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# A longitudinal multi-case study about the board game format of an educational self-talk intervention

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## Abstract

This study explored Goal-Directed Self-Talk (GDST) and its optimization through Educational Self-Talk Interventions (ESTIs), focusing on a novel sports-oriented board game intervention. Examining a practitioner's experiences and diverse participant profiles, including an elite tennis player, recreational athlete, football referee, and tennis coach, the research employed four in-depth case studies. A unique aspect of this study involved intentional control transfer from practitioner to clients, documented through a practitioner diary and post-intervention interviews. Participants generally expressed appreciation for the intervention; however, the coach's case necessitated bespoke adjustments, underscoring the importance of contextual sensitivity in applied practice. The ESTI reportedly facilitated analytical deconstruction of challenges, enhancing self-regulation through GDST. The study underscored the pedagogical merit of the board game and observed a substantive transfer of control from practitioner to participants over the intervention's longitudinal trajectory. Detailed recommendations have been crafted for practitioners to implement the ESTI effectively in their practice.

*Keywords:* cognition; self-dialogue; inner speech; psychological skill; self-regulation

Goal-directed self-talk (GDST) is a ubiquitous practice among individuals spanning the spectrum from elite athletes to those engaged in recreational sports, including coaches and officials (e.g., Boudreault et al., 2018; Fritsch et al., 2022). Employed as a tool for self-regulation before, during, and after sporting endeavours, GDST is akin to an internal guide, functioning as an inner coach or psychologist (Latinjak et al., 2016). Despite its prevalence and positive intentions, the inner coach does not consistently provide constructive support and can, at times, prove counterproductive (Latinjak et al., 2019a). An illustration of this paradox is when the inner coach inadvertently instigates fear-inducing ego-centric goals or irrational beliefs, such as compelling the individual to solely focus on winning (Turner et al., 2018).

Recognizing the occasional counterproductive nature of GDST, it is logical to consider that individuals could benefit from training their inner coach (Latinjak et al., 2016). Aligned with cognitive-behavioural approaches, interventions aimed at enhancing GDST have been developed across various domains, encompassing clinical child psychology (Farrell et al., 1998), rehabilitation psychology (Twamley et al., 2012), and military psychology (Taylor et al., 2011). A recent addition to this spectrum is the Educational Self-Talk Intervention (ESTI) crafted by applied sport psychologists specifically for sports and exercise (Latinjak et al., 2019a). This intervention seeks to impart effective usage of GDST, addressing its potential counterproductivity.

### ***What we know about educational self-talk interventions?***

Beyond the confines of sports, ESTIs have demonstrated decades of success in alignment with cognitive-behavioural approaches (Goldberg et al., 2018; Meyerson, 2017). Primarily, ESTIs enlighten individuals about their organic self-talk, encompassing both goal-directed self-talk (GDST) and spontaneous self-talk (Latinjak et al., 2020a), with the overarching goal of enhancing self-regulation (e.g., Meyerson, 2017). The fundamental components of ESTIs involve instructing individuals in (a) understanding the significance of self-talk and its connections to other concepts (Neil et al., 2013), (b) recognizing dysfunctional self-talk patterns (Latinjak et al., 2019b), and (c) optimizing the use of GDST for improved efficacy (Goldberg et al., 2018). Notably, some ESTIs incorporate cue words, a characteristic feature shared with strategic self-talk interventions (for a comparison between strategic and educational self-talk interventions, refer to Latinjak et al., 2023). While certain ESTI studies include self-talk scripts or cues as supplementary elements, the reflection on GDST remains a more prominent focus in these interventions compared to the use of cue words (Latinjak et al., 2019a).

To date, the ESTI tailored for sports contexts has been the subject of investigation in two studies. Latinjak et al. (2016) introduced their ESTI, initially termed the goal-directed self-talk intervention, through a single-case analysis featuring an elite male orienteer. The ESTI's fundamental process comprised three sequential steps. First, the participant scrutinized a challenging situation, delving into the associated emotions and thoughts (e.g., "I became nervous due to mistakes on a map," with the thought: "the map is not worth looking at"). Second, the participant reflected on their past utilization of GDST in this scenario (e.g., frequently stating: "Calm down, be logical and simple"). Third, alternative applications of GDST were explored for potential future occurrences of similar situations (e.g., considering: "breath and think"). Notably, in line with the characteristic feature of the ESTI, participants were not obligated to employ the alternative cues, though voluntary use was discussed in subsequent sessions. Across four ESTI sessions, the participant rated the intervention as "very positive based on the significant improvements observed in past competitions, attributed to the thorough analysis, comprehension, and application of self-talk."

In the second exploration of the ESTI, four female athletes engaged in the intervention delivered through an online text-messenger service (Latinjak et al., 2019b). Of note, three out of the four participants completed approximately 12 sessions, expressing positive feedback about their experience. However, one participant, encountering challenges with the text message format and facing interpersonal difficulties with the practitioner, discontinued the intervention after only six sessions. Valuable insights from participant feedback, practitioner reflections, and external sources, such as a coach, suggested that the potential positive impacts of the ESTI encompassed heightened awareness of organic self-talk, refinement of GDST content, and positive effects on performance-related variables, including emotions, motivation, and self-confidence.

Furthermore, a chapter focused on the ESTI was published in a sports self-talk book (Latinjak et al., 2020a). This chapter delves deeply into the procedural aspects of the ESTI, offering insights into session setup, including considerations for location (e.g., in an office) and timing (e.g., after a training session). A notable feature of this chapter is the introduction of a

gamified version of the ESTI, depicted in Figure 1. This board game approach encapsulates each step of the ESTI within individual squares. Participants progress through the game by completing each step, ultimately reaching the end. Notably, the three primary steps from the initial ESTI procedures (examining challenging situations, reflecting on past GDST use, and exploring alternative GDST), have been purposefully expanded into smaller, more detailed steps. Further elucidation of these steps is available in the method section, including a comprehensive description of the ESTI session with lessons learned from this study, accessible in [Table S1](#).

### ***The client-practitioner dynamics in ESTI sessions***

While the preceding studies on the ESTI provided valuable insights, they regrettably did not explore potential changes over time in the dynamics within the practitioner-client relationship, particularly concerning the transfer of control from the practitioner to the client. Drawing on Silverman et al.'s (1995) Transfer of Control model, originating from clinical child psychology, it is reasonable to anticipate a gradual transfer of knowledge, skills, and methods within cognitive-behavioural approaches. In the context of our intervention, the initial sessions might witness the practitioner assuming greater control by closely adhering to ESTI procedures. However, as the intervention progresses, the participant is expected to assimilate knowledge, skills, and methods, gradually assuming more control over the sessions, eventually leading the procedures and adapting them to personal preferences.

To the best of our knowledge, the issue of the transference of control over successive intervention sessions has not garnered significant research attention within the sport and exercise psychology literature. However, the shift from a practitioner-controlled to a client-led approach has primarily been explored in the context of psychologists' professional development (e.g., Tod & Bond, 2010). While there is a dearth of literature on this aspect, phenomenological examinations of sport-oriented interventions repeated over sessions suggest changes in clients' perception and engagement. For instance, in Salim and Wadey's (2018) utilization of a one-way conversation technique to facilitate emotional disclosure in injured athletes, a participant noted that "initially, it felt really weird to be talking to myself out loud (...) but, as the sessions went on, I started to feel more comfortable talking." It is conceivable that shifts in client engagement with an intervention over time can impact their adherence to and the effectiveness of the intervention. Pertinently, evidence linked to the ESTI suggests that clients require sufficient exposure to become familiar with the procedures, while excessive repetition may lead to a depletion of meaningful discussion topics (Latinjak et al., 2019b). Thus, gaining a clearer understanding of the extent to which clients assume control once they become familiar with the procedures would provide valuable insights into the potential use of longitudinally structured procedures in client-led practice.

### ***The aims of the present study***

The primary objective of the present study was to explore an intervention utilizing an innovative board game version of the ESTI across a diverse array of clients, reflective of the participant profiles prevalent in the sport and exercise setting—encompassing elite athletes, recreational athletes, coaches, and officials. Specifically, three key questions guided our inquiry: (a) What are the participants' experiences with the ESTI in general? (b) How do they

perceive the board game version of the ESTI? and (c) In what ways does the dynamic interaction between the practitioner and the participant evolve over sessions? The overarching goal of this study was to facilitate practitioners to integrate the ESTI into their practice. To achieve this, and reflect the familiarity gained over a longitudinal intervention, we provided detailed descriptions of the procedures for two distinct scenarios: when clients are not yet familiar and when they are already acquainted with the ESTI ([Table S1](#)).

