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MuSt Theory in Action for Self-Regulation: A Practical Guide and Case Study

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ABSTRACT

The case study of an elite pistol shooter presented here aims to provide practitioners with a detailed procedure to capture the nuances of the various experiences athletes encounter during their performances and to help them self-regulate under pressure. The procedure is grounded in Multi-States (MuSt) theory, which offers a holistic, dynamic framework to enhance athletic performance. MuSt theory integrates psychobiosocial states with core action components to address athletes’ needs under pressure. Through individualized profiling—encompassing performance level, hedonic valence, and action monitoring/control—athletes are guided to identify and regulate functional and dysfunctional states *via* emotion- and action-centered self-regulation.



KEYWORDS

Athlete profiling; attentional focus; emotion–action integration; emotion-related experiences; feelings; performance optimization

Successful athletic performance depends not only on physical ability and technical skills but also on athletes’ capacity to regulate emotions, maintain attentional focus, make appropriate decisions, and execute accurately under pressure (Krane et al., 2021). Multi-States (MuSt) theory (Ruiz, Bortoli, & Robazza, 2021) provides an integrated and dynamic framework to address some critical issues of the interplay between emotional and motor behavioral aspects related to performance. The focus in MuSt theory is the identification of emotion- and action-centered strategies to help athletes self-regulate their performance states, especially under competitive pressure. This article provides sport psychology practitioners with a foundation for implementing self-regulation strategies within the MuSt theory framework, using an empirical example from pistol shooting to illustrate the multiple performance states athletes can experience and to help them self-regulate under pressure.

MuSt theory underpinnings

MuSt theory, depicted in Figure 1, considers the dynamic interplay between individual characteristics, task demands, and environmental factors in

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shaping athletic performance. Environmental factors, which include social influences (e.g., teammates, coaches), interact with task demands (e.g., self-paced vs. externally-paced skills) and personal attributes (e.g., passion, perfectionism, mental toughness) to influence individual performance appraisals in terms of challenge or threat.

A challenge appraisal occurs when an athlete perceives sufficient resources to meet situational demands, while a threat appraisal indicates a perception of insufficient resources (Lazarus & Folkman, 1984). Challenge and threat states reflect evaluations of anticipated benefits versus potential harms within person-environment interactions. This perspective aligns with the biopsychosocial model (Blascovich, 2008) and the cognitive-motivational-relational theory (Lazarus, 1991). Unlike other theoretical approaches, MuSt theory underlines the dynamic interplay between emotion-related experiences and motor processes. This interaction, influenced by antecedents (i.e., environment, task, individual) and mediated by challenge/threat appraisals, is central to understanding how multiple states emerge and eventually influence performance and well-being (see Figure 1, right side). Research supports MuSt theory predictions, linking environmental and dispositional factors, appraisals, and emotional experiences. In particular, perfectionistic strivings (personal factors) predicted functional states through challenge appraisals (Figure 1, upper part), while perfectionistic concerns predicted dysfunctional states through threat appraisals (Figure 1, lower part; Ruiz et al., 2023). Environmental and personal factors, like basic psychological needs (i.e., perceived competence and relatedness; Robazza et al., 2025a), mindful awareness and refocusing (Robazza et al., 2024), self-confidence and mental toughness (Robazza et al., 2025b), were also linked to functional emotion-related experiences *via* challenge appraisal. A study on kickboxers (Morrone et al., 2024)

