (2018) also found that athletes following structured recovery programs exhibited lower stress levels and greater psychological stability compared to those who neglected recovery, while Watson et al. (2017) reported that subjective well-being—including sleep quality—is significantly linked to injury risk and fatigue during the competitive season. These findings support the current study's observation that athletes maintaining regular sleep patterns tend to preserve better physical and mental condition during intense training. Coaches, meanwhile, play a significant role in helping athletes manage fatigue through motivation, post-training evaluations, emotional support, and a coach-athlete relationship characterized by a family-like bond. This aligns with Weinberg and Gould (2019), who identify coach-provided social support as a key factor in safeguarding athletes' psychological well-being under the pressures of high-intensity training. Overall, appropriate recovery practices and consistent coach support enable athletes to minimize the negative impacts of fatigue and maintain the physical and mental condition required for continued high performance.

CONCLUSION

This study concludes that the intensification of training leading up to competition is a deliberate component of athlete development aimed at bolstering physical, technical, and mental readiness. Although most athletes experience physical fatigue as training frequency increases, this does not necessarily result in negative mental consequences; athletes largely perceive such fatigue as a normal part of the journey toward achievement. While high-intensity training does elicit mental responses—such as fatigue, nervousness, and pre-competition pressure—most athletes manage to maintain their motivation, focus, and enthusiasm, sustained by both intrinsic drive and external support from coaches and family. Recovery practices—including cool-downs, adequate rest, regular sleep, nutritious food, and sufficient fluid intake—combined with the coach's role in designing appropriate training programs, monitoring fatigue, providing motivation, conducting evaluations, and fostering supportive relationships, have proven to be key factors in minimizing the negative impact of overtraining on the athletes' mental state at the Jeonstugi Tadulako Club.

Based on these findings, it is recommended that athletes maintain a balance between training and recovery by prioritizing rest, sleep, and nutrition; coaches should continuously monitor athletes' physical and mental conditions and tailor training programs to individual needs to prevent overtraining; the club should continue to support structured training programs that place adequate emphasis on recovery and mental health; and future research should examine the impact of overtraining on other aspects—such as athletic performance or physical condition—utilizing a larger sample of informants and a broader scope of study.

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