## Method

### **Approach**

Before delving into the specifics of our study design, it is important to articulate the foundational epistemological and ontological assumptions guiding our investigation. Our approach is rooted in a constructivist epistemology, which posits that knowledge, particularly in the context of psychological interventions, emerges through the dynamic interactions between practitioners and clients. This perspective emphasizes the interpretative nature of human experiences, suggesting that therapeutic realities are co-constructed and subjective (Schwandt, 2000). From an ontological standpoint, we embrace a relativist position, acknowledging the existence of multiple, context-dependent realities within therapeutic settings. This stance recognizes the diversity and complexity of individual experiences, and how these shape and are shaped by therapeutic practices (Ponterotto, 2005). These philosophical underpinnings steer us towards a case study methodology, privileging depth, nuance, and contextual richness over broad, generalized findings (Baxter & Jack, 2008).

The current project employs a case study design, featuring four instances of a young male neophyte practitioner engaging with diverse clients using a consistent intervention package. The selection of a case study approach serves a twofold purpose: firstly, it provides readers with a developmental opportunity to reflect on the applicability of the ESTI in light of their own experiences (Cotterill et al., 2017). Secondly, we anticipate that the insights gained from the experiences of a neophyte practitioner will yield valuable recommendations, particularly beneficial for other practitioners in their early stages, who often gravitate towards structured procedures before embracing more flexible approaches as confidence grows (Tod & Bond, 2010).

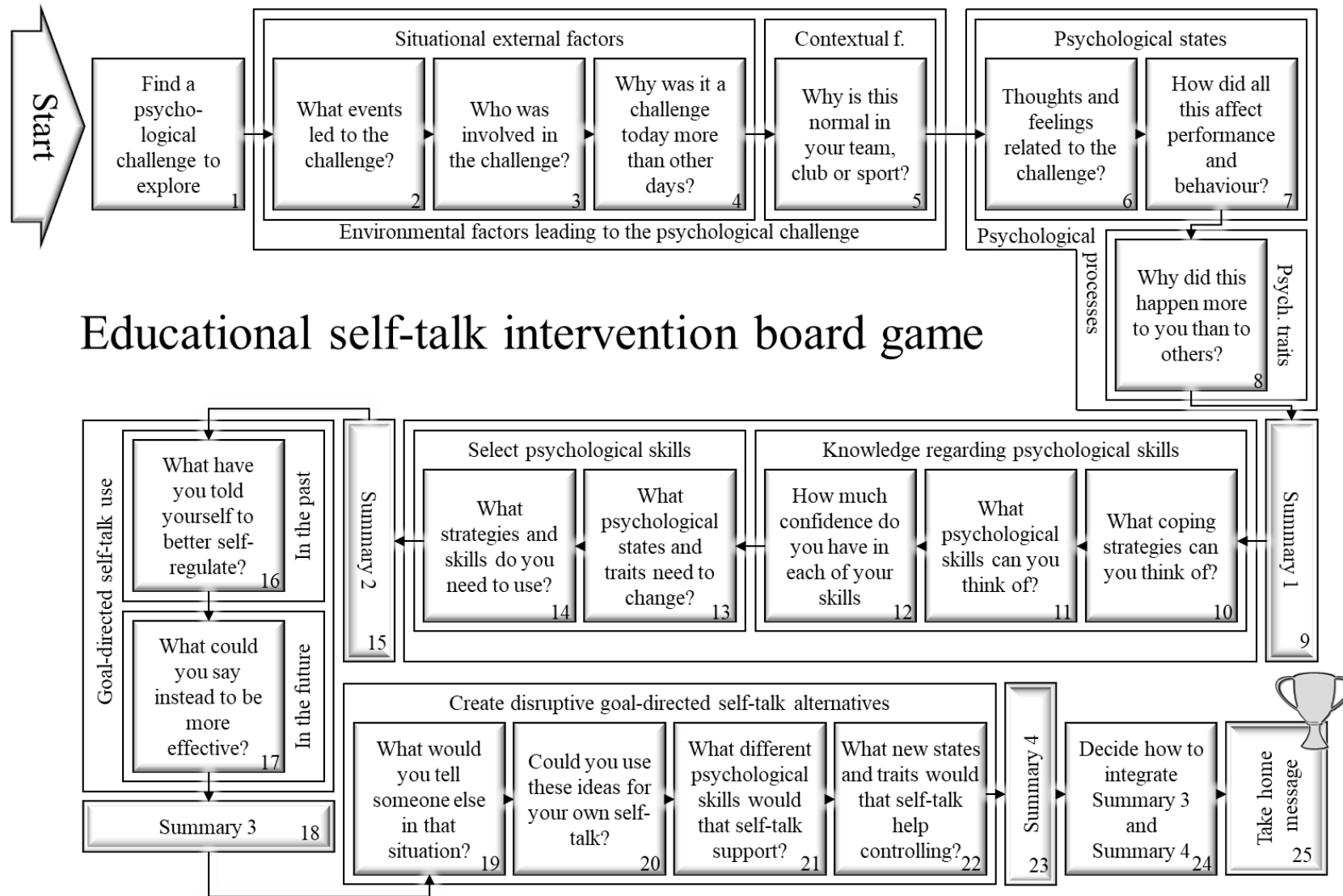
In adopting the case study approach, we conscientiously addressed concerns about construct validity, internal validity, and external validity (Cotterill et al., 2017). To enhance construct validity, we strategically incorporated diverse information sources, including session materials, participant interviews, and the practitioner's reflective diary (Yin, 2014). Furthermore, we asked the practitioner and participants to review the manuscript. To bolster internal validity, we undertook a deliberate effort to replicate results across four distinct cases (Smith, 1988) and diligently scrutinize potential confounding variables during data analysis (Prapavessis et al., 1992). Recognizing the inherent limitations of our study design regarding external validity, we acknowledge that it does not establish conclusive proof of the intervention package directly causing specific effects in participants. Nonetheless, our aim is to furnish valuable insights into the potential mechanisms of the ESTI and provide pertinent information for refining the intervention in future applications.

Our research is shaped by our diverse European cultural backgrounds and cognitivist orientations, which emphasize structured, client-led methodologies. This positionality influences every aspect of our study, from its design to the interpretation of findings. We engage in reflexive practices to understand how our backgrounds and beliefs impact the research outcomes, following the reflexive guidelines outlined by Finlay (2002) in her discussion on negotiating the researcher-participant relationship. This ensures that our findings are a product of a collaborative knowledge construction process, deeply intertwined with our professional stances and personal identities.

### ***The practitioner and participants***

The practitioner, a 26-year-old male, holds a bachelor's degree in sport sciences and a Master of Science in sport and exercise psychology, with the majority of his education completed in Greece. His master's program, however, was a European master's with an international cohort of students and instructors. Prior to participating in this study, he had limited professional consulting experience, amounting to a few hours, along with a nine-month internship during his master's course. In preparation for this study, he immersed himself in the previously published ESTI studies (Latinjak et al., 2016; 2019b) and studied the corresponding ESTI book chapter (Latinjak et al., 2020a). Additionally, he engaged in three practice sessions with the ESTI. While still refining his professional philosophy, the practitioner found comfort in the concept of dynamic shifts between practitioner-led and client-led styles, facilitated by tangible tasks such as those presented in the ESTI. These preparatory efforts underscore his commitment to grounding his practice in established methodologies, and the practitioner is mindful of the evolving nature of his professional identity as he navigates the dynamic interplay between different counselling approaches.