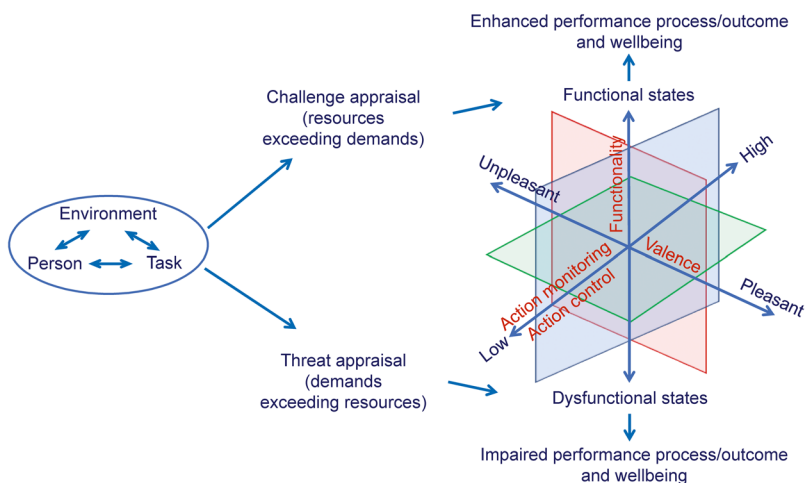


Figure 1. Overview of Multi-States (MuSt) Theory.

further corroborated the theory, showing the mediating roles of challenge and threat appraisals in perceived performance outcomes.

The dynamic interplay between emotion-related experiences and motor processes, derived from the environment-task-person interaction and challenge/threat appraisals, is captured through two primary constructs: psychobiosocial experiences and action monitoring/control (Figure 1). Psychobiosocial experiences encompass several modalities, including emotion, confidence, anxiety, cognition, motivation, volition, body, motor-behavior, performance, communication, and social support, all of which influence performance (see Ruiz et al., 2016). As a key component of psychobiosocial experiences, emotions are categorized based on functionality and valence, resulting in functional vs dysfunctional and pleasant vs. unpleasant classification. This framework acknowledges that unpleasant experiences such as anxiety, can be beneficial due to their energizing effect, while pleasant ones such as cheerfulness, might be detrimental if they lead to a depletion of energy or a reduction in attentional focus. For example, an archer facing a high-stakes final may experience heightened anxiety that, if channeled properly, sharpens their focus and execution timing, whereas excessive complacency after a previous success could lead to overconfidence and loss of concentration. Athletes can transition between four states (pleasant-functional, pleasant-dysfunctional, unpleasant-functional, and unpleasant-dysfunctional) based on situational demands and appraisal changes, and need to manage their psychobiosocial experiences to transition to functional states when needed.

The construct of action monitoring/control is informed by the MAP model (Bortoli et al., 2012), which identifies four performance states derived from the interaction between performance functionality (functional vs. dysfunctional) and action monitoring/control (low vs. high). These states range from optimal flow-like experiences (Type 1), characterized by minimal action monitoring, to more controlled states (Type 2), which require higher action monitoring and effortful attention. Nonoptimal states under unfavorable situations can lead to excessive reinvestment in task execution, resulting in choking (Type 3) or distraction and disengagement (Type 4). For instance, a soccer player taking a decisive penalty kick in a championship match may overthink their technique, leading to excessive self-control and a breakdown in execution. Likewise, a tennis player struggling after a series of errors might disengage mentally, losing focus on their tactical approach. As with the four states derived from the functional/dysfunctional and pleasant/unpleasant classification, athletes can transition between functional/dysfunctional and high/low control levels depending on appraisal changes of situational demands.

To achieve and maintain successful performance states athletes need to focus on core action components. These components are encoded in

long-term memory and vary considerably between athletes, reflecting their unique skill sets and motor preferences. Examples include positioning, grip, aiming, and timing in shooting (Bortoli et al., 2012), or opponent's proximity, opponent's blade (visual cues), own positioning, and blade angle (behavioral cues) in ice hockey (Ruiz, Luojumäki, et al., 2021). It is crucial to note that the action components the athlete has to attend to are effective as long as they provide task-relevant information for them (see Herrebrøden, 2023, for a discussion). Unlike highly automated technical skills, which remain stable even under adverse conditions, core action components exhibit greater variability and require deliberate attention, particularly under pressure, fatigue, or unexpected situations. For example, a weightlifter preparing for a final attempt after a failed attempt must refocus on grip and posture to ensure proper execution. Focusing on these core elements is believed to enhance movement mastery and self-confidence in challenging circumstances. While these components become automated during routinely executed actions, they demand more deliberate attention when situational difficulties increase.