The practitioner allocated sufficient time to effectively administer the intervention to a diverse group of four participants. The study encompassed an array of individuals, including an elite male tennis player (aged 18–25), a recreational female triathlete (aged 18–25), a male football referee (aged 25–35), and a male tennis coach (aged 55–65). The practitioner extended the study opportunity to individuals in his professional network who had independently expressed a desire to engage with him in a professional capacity. The selection of participants was guided by three criteria: (a) the representation of different stakeholder types in the sports context, encompassing athletes, exercisers, officials, and coaches, (b) a demonstrated interest in psychological support as expressed by the participants, and (c) a specific interest related to self-regulation. For participant recruitment, the practitioner engaged in discussions with various stakeholders, ultimately identifying one individual from each of four distinct groups who expressed interest in the study and acknowledged a need to better manage personal internal challenges during their informal conversations. All participants, of Greek nationality, willingly signed an informed consent form before the commencement of the first session. They were informed about their right to withdraw from the study at any point, emphasizing the importance of voluntary participation and ethical considerations in research practice. Throughout the recruitment phase, all individuals who showed interest remained committed to participate after being briefed on the session details and the overall duration of the study.



**Figure 1.** The educational self-talk intervention board game

## **Procedures**

The main study and intervention procedures remained consistent across all four cases, underscoring the methodological uniformity. However, the nuances of how the intervention was delivered exhibited variability to accommodate the distinct needs and preferences of each participant. This adaptive approach reflects the study's inherently eclectic and pragmatic philosophical paradigm, aligning with established principles (Cotterill et al., 2017).

Following the receipt of ethical approval from the University of Thessaly's ethics committee, participants were contacted, and upon their agreement to participate, an introductory meeting was scheduled. The initial meeting had a dual purpose: collecting preliminary descriptive data and conducting a comprehensive exploratory interview. The interview, guided by established protocols (Latinjak et al., 2021), aimed to familiarize the practitioner with the participants and gain a nuanced understanding of their unique needs and preferences, setting the stage for tailored intervention strategies.

Following this session each participant engaged in a minimum of three ESTI sessions, with the option to extend to a fourth session. While Latinjak et al. (2016) utilized four sessions, we introduced flexibility to accommodate participants' preferences and needs regarding the number of ESTI sessions. Subsequent to their final ESTI session participants participated in a post-intervention interview (see interview script in supplementary [Table S2](#)). Scheduling aimed for intervals of 7 to 14 days between sessions, with the specific time frames detailed in each case study section within the results. Ideally, all sessions were conducted in person, but due to the constraints of the COVID-19 health pandemic, eight out of the 14 sessions were conducted online, adapting to the circumstances while maintaining the integrity of the intervention. Although the format of both in-person and online sessions was consistent, we anticipated variations in participant experiences attributable to the differing environments. Consequently, we incorporated a query regarding the physical context within the post-intervention interview to capture these nuances (see [Table S2](#)).

**The educational self-talk intervention.** The ESTI in this study adhered to the materials and procedures outlined by Latinjak et al. (2020a). The intervention was structured around a game board delineating intervention steps (refer to Figure 1), categorically divided into eight phases.

1. Identification of a challenging situation for exploration (e.g., reacting angrily after a mistake).
2. Analysis of the situation and contextual factors, exploring events leading to the challenge, individuals involved, and variations in challenge intensity.
3. Examination of psychological states and traits related to the challenge, including thoughts, feelings, behavioural and performance impact, and the prevalence of the challenge.
4. Focus on coping strategies and psychological skills, involving the creation of a list and the participant's confidence rating in each skill.
5. Integration of ideal strategies and skills, identifying key traits and states defining the challenge.
6. Reflection on past GDST use, recalling self-statements and contemplating alternatives.



7. Exploration of new GDST approaches through different perspectives, formulating statements for others (e.g., younger siblings) and evaluating their potential helpfulness.
8. Decision-making on a set of statements for future use in similar challenging situations, which are encapsulated in a take-home message summarizing the ESTI exercise.

This systematic breakdown demonstrates the comprehensive nature of the ESTI, providing participants with a structured yet flexible framework for self-reflection and the cultivation of effective self-talk strategies.

The take-home message undergoes a gradual elaboration during the summary steps integrated into the board game. Following Phases 1 to 3, known as “The When Summary,” both the practitioner and participant distil the crucial situational, contextual, and personal elements pertaining to the challenging situation (e.g., “When I am angry because of a mistake in a big game and my perfectionism...”). Post-Phases 4 and 5, denoted as “The I could Summary,” the practitioner and participant synthesize the necessary coping strategies and psychological skills to address the challenge (e.g., “...I could use my somatic relaxation skills to decrease physiological activation...”). Upon completing Phases 6 and 7, identified as “the first My self-talk could be Summary,” the practitioner and participant encapsulate past and potential future GDST (e.g., “...my self-talk could be ‘breathe slowly and calmly’”). However, after Phase 8, designated as “the second My self-talk could be Summary,” an alternative GDST approach is proposed, grounded in a potential re-evaluation of the situation (e.g., “...my self-talk could be ‘use your anger tactically’ as it might be more efficient to accept and use my anger than fight it”). In a culminating step, the four summaries harmonize into a unified take-home message, which participants can receive in handwritten form during the session or digitally via email or text-messenger service. For example:

*When I am angry because of a mistake in a big game and my perfectionism, I could use my somatic relaxation skills to reduce physiological activation, so my self-talk could be, “Breathe slowly and calmly,” or, failing that, my self-talk could be, “use your anger tactically,” as it might be more efficient to accept and use my anger than fight it.*

This comprehensive approach ensures that participants leave each session equipped with a personalized and integrated set of self-talk strategies tailored to their unique challenges.

The board-game-inspired format (Figure 1) of the ESTI is designed to engage clients in a game-like environment, yet it is crucial to note that this does not inherently instil a competitive element where winning or losing is defined. The nature of the ESTI allows for a variety of responses to each question, with no definitive right or wrong answers. The valuation of a response is primarily subjective, with the client being the primary judge of its adequacy, and to a lesser extent, the practitioner offering guidance. Progression through the game occurs as clients feel they have adequately addressed a question, enabling them to advance to the next square. Importantly, the option to bypass questions is available, should clients find them unanswerable, uncomfortable, or irrelevant to their personal context. Practitioners play a supportive role in facilitating these decisions, offering insights, or challenging the client's choices when it serves their personal growth. Overall, it is essential to understand that from the practitioner's viewpoint, the ESTI is not a competitive endeavour aimed at victory.

Instead, its game-like structure is intended to foster engagement and motivation, leveraging the familiar and enjoyable aspects of board games to enhance the self-reflexive or learning process.

**Practitioner diary.** Throughout the preparation and implementation of the intervention, the practitioner maintained a reflective diary. This diary served as a comprehensive record, capturing both quantitative data related to the intervention (such as session duration) and the practitioner's subjective experiences, enriched by critical self-examination. The diary entries revolved around fundamental questions, prompting the practitioner to delve into the nuances of each session: What activities transpired between myself and the participant during the session? How did I personally perceive and experience the session? What aspects unfolded successfully, and where might improvements be necessary? What adaptations or changes would I consider for the subsequent session? In all, this reflective process manifested over 2000 words. The practitioner's commitment to meticulous record-keeping and thoughtful self-analysis reflects a dedication to honing the intervention, fostering a responsive approach to the evolving needs of each participant.

### ***Data analysis***

All authors except the practitioner undertook an analysis of the evidence independently, deferring discussions with the practitioner until the initial draft of the results was formulated. The analysts' objective was to construct a comprehensive portrayal of the transpired events in the case studies, drawing from the available data and adopting an external observer's perspective. Following the establishment of a cohesive narrative from their viewpoint, subsequent meetings with the practitioner were convened to deliberate on subtleties within the entries in the practitioner's diary and to explore diverse interpretations of the participants' remarks. Subsequent to the analysts' comprehensive discussions and modifications to the manuscript, the document underwent dissemination to the participants. Participants received an individualized copy, featuring information from their respective case highlighted, and invited to furnish comments and identify any instances of misinterpretation of their experiences.

For our analysis a comprehensive review process was initiated by first perusing all transcripts and materials from the sessions to meticulously assess the available data. Subsequently, the four cases were scrutinized in the sequence presented in this article. Consistent with earlier ESTI studies, we opted for an interpretive phenomenological analysis methodology (Callary et al., 2015) to systematically evaluate the data. The initial phase involved the summarization of descriptive data pertaining to the sessions. Following this, a detailed exploration of participants' experiences with the ESTI was undertaken through an examination of the interview transcripts. Specifically, their overarching impressions of the ESTI and its impact were scrutinized. Additionally, insights were sought regarding various facets of the intervention, such as reflections on the board game, the take-home message, and the online format adopted for certain sessions. Furthermore, an examination of both participants' and practitioners' comments concerning shifts in the dynamic of the relationship, particularly in terms of procedural leadership, was conducted.

In addition, an in-depth examination of the practitioner's diary was conducted, with a particular emphasis on capturing the practitioner's evolving experiences throughout the interventions. The scrutiny encompassed an exploration of the practitioner's personal impressions and the discernible shifts in his perspectives over the intervention duration. Special attention was devoted to extracting insights into the practitioner's perceptions of the participants' progress and his comprehensive evaluation of the ESTI within each case. Notably, the analysis focused on the practitioner's comments regarding the alignment of the intervention with the unique characteristics and circumstances of the participants.

## Results

### Case Study 1: George, an Elite Tennis Player

#### *George*

George (pseudonym), an 18 to 25-year-old male tennis player, engaged in rigorous training three to five days per week. At the time of the study, he held a prominent position within the top 10 rankings in Greece, signalling his imminent transition to full-time professional status. George had garnered noteworthy achievements, reaching the finals in various national and international tournaments. His mid-term objectives encompassed securing the national title and establishing himself as a professional player on the international tour. Concurrently, he aspired to complete his academic diploma during the intervention. Notably, George had not sought professional psychological support prior to this intervention.

#### *Intervention*

George underwent four ESTI sessions, each lasting between 20 and 30 minutes, over a span of 58 days from the initial to the concluding session. The intervals between sessions fluctuated from four to 22 days, with a three-week hiatus attributed to academic exams. The session topics encompassed (a) addressing self-confidence issues, (b) managing anger following mistakes, (c) coping with fear and nervousness before crucial finals, and (d) addressing difficulties related to concentration. The post-intervention interview occurred 12 days after the final session and lasted 27 minutes.

#### *Results*

In summary, George provided a positive assessment of the ESTI sessions. He observed a growing familiarity and noted several improvements, particularly in managing anger issues. Consequently, he placed value on the acquired skills through the repetition of the ESTI.

*I liked what we did in these sessions. I think [these sessions] were very helpful. I couldn't have thought about all these things alone. In the first session, I didn't know what to say. I couldn't think up the right things, but step by step I became aware of more psychological aspects. Repeating the sessions was good because I knew what would follow next. Step by step I was thinking faster. It was helpful. It helped me a lot. I've seen this in my last tournament, which took place last*

*week. Despite studying a lot for the Panhellenic exams this year, our sessions helped me in the tournaments. I wasn't angry. Only in a few moments, but then it was gone. I forgot it [the anger].*

George appreciated the emailed take-home messages sent by the practitioner at the conclusion of each ESTI session. He also valued the board game format. Nevertheless, George indicated a preference for in-person sessions over online sessions.

*As for the take-home messages, I read them every time you sent them to me. Also, I read them before the last competition. It was helpful. I thought about the cues during the competition... This whole process was helpful. I think it is better using the board game... Maybe a discussion without the board game would be boring... Now it was enjoyable! I liked how we did it but I think it would be better in person. I would prefer touching the board game. And the contact between us would have been even better.*

Throughout the intervention, the practitioner placed significant emphasis on his interaction with George. He consistently deliberated on the session durations, ultimately attributing the shorter length compared to other cases to George's communication style, without correlating session length to overall quality.

*Before the interview I thought that [George] is an elite athlete and that I want him to be happy with my work. During the [first] session, I noticed that he trusted me and that he was engaged with our work. We had built a trusting environment. George was concise in the sessions and the duration [of the sessions] was short. But his answers were targeted and to the point. He knew what was being asked of him and the sessions were of high quality.*

The practitioner provided a positive assessment of George's progress, noting a strong alignment between the ESTI sessions and George's specific issues. Observing improvements in George's overall psychological knowledge and communication skills, the practitioner also identified a discernible shift in control occurring during the intervention.

*His psychological challenges matched the self-talk intervention, and the sessions were quality and effective. Their duration was short, but they were just as long as he needed. From the second session I realised that he was learning psychological terminology and we could speak the same language. For example, in the first session he could not easily name psychological skills or emotions. From the second session he used terms like 'anxiety', 'focus on the present', 'concentration' etc. From the second session George began to read the questions and think about the answers himself.*

### **George's Case Discussion**

George expressed satisfaction with the ESTI sessions, finding value in the repetition that facilitated familiarity with procedures and a swift sense of ownership. Enjoyment emerged as a crucial aspect for George, with the board game format and interactions with the practitioner

playing pivotal roles in enhancing his session experience. The practitioner, initially concerned about George's opinion, remained attentive to session length during the intervention. Despite deviations from expectations, having clear guidelines seemingly enabled the practitioner to navigate confidently and appreciate the unique dynamics of the client-practitioner relationship. The sessions, though different from the practitioner's anticipations, may have fulfilled the client's needs effectively.

### **Case Study 2: Maria, a Recreational Triathlete**

#### ***Maria***

Maria, a pseudonym for an 18 to 25-year-old recreational exerciser, engaged in swimming, cycling, running, and strength training four times a week. Her notable accomplishments included securing first places in recreational cross-country races. Looking ahead, Maria aspired to achieve personal improvement and complete a half-Ironman within six months of commencing the intervention. Notably, Maria had no prior experience with professional psychological support.

#### ***Intervention***

Maria participated in four ESTI sessions, with their durations gradually decreasing from 30 to 50 minutes. Over a 32-day span from the initial to the concluding ESTI session, the intervals between sessions ranged from six to 13 days. The sessions addressed various themes, including (a) negative thoughts stemming from her coach's high expectations, (b) fear of sustaining injuries while cycling, (c) anger on the day preceding a competition, and (d) feeling “like a prisoner” during a week-long training camp. The post-intervention interview occurred seven days following the final session and lasted 30 minutes.

#### ***Results***

In general, Maria expressed strong support for the ESTI, noting its efficacy in enhancing her understanding of challenging situations. She observed that the significance of cue words appeared to be less impactful when compared to the reflective process.

*I liked that I understood the problem better and it [the ESTI] made me an external observer of my situation to find the solution. It was easy. By aligning my preferred cues with the problems, my anxiety turned into a desire to continue and think positively. However, what helped me the most was the process of the session. I didn't have to look at the take-home messages that much.*

Maria found value in the quantity of ESTI sessions and positively received the board game format. Additionally, she observed a distinct transfer of control throughout the intervention.

*It was nice because if you want to learn how to use it [self-talk] properly, you have to repeat it [the ESTI]. If I would have to do these sessions a year long, sure I'd get tired... But four sessions were enough to get me used to the board game. The*

*board game format is more interesting. You could just use questions, but it wouldn't be that interesting. I liked how you go from one step to the next and it's like trying to finish a race. Yes...it helps. I liked the repetitions a lot because step by step I got used to it and found solutions myself. In the first session it was new to me... and complicated... I didn't know how it worked. Step by step I learned how it works and I did it [the exercise] myself. I could have the board game at home and try to solve my problems.*

When questioned about the impacts of the ESTI, Maria emphasized enhancements in her self-regulation and shifts in her mindset during competitions.

*Well, I'm not saying I'm not afraid anymore, but I can find the causes and solutions myself. In the last competition, self-talk helped me...yes...I remember after our sessions telling myself that it [self-talk] was very helpful, and now I think differently [while competing in my sport] ...*

In general, the practitioner expressed high satisfaction with the sessions involving Maria, although not all sessions unfolded with equal success. Intriguingly, concerning the transfer of control, the practitioner held a viewpoint distinct from Maria's.

*Maria was very engaged in every session and ready to answer all questions seriously. She spent a lot of time answering and thinking. That means she gives value to what we do. Our working climate improved with each session. After the 1st, 3rd, and 4th ESTI session I noticed an expression of happiness and satisfaction on her face. This boosted my self-confidence and motivation. But after the 2nd session she said to me: 'Ok, but the fear is still there'. After that, I thought that this session did not go so well and that her problem might need a different approach. Maria only read the questions by herself in one session. She preferred that I asked the questions because she liked me tailoring them to her situation.*

### ***Maria's Case Discussion***

In summary, Maria provided a positive assessment of the ESTI, expressing satisfaction with both the board game format and the recurrent sessions. Interestingly, she observed a distinct transfer of control, a perception not entirely shared by the practitioner. It appeared that the ESTI sessions played a crucial role in clarifying Maria's situation, instilling added confidence in her self-talk, and enhancing her overall self-regulation strategies. Despite the practitioner's reservations regarding the efficacy of the ESTI in addressing Maria's performance anxiety, she offered an alternative perspective. Rather than questioning the effectiveness of the intervention, Maria suggested that the exercise facilitated a shift in focus away from uncontrollable external variables, enabling her to better manage anxiety.