Building on and integrating the constructs of psychobiosocial experiences and action monitoring/control, MuSt theory presents a $2 \times 2 \times 2$ framework that considers the interaction between performance functionality, hedonic valence, and action monitoring/control (Figure 1, right side). This framework identifies eight performance states, ranging from three continua: functional vs. dysfunctional, pleasant vs. unpleasant, and low monitored/controlled vs. high monitored/controlled performance conditions. Performance is highly individual and influenced by dynamic transitions between these states, shaped by an athlete's appraisal of their personal resources and task demands. This dynamic and idiosyncratic approach underscores the need for individualized strategies to optimize the athlete's performance.

MuSt theory in action: A case study

Grounded in MuSt theory, Table 1 summarizes the objectives and key steps of a sequential process for applying emotion- and action-centered self-regulation to enhance performance. Each phase is discussed in detail below. As shown in Figure 1 (right side), this case study illustrates how athletes can be guided to identify core functional/dysfunctional states and action components that influence performance by examining the interplay between functionality, hedonic valence, and action monitoring/control. It also demonstrates how these states and components can be used for self-regulation to optimize the performance process and outcome.

Ruiz, Bortoli, and Robazza (2021) described the application of MuSt theory to self-regulation using an archer as an example. Their stepwise

Table 1. Key objectives and content of the emotion- and action-centered self-regulation process for performance enhancement.

Phase	Objectives	Content
Phase 1—Baseline Assessment	Evaluate performance, hedonic valence, and action control levels. Increase awareness of pleasant/unpleasant states and attentional focus.	<ul style="list-style-type: none"> • 24 series of 10 shots (240 shots total) in simulated competition. • Shooting scores categorized as good (10-10.9) or nonoptimal (< 10). • Self-evaluations of hedonic valence before each shot and action monitoring/control after each shot using a modified 11-point Borg CR-10 scale. • Review of eight potential performance states (2 × 2 × 2 framework).
Phase 2—Retrospective Assessment of Psychobiosocial States and Action Components	Identify functional and dysfunctional psychobiosocial states influencing performance. Determine core action components for effective shooting.	<ul style="list-style-type: none"> • Reflection on optimal and suboptimal performances using a list of adjectives. • Identification of feeling states associated with optimal and suboptimal performances. • Detailed description of effective shooting action sequence. • Intensity ratings (0–11) of psychobiosocial states and accuracy of execution for both optimal and suboptimal performances.
Phase 3—Identification of Core Psychobiosocial States and Action Components	Identify key functional/dysfunctional states and action components differentiating optimal from suboptimal performance under pressure.	<ul style="list-style-type: none"> • Analysis of individualized profile from Phase 2 to determine relevant differences. • Identification of functional states to regulate (e.g., calm, focused, consistent). • Identification of core action components (e.g., sighting, triggering, timing).
Phase 4—Emotion- and Action-focused Self-regulation	Develop and implement a self-regulation routine to maintain or regain optimal performance.	<ul style="list-style-type: none"> • Selection of strategic cue words (e.g., “calm and focused”, “front sight”, “trigger”, “flow”). • Integration of cue words with mental rehearsal, breathing techniques, and muscle relaxation/tension. • Shooting routine structure: (a) awareness and acceptance of one’s current psychophysical state, and self-regulation before each shot; (b) monitoring core action components during the shot; and (c) short review after the shot. • Practice over three consecutive days in simulated competition (180 shots total).
Phase 5—Follow-up	Evaluate the effectiveness and sustainability of the self-regulation routine over time. Identify adjustments to optimize performance.	<ul style="list-style-type: none"> • One-month follow-up after practicing the routine in training and competitions. • Adjustment of core action components (e.g., “timing” automatized, “sighting” and “triggering” integrated into “smooth”). • Continued high performance and increased confidence.

procedure involved identifying psychobiosocial states and core action components, predicting performance, and employing self-regulation strategies. The case study presented here aims to provide a more detailed explanation of this stepwise process, highlighting the nuances of the various experiences athletes encounter during performance. In particular, the case study describes an intervention with Michele (pseudonym), a 26-year-old elite pistol shooter of the Italian national team. The intervention was conducted by a qualified psychologist expert in shooting and precision sports. It was part of a psychological counseling program mandated by the shooting federation to offer elite athletes psychological support during training

camps preceding international competitions. Training camps usually last one week and take place approximately every two months.