### Case Study 3: Manu, a referee

#### **Manu**

Manu (pseudonym), a male football referee aged 25 to 35, engaged in rigorous training five days a week and officiated one game weekly. At the time of the study, he served as a referee in the third division of Greek male football, with aspirations for promotion to the second division as a mid-term goal. Manu had not previously sought professional psychological support.

#### **Intervention**

Manu completed four ESTI sessions (each ranging from 26 to 40 minutes) over a 26-day period; the intervals between sessions varied from three to 12 days. The sessions addressed diverse topics, including (a) stress stemming from a conflict with athletes and staff following a decision, (b) anxiety following a mistaken penalty decision, (c) fear and anxiety triggered by a coach's aggressive behaviour during a game, and (d) anxiety and frustration experienced by one of his linesmen after being pressured for a wrong decision. The post-intervention interview occurred 8 days post the last session and lasted 25 minutes.

#### **Results**

Overall, Manu expressed high satisfaction with the ESTI, and he positively evaluated the repetition of the same procedures.

*Following the board game questions step by step helps you discover things about yourself that can help you deal with pressure and difficult situations. For example, it helps you manage your psychology after making a wrong decision in the game. Yes, it was very helpful. At first it was new, but little by little, after the second session, I got used to the procedures and then it went automatically. For example, I read the questions alone and everything was like: 'watch, without stopping, autonomously'.*

Manu appreciated the board game format and perceived tangible benefits from the ESTI that assisted him in addressing real challenges.

*It [the board game] was clever and familiar. And I say familiar because we all grew up playing board games. I liked that it was like a game...it made me more engaged and committed. It wouldn't be the same if only you [the practitioner] asked the questions. Our sessions have contributed to my better psychological coping with other challenging situations. In the last competition there was a conflict with the players and the coaching staff, and I managed it much better than before our sessions. And it was exactly the same topic that we discussed in one of our sessions.*

The practitioner derived great satisfaction from collaborating with Manu. The alignment between Manu's challenges and the ESTI was crucial for the practitioner, although he was surprised by the topic of the fourth session when Manu opted to address an issue involving his linesman. Notably, the practitioner observed a substantial and positive transfer of control over the ESTI.

*I am very happy and satisfied with Manu. He was very engaged and interested in what we were doing. His [Manu's] challenges fitted right into the self-talk intervention, and it was a very valuable experience. He knew what he needed, and we didn't waste time discussing irrelevant issues. We've been working on personal challenges he's experienced throughout the games, except [in the last session] when we talked about helping his linesman. He [Manu] became more comfortable with the intervention day by day and was willing to read and reflect on his own without letting me talk so much. I just made some clarifications, mainly related to psychological skills. What impressed me is that he decided to arrange our third session a few days before his next competition because he felt it would be very helpful for him and he would have "fresh" ideas. He is a person you enjoy working with.*

### **Manu's Case Discussion**

The ESTI appeared to suit Manu's needs, suggesting that the sessions likely assisted him in addressing his routine challenges more efficiently. Manu demonstrated a quick grasp of the reflective procedures associated with the ESTI and applied them autonomously. Notably, he extended some of the techniques acquired during the intervention to better navigate other life challenges, although he did not provide specific details on this matter. In Manu's case, noteworthy aspects included the transfer of control, strategic session planning to anticipate challenges, and the adaptation of procedures to analyse challenges not only related to himself but also to others. Manu not only achieved autonomy with the procedures but also demonstrated the ability to tailor them to his unique needs and interests.

### **Case Study 4: Hector, a tennis coach**

#### **Hector**

Hector (pseudonym), a male tennis coach aged 55 to 65, devoted five days a week to coaching and boasted an extensive 30 years of coaching experience. As a former player, he had achieved a top-30 ranking in Greece, and his coaching expertise had contributed to the success of several players who secured top-10 international rankings in their respective age groups. Hector's primary objective was to enhance the tennis proficiency of his players. Notably, he had not sought professional psychological support before this intervention.

#### **Intervention**

Hector participated in three ESTI sessions, each lasting between 45 and 67 minutes. Over a span of 43 days from the initial to the concluding ESTI session, the intervals between sessions varied from seven to 16 days. The session topics revolved around (a) managing despair



following a player's frustration and defeat, (b) aiding a player in altering negative self-talk that triggers anger, and (c) addressing a player's self-blame and frustration after a defeat. The post-intervention interview occurred 20 days after the last session and extended for 39 minutes.

### **Results**

It is crucial to acknowledge that Hector's case differed from the others. Rather than focusing on his personal challenges, Hector utilized most ESTI sessions to identify cues he could provide athletes to enhance their psychological preparation. Despite this distinction, Hector expressed a generally positive view of the ESTI, recognizing benefits in analysing situations. However, he also recommended simplifying the exercise.

*I liked it [the ESTI]. We analysed a situation... I think we analysed all the factors related to our psychological challenges... During the sessions I gained a more realistic perspective of the situation. You see, the mind needs to focus on this process (the ESTI session). It's tiring. It would be better to reduce the questions or have smaller board games with fewer questions but adapted to each topic.*

Hector appreciated the repetitive nature of the exercise, especially considering the novelty of the ESTI for him. Additionally, he gave a positive rating to the take-home messages.

*Step by step I became more familiar with the process. It didn't scare me. It helped me put all things on a 'right footing', and step by step I got comfortable with it [the ESTI]. Repeating the sessions the same way wasn't bad, because if you do the same thing over and over it makes the process easier to remember. It was very helpful that we kept few cues (the most important ones) in the last part of the sessions because it is difficult to remember a lot of information. I'll save [the take-home messages] to my folder and refer to them whenever I need them.*

Hector's evaluation of the effects of the ESTI appeared somewhat ambivalent. While he incorporated the cues from the take-home message into his interactions with athletes, he acknowledged achieving only partial success. Nevertheless, Hector viewed his overall experience as highly positive.

*I used them [the cues] by pairing players up and asking them to use those cues with their teammates. For some it worked, for some it didn't. I think that our sessions have made a positive contribution to my athletes, but not to a great extent. I am very satisfied. In general, I enjoy learning new and innovative things and I came to our sessions with a positive vibe. I believe in the benefits of these innovations. My time is limited, so I would not attend our sessions unless I believed in their benefits.*

Hector's case posed a distinct challenge for the practitioner. Following the initial exploratory session, the practitioner documented in his diary that Hector expressed a preference for concentrating more on his athletes than on his own concerns. Consequently, the practitioner faced the decision of how to navigate the intervention given this shift in focus.

*During the first session he mentioned that he didn't need psychological support for himself but needed to find ways to help his athletes. I had difficulty tailoring the sessions to his needs because he told me that he had no mental issues because he was experienced, and he wanted to discuss his athletes' issues. I had to take the initiative and think about what to say to make the session effective. I told him, the exercise could help you keep these cues clearer in your mind and understand how sport psychologists might work with your athletes as well.*

Driven by the notion that the sessions could offer Hector insight into the role of sports psychologists, the practitioner granted Hector the flexibility to tailor the ESTI to better align with his specific needs and objectives.

*In the last two sessions we've agreed to work out how he can help his athletes. We talked about what cues his athletes need to hear from him, the coaching staff, and their teammates. This method was more effective, and we found many solutions.*

Overall, the practitioner expressed contentment with the collaboration with Hector, observing a notable shift of responsibility towards Hector during the concluding sessions.

*I am pleased with Hector's seriousness, interest, and commitment. He was a person who appreciated our work and wanted to gain support. Despite being older and very experienced, he was open to new ideas and improved his coaching style. In the last two sessions he read the questions and I only made some clarifications where necessary.*

### **Hector's Case Discussion**

Hector's case presented unique challenges, particularly due to the significant age and experience gap between the practitioner and the coach. Despite initial uncertainties about the intervention's continuity, an adaptive approach was agreed upon with Hector, leading to a modified protocol that addressed their specific goals. It is essential to note that the outcomes of Hector's ESTI sessions may not be directly applicable to other cases due to the intervention's idiosyncratic changes. Nevertheless, Hector's experience serves as an illustration of how a standardized protocol can be flexibly adapted by both practitioner and client to create a more tailored intervention. In terms of the ESTI's effects, the process introduced Hector to new concepts, fostering enhanced self-awareness and a deeper understanding of the challenges in his coaching role. This heightened awareness appeared to stimulate independent efforts by Hector to refine his coaching behaviours. Overall, Hector provided positive ratings for the intervention sessions, emphasizing the need for effectiveness given his limited time to prevent disengagement.

## General Discussion

We implemented a longitudinal ESTI in four distinct cases to investigate participant experiences with the innovative board game version of the intervention and the gradual transfer of control from practitioner to participant across the ESTI sessions. This section succinctly addresses the initial three questions posed and integrates these insights within the broader context of existing literature.

### ***What were the participants' experiences with the ESTI?***

In general, participants provided positive feedback on the ESTI, acknowledging its initial complexity and emphasizing the importance of repetition for optimal engagement. Notably, Hector, the coach, proposed simplifying the ESTI process. While this social validation aligns with previous observations (Latinjak et al., 2016; 2019b), the learning effect observed in this study adds a novel dimension. The duration or dosage of sport psychology interventions is an evolving research area (e.g., Walter et al., 2019). The present study suggests the importance of considering session frequency, as evident in a previous study that indicated potential challenges with excessive sessions (Latinjak et al., 2019b). Although Maria suggested four sessions as ideal, we believe it is too early to make such conclusive recommendations. Instead, we advise practitioners to plan three to four ESTI sessions over two months and explore additional sessions and their spacing based on the client's needs.

Furthermore, participants unanimously emphasized the value of the ESTI's reflective process, facilitating self-discovery and a nuanced comprehension of challenging situations. This aligns with findings from prior ESTI studies (Latinjak et al., 2016; 2019b). In the broader field of sport psychology interventions, self-reflective components have proven pivotal for enhancing athlete and coach performance (e.g., Hägglund et al., 2021). Distinctively, the take-home messages were singled out by George and Hector as particularly beneficial aspects of the ESTI. In the ESTI, these messages include potential cue words and phrases demonstrated to enhance performance through attentional and motivational mechanisms (Tod et al., 2011). However, participants are not obliged to use these cues, and practitioners are encouraged to suggest their optional use. The primary intent of the take-home messages is to aid clients in recollecting the session and sustaining the process of self-reflection on occurrences and self-regulation using GDST. Extending beyond the specific content of GDST, the culmination of an ESTI might involve variations in the grammatical form of GDST (e.g., shifting from "I can do it" to "We can do it") or experimenting with different imaginary intonations (e.g., adopting a softer tone). Moreover, it remains a possibility for participants to decide not to employ GDST in a given challenging situation (Latinjak et al., 2023). This flexibility underscores the adaptability of the ESTI to individual preferences and the dynamic nature of self-regulation strategies.

### ***What were the participants' experiences with the board game format of the intervention?***

Participants generally praised the board game format, with three of the case studies highlighting that the ESTI's engagement and enjoyment would have been diminished without it. The board game format not only introduced an element of fun but also instilled a sense of familiarity and motivation akin to *winning the game*. While board games have been employed in psychological interventions and other health-related contexts (e.g., Kerr et al., 2020), our intervention stands out as one of the first in sport psychology to utilize this format as a vehicle for intervention delivery. Previous research has suggested that activities framed as board games can enhance retention rates (Wait & Frazer, 2018). Our findings further support the notion that transforming sport psychology interventions, such as goal setting, into a board game format holds promise for motivating and engaging a diverse range of clients. This area presents an intriguing avenue for applied research to explore further.

### ***How did the interaction between the practitioner, participant, and task change over the ESTI sessions?***

Despite its inherent longitudinal design, the transfer of control within the task from the practitioner to the client had not been previously documented in the ESTI or other investigations into sport psychology interventions. In this study, all participants acknowledged that as the sessions unfolded, they progressively gained autonomy and assumed greater control over the exercise. This shift may be attributed to various mechanisms, with certain aspects being more pronounced for specific individuals. For instance, George developed a more extensive vocabulary throughout the sessions, fostering more fruitful discussions with the practitioner. Maria, by the fourth session, felt autonomous enough to suggest she could independently practice the ESTI at home. Meanwhile, Manu embraced autonomy, adapting procedures to assist a colleague facing a challenging situation. Recognizing and promoting client autonomy in sport psychology interventions is crucial for enhancing intrinsic motivation (Ryan et al., 2011) and facilitating learning and behavioural changes that contribute to more favourable intervention outcomes (Sharp et al., 2015). Thus, this study offers a valuable illustration of how the repetition and practice of a specific task contribute to a learning process, empowering participants to autonomously apply and adapt that task. Our recommendation for practitioners is to support clients in gradually transforming the ESTI into their personalized version.

An essential takeaway from this study is the comprehensive description of the ESTI for two distinct scenarios: when clients are unfamiliar with the procedures and when they are already acquainted with them. For the sake of brevity, these detailed descriptions are made available as supplemental material ([Table S1](#)). Specific recommendations for each situation are provided that range from greeting a client and introducing them to the ESTI procedures to concluding a session or transitioning to another activity within the session. [Table S1](#) serves as a valuable resource for practitioners, aiding their preparation for an initial ESTI session with a client and offering insights into what a tangible transfer of control might look like based on the client's familiarity with the ESTI. Together with Figure 1, [Table S1](#) equips practitioners for the effective application of the ESTI in their applied practice.

### ***Limitations***

In this study, we observed general support for the ESTI, including the effectiveness of the board game format. However, it is crucial to acknowledge potential sources of bias that may impact the results. There is an elevated risk of Type I error stemming from selection bias in participant sampling, social desirability bias influencing participants' responses during interviews, and confirmation bias in data interpretation. Concerning selection bias, participants were chosen based on their interest in the study and perceived receptiveness to self-reflective interventions by the practitioner. Individuals who opted not to participate and were less inclined toward self-reflective interventions might have had a different experience. Nonetheless, in practical applications, intervention choices are typically tailored to the client's needs and preferences (Poczwadowski et al., 1998).

Concerning social desirability bias, a limitation of this study was that the final interview was conducted by the practitioner. Although leveraging the existing rapport between the practitioner and participants facilitated discussions on shared experiences, an alternative approach would involve having the final interview conducted by a different researcher. While participants were explicitly informed that their critical opinions were crucial for further refining the intervention, the practitioner's presence might have influenced the level of openness to sharing criticism. To mitigate confirmation bias, two mechanisms were implemented to enhance confidence in data interpretation: critical self-reflection by the practitioner and other authors, and member checking. This involved the practitioner and participants jointly reviewing the findings to identify potential misinterpretations of their experiences (considering criticisms about member checking summarized by Smith & McGannon, 2018).

### **Conclusions**

The current study investigated the practitioner's and four participants' experiences with a board game adaptation of the longitudinal ESTI. The elite athlete, recreational exerciser, referee, and coach reported positive experiences, expressing that the intervention aided them in gaining a deeper understanding of challenging situations and enhancing their use of GDST for self-regulation. Participants liked the board game format and found value in the opportunity to actively engage in the exercise. Notably, there were observable indications of a transfer of control from the practitioner to the participants across the ESTI sessions.

Novice practitioners, particularly those, like the practitioner in this study, navigating the early stages of their professional journey, can benefit from firsthand narratives detailing interactions with diverse clients. These narratives offer insights into engaging less talkative clients (e.g., George), addressing clients hesitant to identify personal challenges (e.g., Hector), or managing clients disappointed with session outcomes (e.g., Maria). Practitioners can consult [Table S1](#) for comprehensive guidance on conducting an initial ESTI session and envisioning sessions where clients are familiar with the exercise and assume more control. This study exemplifies the adaptability of structured techniques, commonly associated with practitioner-led consultation, to be employed in a more client-led manner.