Michele was a specialist in the 10 m air pistol discipline. Scores in this discipline typically range from 10 to 10.9 (indicating good performance), 9 to 9.9 (indicating nonoptimal performance), and 8 to 8.9 (indicating poor performance, which is uncommon at elite-level). In pistol shooting, the width of the 9 ring on the target is 27.5 mm, while the 10 ring is 11.5 mm wide. Given the very small area of these rings, the shooting score is not visually accessible from the shooting position. Therefore, shooting scores and summary results are displayed to the shooter on a monitor screen.

Phase 1—Baseline assessment (optional)

An initial baseline assessment was conducted to evaluate Michele's performance, along with his perceived hedonic valence and action control levels. Of note, this phase applies to self-paced and short-duration tasks, and can be omitted in reactive or long-duration tasks. The purpose of this phase was to increase Michele's awareness of his pleasant and unpleasant states and attentional focus during shooting, potentially leading to eight distinct performance states resulting from the interaction of performance level, hedonic valence, and action monitoring/control. To this aim, Michele was asked to execute 24 series of 10 shots (i.e., 240 shots in total) in a simulated competition, where actual shooting scores were assessed together with self-evaluations of hedonic valence intensity before each shot. In addition, action monitoring/control level self-evaluations were conducted after each shot, just before viewing the result.

Shooting scores from 10 to 10.9 were assumed to indicate good performance, while scores below 10 were assumed to indicate nonoptimal performance. Both hedonic valence and action monitoring/control were rated on a modified 11-point Borg Category Ratio (CR-10) scale ranging from 0 to 11 (see Ruiz, Bortoli, & Robazza, 2021). For hedonic valence, scores from 0.5 to 11 indicated pleasant states, while scores from -0.5 to -11 indicated unpleasant states. Ratings of action control were classified as "monitoring" (flow-like action supervision) from 0 to 4, and as "control" (deliberate action control) for scores greater than 4.

Baseline assessments were conducted over four consecutive days of 60 shots each. Following each series of 10 shots, Michele was asked to shortly review his performance based on the $2 \times 2 \times 2$ framework, focusing on his differential experiences of the eight potential performance states encountered during the shooting series. Each daily shooting and reviewing session lasted about two hours. The mean score of the 240 shots was 10.0 ($SD=0.55$). Table 2 presents the frequency distribution of shooting scores

Table 2. Shooting scores frequency distribution based on the eight combinations resulting from performance level, hedonic valence, and action monitoring/control interaction.

Performance	Hedonic valence	Monitoring/control	Baseline		Self-regulation		Follow-up	
			N (240)	%	N (180)	%	N (180)	%
Optimal	Pleasant	Monitoring	60	25.00	50	27.78	65	36.11
	Unpleasant	Monitoring	28	11.67	4	2.22	3	1.67
	Pleasant	Control	47	19.58	63	35.00	64	35.56
	Unpleasant	Control	16	6.67	14	7.78	3	1.67
Total			151	62.92	131	72.78	135	75.00
Nonoptimal	Pleasant	Monitoring	52	21.67	13	7.22	15	8.33
	Unpleasant	Monitoring	20	8.33	4	2.22	3	1.67
	Pleasant	Control	10	4.17	23	12.78	23	12.78
	Unpleasant	Control	7	2.92	9	5.00	4	2.22
Total			89	37.08	49	27.22	45	25.00

Note. Shooting scores classified as optimal ≥ 10.0 and nonoptimal < 10.0 ; hedonic valence ratings on the CR-10 scale classified as pleasant ≥ 0.5 and unpleasant < 0 ; action ratings on the CR-10 scale classified as action monitoring ≤ 4 and action control > 4 .

resulting from the eight combinations of performance level, hedonic valence, and action monitoring/control.

Excerpts from Michele's interview descriptions of his experiences, following each series, are provided in Table 3. These accounts offer a nuanced and insightful description of Michele's feelings, attentional focus, and behaviors during different shooting performances. They effectively capture the complexity and combinations of different mental states across various situations and their impact on performance, reflecting both optimal and nonoptimal experiences.