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**Table S1**

*A detailed description of the Educational Self-Talk Intervention (ESTI) procedures when working with clients how are unfamiliar or familiar with the exercise.*

	When <b>the participant is not familiar</b> with the ESTI	When <b>the participant is already familiar</b> with the ESTI
Welcome to the session	<p>Prior to delving into ESTI procedures, initiate the session with a warm greeting and assess whether there are any immediate concerns that require attention. For instance, if an athlete recently had a disagreement with their coach, addressing this event may take precedence over proceeding with the ESTI.</p> <p>In the absence of acute issues, propose the idea of engaging in the ESTI. You can inquire, “Would you be interested in trying the ESTI, a self-reflection exercise where we explore a challenging situation and identify self-instructions to enhance your ability to navigate challenges effectively?”</p>	<p>Welcome the person and acknowledge any pressing matters that might require immediate attention, potentially superseding the scheduled ESTI session.</p> <p>Take a moment to revisit a previous ESTI session, considering any assigned homework. For instance, inquire whether the client had an opportunity to review the take-home message from the last ESTI session and if they have any reflections or comments based on their experiences since then.</p> <p>Prior to commencing the planned ESTI, confirm with the client whether they are still comfortable proceeding with the exercise during this session.</p>
Spatial organisation in face-to-face sessions	<p>During face-to-face sessions, it is advisable to position yourself at a table alongside the client. Arrange the board game, printed on A3 or A4 paper, in the centre between you and include a sheet of paper designated for summaries and the take-home message.</p> <p>In the initial ESTI session, you will likely handle most of the writing. If you are right-handed, position yourself to the left of the participant, ensuring that the paper is in front of the client during writing. Conversely, if you are left-handed, take a seat on the right side for optimal positioning.</p>	<p>In face-to-face sessions, it is still advisable to position yourself next to the client but slightly further away from the table, signalling your encouragement for the client to take a more autonomous role in the exercise.</p> <p>Situate the board game in front of the participant along with a sheet of paper designated for summaries and the take-home message. If the client is right-handed, seat yourself on the right side of the participant to observe their writing. Conversely, if the client is left-handed, take a seat on the left side.</p>
Introducing the exercise	<p>Initiate the session by outlining the objectives of the exercise. For instance, clarify that the Reflective Self-Talk Intervention (ESTI) aims to foster metacognitive knowledge by examining challenging situations and exploring both the actual and alternative use of self-talk to navigate these scenarios.</p> <p>Proceed to explain the structure of the exercise. Inform the client that the ESTI comprises 25 squares of concise reflective</p>	<p>If not addressed previously, inquire about the client's reflections on their previous experiences with the exercise. For instance, discuss whether they encountered any of the challenging situations explored together and how they approached these scenarios with their self-talk.</p> <p>In preparation for the current session, motivate the participant to adopt a more active role in the exercise. Communicate</p>



activities, which they are to complete sequentially until reaching the conclusion of the exercise. Provide an estimated timeframe of approximately 45 minutes, emphasizing that certain questions may pose greater difficulty than others, and reassure them that subsequent repetitions will likely become more manageable.

Express the intention to repeat the exercise in the future, assuring the client that each iteration will likely present fewer challenges. Clearly articulate the initial step of the exercise before commencing. For instance, indicate that the analysis of a challenging situation will be the starting point.

Offer to take a more directive role in the exercise's initial stages, suggesting that you can provide explicit guidance and handle the majority of the writing on their behalf for the first session, with the understanding that their autonomy will increase in subsequent repetitions. Prior to commencement, encourage the client to seek clarification or pose any questions they may have about the exercise.

Selecting a challenging situation for the exercise. Termed Phase 1 in the manuscript. Square 1 on the boardgame.

Clearly communicate to the client the necessity of selecting a concrete, recent, and recurring situation, especially for the initial session. Emphasize the importance of choosing a stereotypical scenario for the first session, making it clear that a situation with well-defined characteristics will be more beneficial.

In instances where the client struggles to identify a situation, refer back to previous discussions to offer suggestions. For instance, remind them of past conversations, suggesting situations related to previously mentioned challenges. If the client encounters difficulty in choosing between different situations, advise them to opt for the simplest one. For example, if torn between anger after a mistake and uncertainty about a life choice, recommend choosing the anger situation.

Ensure that cognitive self-reflection is particularly relevant, especially in the initial session. For instance, in a situation involving social confrontation, inner

the shift in responsibility by explaining that while you previously read all the questions aloud and handled most of the writing, you now encourage the client to read and take charge of the writing process. Emphasize the significance of this transition, emphasizing that it is integral for the procedures to integrate into their natural self-reflective practices.

Illustrate the importance of their growing autonomy in executing the exercise during the session. Clarify that increased independence enhances their ability to reflect on their self-talk, fostering more effective utilization.

Prior to commencing, invite the client to suggest small modifications to the procedures. For example, inquire if there were any questions or steps they did not like or if they believe the exercise could be improved. Encourage them to propose changes and incorporate these adjustments during the session.

Provide the client with greater autonomy in choosing challenging situations. Allow them to select more complex scenarios or situations where self-talk is not the sole mechanism for addressing the challenge. As the client gains experience with the ESTI, they can analyse more intricate situations, recognizing that self-talk may have limitations and that other strategies and skills might be more relevant in certain circumstances.

For instance, a client may choose an interpersonal conflict, discovering that while self-talk helps them prepare for a conversation, additional social skills are crucial for conducting that conversation successfully. This approach allows the client to comprehend the multifaceted nature of addressing challenges.

Additionally, suggest the possibility of re-evaluating a previously analysed situation. Inform the client that they could reconsider a fear-of-failure scenario analysed earlier to determine if progress in self-talk leads to different conclusions

	<p>dialogue may be less applicable than in a moment of self-doubt. Before proceeding to the next step, transcribe the chosen situation as a title on the sheet of paper allocated for summaries and the take-home message.</p>	<p>than the last time. Encourage the client to write the chosen situation as a title on the prepared sheet of paper for summaries and the take-home message before moving on to the next step.</p>
<p>Analysing the challenging situation. Termed Phase 2 and 3 in the manuscript. Squares 2 to 9 on the boardgame.</p>	<p>When a client is completing the ESTI for the first time, it is recommended to adopt a supportive approach that is less challenging about the client's answers. Emphasize the importance of their responses and provide positive reinforcement, such as expressing interest in the mention of an external factor like a coach without probing deeper into why that specific coach is relevant.</p>	<p>As clients progress through various ESTI sessions, you can gradually introduce more challenging feedback to encourage them to articulate their reasoning explicitly. For instance, question their answers not to deem them incorrect but to prompt a deeper understanding of the connections between different elements. For example, ask why ambition is crucial in explaining a situation involving performance anxiety, fostering a link between a personality trait and an emotion.</p>
	<p>Additionally, accept uncommented answers that may not be fully aligned with the question, avoiding unnecessary challenges in the initial stages. For instance, if the question pertains to situational external factors like the score of a tennis match and the response delves into a psychological state like nervousness, acknowledge the answer without dwelling on the mix-up.</p>	<p>If a client provides an answer not specific to the question, avoid dismissing it outright but gently point out the confusion. For instance, clarify that while the score is relevant to the challenging situation, the question was focused on psychological traits.</p>
	<p>Furthermore, you can offer to write the summary, allowing the client to observe the process and learn how to create summaries themselves. If necessary, gently introduce more scholarly or specific terminology, providing guidance to enhance their understanding of relevant concepts.</p>	<p>Additionally, remind clients of specific terminology discussed in previous sessions, reinforcing their understanding. For example, you could prompt a client by recalling that what we referred to as playing for fun was termed intrinsic motivation in the previous session.</p>
<p>Analysing psychological skills with regards to the challenging situation. Termed Phase 4 and 5 in the manuscript. Squares 10 to 15 on the boardgame.</p>	<p>When the client is completing the ESTI for the first time, consider using a new piece of paper to create a list of psychological skills and coping strategies that are independent of the situation. Direct the client to momentarily set aside the specific situation and compile a list of ways and means they know to self-regulate. If clients struggle to identify skills and strategies on their own, you can provide a pre-determined list from which they can select. Once the client has assembled an initial list (which does not need to be exhaustive), prompt them to rate these skills and strategies based on</p>	<p>In this section, utilize the list of psychological skills and coping strategies developed in previous sessions, and add any new skills and strategies that may arise in the discussion. Direct the client to review the existing list and incorporate any additional skills or strategies that come to mind during the session. Allow clients to modify their ratings for these skills and strategies, emphasizing that the ratings are flexible and contingent on the circumstances in which the skills and strategies are employed. Prompt the client to reflect on their recent experiences with the skills and</p>