Phase 2—Retrospective assessment of psychobiosocial states and action components

To gain insight into unique performance experiences, this approach combines the personalized profiling of psychobiosocial states with an analysis of core action components, as described by Ruiz, Bortoli, and Robazza (2021). The athlete recalled his best performances and, with the help of a list of adjectives (see Ruiz, Bortoli, & Robazza, 2021), identified feeling states that functionally impacted his performance. Specifically, he was asked to choose the descriptors that best represented his feelings or identify new ones (not included in the list) that he felt were most representative. The specific instructions were:

This list contains several adjectives that athletes use to describe their experiences related to performance. Thinking about your optimal performance conditions, please choose those adjectives that describe how you feel. If you think that some of your feelings are not represented, or that there are more appropriate adjectives to describe your performance experience, you can include them.

This reflective process was then repeated, focusing on his less successful performances to identify dysfunctional states. Subsequently, Michele

Table 3. Excerpts from Michele's accounts describing his shooting experiences.

Optimal performance
<p>Pleasant feelings, action monitoring</p> <p>"I felt completely focused... everything was smooth and I didn't have to think much about my actions... just let my body do what it knows how to do. Shooting was almost effortless, and the shots just seemed to align perfectly."</p> <p>"During the action, I felt a sense of calm and focus. I was aware of what doing, but it felt natural, like just flowing with the rhythm of the shots... could feel the soft pressure on the trigger and the stable alignment of my sights. The results just followed naturally."</p>
<p>Unpleasant feelings, action monitoring</p> <p>"I felt a bit nervous because the previous shots were not as good as expected... but I managed to stay focused on the task. My mind was clear and I didn't overthink my actions. Despite the tension in the shoulders, performance was good."</p> <p>"Even though a bit tired, I kept my actions automatic and didn't let negative feelings interfere. I was able to react and channel my energies into the shooting... maintaining a steady rhythm. It worked out well in the end."</p>
<p>Pleasant feelings, action control</p> <p>"I felt good and was keeping a close eye on my technique... made sure to adjust stance width and grip pressure slightly, which helped me maintain precision. It felt like a balanced effort where I was in control without overdoing it."</p> <p>"I was enjoying the process and paying close attention to my execution... I made small corrections to sight alignment and trigger control as needed, and it felt like I was in sync with my body and the target. It was a balanced mix of flow and control."</p>
<p>Unpleasant feelings, action control</p> <p>"I was upset because something went wrong at the beginning of the action... but was able to react and focus on some details of my technique. I made sure to check my alignment and breathing, which helped me stay on track. Despite feeling a little uncomfortable, I managed to keep my performance steady."</p> <p>"Even though I was feeling off, I kept a close watch on my technique... made precise adjustments to grip and stance as needed, and it felt like I was controlling the situation well, despite the tension."</p>
Nonoptimal performance
<p>Pleasant feelings, action monitoring</p> <p>"I felt good... but got too relaxed... wasn't paying enough attention to the technical details, and my shots were a bit off. I became too confident in my performance and lost focus on the fundamentals."</p> <p>"Even though I felt fine, I wasn't as sharp as needed... let my guard down and stopped controlling my shooting process closely. It showed in my scores. I need to find a better balance between feeling relaxed and staying alert."</p>
<p>Unpleasant feelings, action monitoring</p> <p>"I was feeling tense... and wasn't paying enough attention to my technique. My shots suffered because I was just going through the motions without really being present. The tension prevented me from maintaining my usual awareness."</p> <p>"I wasn't feeling great after a technical issue, and that affected my focus. I wasn't able to maintain enough energy to control the actions properly, and it led to mistakes. I need to find a way to stay engaged even when feeling negative."</p>
<p>Pleasant feelings, action control</p> <p>"I felt good... but I was overthinking... trying to control every aspect of my technique, from grip to follow-through, and it made my shots feel forced. I lost the natural flow by being too analytical."</p> <p>"Even though I was enjoying the process, I became too focused on the technical mechanics ... over-controlled my movements, trying to perfect every detail, and it made my performance feel stiff and mechanical rather than natural."</p>
<p>Unpleasant feelings, action control</p> <p>"I felt tense, and it made me overthink everything ... I tried to control every little movement, from sight alignment to trigger squeeze, and it just made things worse. The pressure made me unable to trust my natural shooting process."</p> <p>"I was feeling overwhelmed, and it showed in my performance. I tried to manage every aspect of my shot ... force control rather than let my automatic execution take over. The pressure made me too rigid, and I couldn't execute properly."</p>

thoroughly described the sequence of actions needed for his most effective shooting execution following this instruction: "Please describe in detail your shooting action from start to finish. Consider every aspect of your behavior and execution technique that leads to optimal shooting outcomes." Finally, he assessed both the intensity of the psychobiosocial

states he experienced and the accuracy of execution of his core shooting actions previously identified, using the CR-10 scale. These ratings were assessed separately for successful and less successful performances. Michele’s individualized profile resulting from this procedure is depicted in Figure 2.

Phase 3—Identification of core psychobiosocial states and action components

The purpose of this phase was to identify the key functional and dysfunctional states and core action components that differentiate optimal from suboptimal performance under pressure. Based on the most relevant differences in the individualized profile from Phase 2 (see Figure 2), the question posed was:

Imagine yourself in a challenging situation, or experiencing a mental or physical nonoptimal state that can occur under pressure, fatigue, or after a mistake or poor execution. What functional states need to be regulated to maintain or regain optimal performance and execute consistently and accurately?

This question was also used to identify dysfunctional feelings that could be regulated to achieve or regain optimal performance. Additionally, the following question was asked to identify core action components: “In the same challenging situation just described, what actions or behaviors need to be self-regulated to achieve or regain optimal performance?”

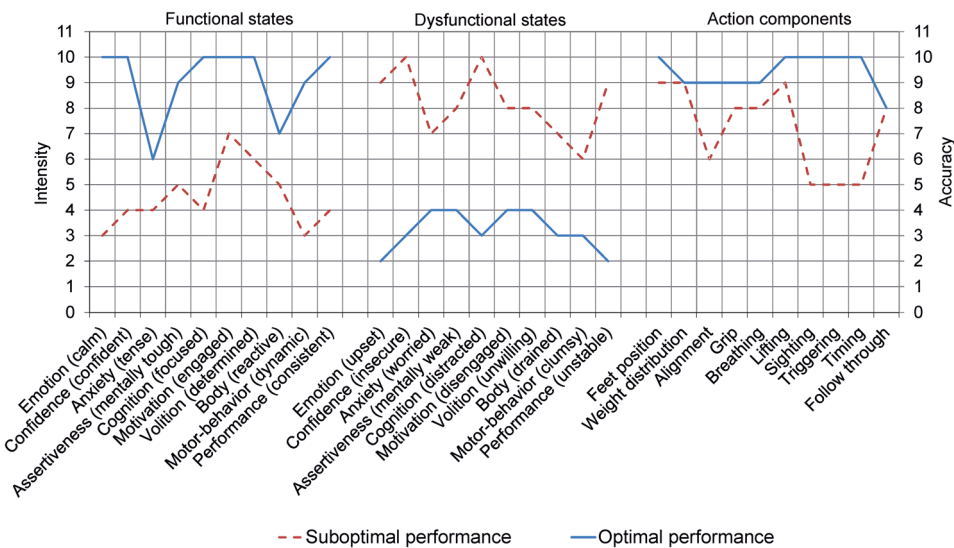


Figure 2. Michele’s individualized profile of recalled optimal and suboptimal performances. Note. The identified psychobiosocial descriptors of each functional and dysfunctional state modality are in parentheses.

Michele selected “calm” (Emotion modality), “focused” (Cognition), and “consistent” (Performance) as the key functional psychobiosocial states to regulate (i.e., to increase or maintain their intensity). As for the action, Michele identified “sighting”, “triggering”, and “timing” as core components. He perceived that being calm was necessary to be focused and execute consistently: “To perform at my best under pressure, I must remain calm and focused, ensuring consistency in my actions. This means mastering sighting and triggering, and executing with perfect timing”. Interestingly, the first component primarily involved an external focus of attention, while the other two mainly required an internal focus of attention. All components were intended to gather task-relevant information (Herrebrøden, 2023).