	<p>their confidence in using them in the recent past.</p>	<p>strategies and adjust the ratings accordingly.</p>
	<p>Proceeding to Squares 13 and 14, provide examples to illustrate how different strategies and skills might be useful in addressing various aspects of the situational and contextual factors in the situation. If needed, refer to Summary 1 to reinforce key concepts. For example, explain to the client the importance of focusing on the present when time is limited in a job, emphasizing how it helps in moving forward quickly. Offer to write the summary to guide the client in creating summaries and suggest taking a short break during this process.</p>	<p>Initiate a discussion with the client about the rationale behind matching specific skills and strategies with the challenging situation. For instance, ask why they suggested emotion control in a demotivating situation rather than thought control. Encourage the client to provide reasoning for their choices, fostering deeper self-reflection.  As new ideas emerge in the client's rationale, prompt them to add situational and contextual factors as well as situational and contextual processes to Summary 1 as necessary. In Summary 2, motivate the client to take an active role in writing the summary themselves or dictating it to you.</p>
<p>Analysing the use of goal-directed self-talk in the challenging situation. Termed Phase 6 in the manuscript. Squares 16 to 18 on the boardgame.</p>	<p>In the initial session, the client may have a less distinct understanding of what constitutes self-talk. Adopt an inclusive approach, encompassing non-verbal thoughts and mental images if they emerge during discussions about self-talk.  In the latter part of this step, motivate the client to generate as many alternative statements as possible. If the client encounters difficulty finding alternative statements, refer to the Strategies and Skills Summary 2 to assist them. For instance, inquire if there is a statement from the summary that aligns with a skill they selected earlier in the current ESTI session.  Summary 3 provides an opportune moment to ask the client if they would like to take on the task of writing at least one of the summaries during this initial session. This involvement enhances the client's engagement and ownership of the self-reflective process.</p>	<p>In subsequent ESTI sessions, it becomes pertinent to distinguish goal-directed self-talk from other forms of thinking while still valuing any response from the client. For example, clarify to the client that identifying ways to enhance technical performance is more aligned with visualization than self-talk. In contrast, instructing oneself to concentrate on the present exemplifies goal-directed self-talk. This distinction aids the client in refining their understanding of goal-directed self-talk.  As the sessions progress, the emphasis may shift from generating a large set of alternative statements to evaluating the quality of reasoning behind why a particular alternative statement might be more effective than the original ones. For instance, prompt the client to articulate how the new statement is an improvement over the old one, considering the characteristics of the situation.  Encourage the client to take a more active role in writing Summary 3, fostering increased engagement and reinforcing their ownership of the self-reflective process.</p>
<p>Exploring alternative goal-directed self-talk</p>	<p>In this section, frame the exercise as an opportunity to explore the challenging situation and its associated challenges</p>	<p>Before initiating this section, inquire with the client about the extent to which they were already considering imaginary</p>

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approaches for the challenging situation. Termed Phase 7 in the manuscript. Squares 19 to 23 on the boardgame.

from an innovative perspective. Communicate to the client that you will be revisiting the situation and self-talk from a wholly different standpoint while acknowledging the progress made thus far.

When proposing who the "somebody" might be in this section, consider individuals close to the client who have a distinct relationship with them, differing from the client's self-talk. For instance, if the self-talk in Summary 3 is notably instructive, choose someone with a more compassionate approach. Clarify to the client that the things they might say to others may not necessarily be applicable to their own self-talk.

Clients may generate a larger amount of new material in Squares 19 and 20. Select one or two ideas that diverge significantly from the statements in Summary 3, and analyse them in Squares 21 and 22. For instance, suggest analysing the idea of allowing oneself to be happy and make mistakes, as it differs from the other ideas discussed in Summary 3.

Recognizing that clients may feel fatigued at this stage, offer to write the summary for them if they dictate it to you, providing additional support and ensuring a smooth continuation of the session.

Finishing the exercise. Termed Phase 8 in the manuscript. Squares 24 and 25 on the boardgame.

Conclude the ESTI by creating a take-home message. Arrange Summary 3 and 4 side by side and ask the client to compare them. Guide them to assess the original and alternative statements, selecting those they believe will be beneficial for their future.

Subsequently, compose the take-home message using an if-then format. For instance, a card might read: "If I get nervous at a crucial moment, then I could tell myself that the other players are probably nervous too."

Offer the client the option to write the take-home message themselves. Emphasize that the take-home message serves as a reminder of the session's content, not as an instruction for handling challenging situations in the future.

interlocutors when generating alternative statements in the previous section. For instance, ask whether they envisioned talking to someone else in that section because they have engaged in similar exercises before.

Also, discuss with the client whom they would like to choose as an imaginary interlocutor, encouraging the use of different characters compared to previous sessions. You can explore interesting characters that differ from those used in prior sessions.

Given that clients may respond more quickly than in the initial sessions, consider selecting more than one imaginary interlocutor in this section. Alternatively, you can start this section by changing the first question to "What would another person tell you?"

Towards the end of this section, inquire more openly about what the client might learn from the alternative approaches regarding their self-regulation and their understanding of themselves in this situation. Simply ask the client what this new perspective reveals about themselves and the challenging situation.

Once again, motivate the client to write Summary 4 or dictate it to you.

In cases where clients are more experienced with the ESTI, it's likely they already have an idea of which statements they would choose for their take-home message. Encourage these clients to articulate why they would select specific statements, making their thought process explicit. Challenge them if necessary to enhance the depth of their reasoning. For instance, inquire why they prefer a statement like "I can" over one saying "It's okay if I miss."

Empower the client to write the take-home message, allowing them to choose the format they find most comfortable. Some clients might prefer to use their phone rather than pen and paper. Finally, suggest that the client keep the take-home message in a visible place, prompting them to reflect on it periodically until the next session. For

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	<p>Clarify that they should keep the message to recall what was discussed, using the statements on the paper only if they find them suitable for the specific challenge they are facing. Provide the take-home message to the client but remember to take a photo for your records beforehand.</p>	<p>example, recommend sticking the message on their notebook or bedroom door and adding notes until your next meeting. Regardless of the number of ESTI sessions completed, remind clients that using the statements is an option, not an obligation.</p>
<p>Terminating the ESTI session or passing on to another activity in the session.</p>	<p>Before concluding the session, motivate the client to inquire about the ESTI procedures. Ensure they comprehend the ESTI's objectives and the significance of each step. To tailor the ESTI to the client's preferences, invite them to share what aspects they appreciated and if there are any adjustments they would consider for future exercises.</p> <p>Engage in a reflective discussion with the client to explore any emerging aspects, beyond self-talk, that might warrant further exploration. For instance, if the client mentions a negative impact from their coach, inquire if they would like to delve deeper into their coach-client relationship in a subsequent session.</p> <p>Plan the next ESTI session flexibly and encourage the client to note down challenging situations as homework. Emphasize that the ESTI yields optimal results through repeated use and propose revisiting the procedures in an upcoming session.</p>	<p>Following the completion of the ESTI procedures, prompt the client to engage in critical reflection on the exercise and their insights. Encourage them to assess the session's quality, their level of self-reflection, and the take-home message. Make it clear that, akin to many activities in sports, not every attempt yields the same level of execution.</p> <p>Additionally, inquire if there were any aspects beyond self-talk that emerged during the exercise that they would like to delve into further. Acknowledge that they have analysed various elements and suggest that they might choose specific aspects to explore through different approaches in the future.</p> <p>In instances where the client demonstrated a high level of autonomy during the session, propose the idea of assigning the next ESTI exercise as homework. Recommend that they complete the exercise at home and bring the summary and take-home message to the next session for joint discussion.</p>

**Table S2**

*The post intervention interview script.*

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General impressions	How did the intervention sessions go?
	Are there positive aspects that you would like to highlight in the intervention?
	Are there aspects that surprised you during the intervention?
	Are there any negative aspects you would like to highlight about the intervention?
	What do you think should be changed to improve the procedure?
	Did you notice differences between the first and last training session?
	Have you noticed any changes in your sport activity that you think could be related to the intervention? These changes can be both positive and negative.
	Were there any positive effects that you expected that did not materialise?
Specific questions	What was it like repeating the sessions over time?
	What do you think of the board game format?
	What would have changed if it had taken place online/in person?
	If anything, how has your role during the session changed over time?

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