Phase 4—Emotion- and action-focused self-regulation

Building on the enhanced awareness from Phase 3, Michele identified strategic cue words to help him stay calm, focused, and consistent in his shooting performance. The cue words “calm and focused” were selected for self-regulation just before shooting, paired with deep diaphragmatic breaths and muscle relaxation to lower activation levels. Alternatively, thoracic breaths and muscle tension were used to heighten activation when necessary, depending on situational demands. For execution, the cue words “front sight,” “trigger,” and “flow” were chosen. These words were integrated into mental rehearsal before each shot and used to monitor execution during the action. Consistent with MuSt theory underpinnings, we explored Michele’s emotional states, attentional focus, and technical execution in depth to ensure that the cues selected were meaningful and effective in optimizing performance.

In summary, the shooting routine followed this structure: (a) before each shot, awareness and acceptance of one’s current psychophysical state, and self-regulation using a combination of imagery, self-talk, breathing techniques, and muscle tension or relaxation; (b) during the shot, monitoring the core components of the action; and (c) after the shot, very short review of performance process and outcome. Using this routine, emotion- and action-focused self-regulation was practiced over three consecutive days in a simulated competition, with 60 shots each day. Similar to the baseline assessment in Phase 1, Michele briefly reviewed his performance after each series of 10 shots. The mean score of the 180 shots was 10.2 ($SD=0.41$), which was above the baseline. [Table 2](#) shows the frequency distribution of shooting scores based on the eight combinations of performance level, hedonic valence, and action monitoring/control. The percentage of good shots increased from the baseline.

Phase 5—Follow-up

Michele was met again at a training camp after a month, during which he had the opportunity to practice the routine by himself and test it in a couple of important competitions, one national and one international. He reported experiencing benefits from using the routine, indicating that its execution had become easier and more comfortable after systematic practice during training. An important change he made was related to core action components. “Timing” no longer needed to be monitored because it was largely automatized within the shooting sequence, while “sighting” and “triggering” were integrated into a single component monitored by the cue word “smooth,” a holistic focus to evoke the overall feeling of execution (Becker & Avalos, 2024). As Michele reported, “The shooting routine helps me stay calm, focused, and embrace pressure. My execution is much easier and smooth than before, and I know exactly what it takes to maintain control and which aspects of my performance need attention during shooting. This makes me feel more confident in myself.” Follow-up performance was tested over 3 days in a simulated competition, with 60 shots taken each day, followed by a review. Shooting performance was similar to that in Phase 4, with a mean score of 10.2 ($SD=0.39$) and a high percentage of good shots (Table 2).

Concluding remarks

Grounded in MuSt theory, this paper outlines practical phases for sport psychology practitioners to help athletes enhance awareness and regulate their performance states. The theory posits that both optimal and suboptimal performances are shaped by a spectrum of fluctuating states influenced by levels of functionality, hedonic valence, and action monitoring/control, particularly under competitive pressure. Although self-regulation is here presented through a case study of an athlete engaged in a closed, self-paced motor task, MuSt theory also applies to situational sports (e.g., fencing, volleyball) that involve open, externally-paced tasks. This has been demonstrated with high-level ice hockey players (Ruiz, Luojumäki, et al., 2021) who underwent a stepwise profiling process to identify key emotion-related states and action components.

Overall, MuSt theory offers several advantages in that it: (1) integrates emotion and action, providing a more complete understanding of performance; (2) accounts for the dynamic interactions between individual characteristics, task demands, and the environment, as well as their impact on an athlete’s appraisal of available resources, particularly under pressure; (3) recognizes the individualized nature of performance, acknowledging that optimal and suboptimal states vary across athletes; (4) emphasizes emotion- and action-centered self-regulation, equipping athletes with practical tools to effectively manage their performance in high-pressure

situations; and (5) considers the fluctuating nature of emotion-related states and their relationship with attentional focus, especially in competitive environments. Thus, MuSt theory provides practitioners with a nuanced, individualized, and dynamic approach to enhance both performance and well-being in athletes.

Disclosure statement

No potential conflict of interest was reported by the authors.

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