

An Eight-Week Mindful Self-Compassion Intervention Fosters Emotion Regulation and Resilience in Youth Athletes

Tsz Lun (Alan) Chu

t_chu2@uncg.edu

University of North Carolina at Greensboro

Sophia DeMan

University of North Carolina at Greensboro

Brian Ching-Yuan Cheng

University of North Carolina at Greensboro

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Abstract

Self-compassion interventions are increasingly used to support young people's well-being, yet how youth athletes understand and learn relevant concepts and tools remains unexamined. This study investigated youth athletes' perceived mechanisms of change and psychological skills following participation in the 8-week Self-Compassion, Mindfulness, & Athlete Resilience Training (SMART) program. Thirty-three athletes ages 13–18 across five school and club sport groups in the U.S. completed semi-structured one-on-one interviews one to two weeks after program completion. Reflexive thematic analysis, informed by a critical realist perspective, generated four themes: (1) Noticing What Was There Before—a new capacity to recognize and name previously unidentified thoughts and emotions; (2) Turning Inner Critic Into Inner Coach—a shift from self-criticism toward self-kindness and common humanity following mistakes; (3) Managing Emotion and Promoting Resilience to Perform—the use of psychological techniques such as breathwork, meditation, and self-talk to regulate stress and setback; and (4) Carrying It Off the Field—the unprompted transfer of self-compassion concepts and tools into academic and everyday nonsport settings. Findings suggest a sport-specific, structured mindful self-compassion program can be a meaningful entry point for skills that extend beyond the performance context, offering evidence to ongoing efforts to distinguish and integrate disposition mindfulness and interventions for youth mental health.

Introduction

Adolescence is a developmentally sensitive period during which people become increasingly susceptible to anxiety, depression, and other mental health difficulties. Sport participation during this time can play an important role as either a protective or risk factor. More specifically, a review showed that youth sport participation had been linked to both health benefits and adverse psychosocial outcomes such as anxiety and burnout (Vella et al., 2019), with elevated rates of anxiety and depressive symptoms in elite athletes due to the pressure they face (Gouttebarger et al., 2019). The literature reveals the importance of psychological resources and interventions that support youth athletes' coping skills and subsequent mental health when sport pressures are present.

Self-compassion has emerged as one such psychological resource. Neff (2003b) defined self-compassion as a kind, connected, and accepting stance toward oneself composed of three interrelated components: (1) mindfulness rather than over-identification with painful thoughts and feelings, (2) common humanity rather than isolation, and (3) self-kindness rather than harsh self-judgment. Applied to sport, self-compassion offers athletes helpful ways to respond to mistakes, setbacks, and self-criticism (Cormier et al., 2025).

Athletes' Self-Compassion Within Sport

A growing body of qualitative and intervention research has examined how athletes experience and apply self-compassion within competitive sport (Cormier et al., 2025). Athletes have described self-

compassion as helping them reframe self-criticism, respond to negative internal states with greater acceptance, and manage shame or self-blame following poor performances (Adam et al., 2021; Cote et al., 2019; Reis et al., 2024; Wang et al., 2026). Whether athletes are receptive to self-compassion, however, appears to depend on whether they perceive it as compatible with athletic identity and competitive striving rather than as a threat to toughness or performance standards. For instance, women athletes have described initial hesitation toward self-compassion that shifted toward openness once they understood it as supporting, rather than undermining, their competitive goals (Adam et al., 2021). Although researchers have speculated that self-compassion may be difficult to reconcile with masculine norms in sport, men athletes have described self-compassion as compatible with, rather than threatening to, their athletic identity when it is framed as a tool for constructive recovery from setbacks (Reis et al., 2022). Furthermore, preliminary evidence from an online self-compassion intervention with competitive men athletes supports the feasibility of delivering self-compassion content in ways athletes experience as acceptable within competitive sport contexts (Reis et al., 2024). Much of this evidence, however, comes from older adolescent and adult samples spanning roughly ages 16 to 35 across collegiate, competitive, and elite sport contexts (Adam et al., 2021; Eke et al., 2020), leaving how younger adolescent athletes experience and apply self-compassion unexamined.

Athletes' Self-Compassion Beyond Sport

A smaller body of literature has examined whether self-compassion skills extend into athletes' lives outside sport. Among NCAA Division I tennis players completing the Mindfulness Meditation Training for Sport 2.0 program, athletes described calmer responses to academic pressure and reduced everyday stress when asked directly about change outside sport (Cote et al., 2019). Further, semi-elite to elite athletes completing the Mindfulness for Wellbeing program similarly described applying mindfulness- and self-compassion skills to personal stress, self-blame, and emotion regulation beyond training and competition (Wang et al., 2026). Collegiate and retired women athletes participating in the Bodies in Motion program, which applies self-compassion to body-related well-being and life transitions, described greater body appreciation and self-kindness during active participation (Voelker et al., 2020). In a long-term follow-up years after the intervention concluded, they further described using techniques such as mindful exercise and breathing to navigate retirement, identity transition, and injury recovery (Barrett et al., 2022). Similarly, adolescent women athletes reported that body-related self-compassion enhanced emotion regulation and reduced social comparison based on a narrative study (Eke et al., 2020).

Taken together, the self-compassion literature in sport suggests that changes in and benefits of self-compassion are not confined to the sport context in which it is learned, but they translate across contexts. However, the research evidence remains fragmented, leaving gaps and limitations. Self-compassion was often not the primary well-being intervention target, but one component embedded within broader mindfulness or body-image programming, which introduced noise to understanding the role of self-compassion (Barrett et al., 2022; Cote et al., 2019; Reis et al., 2024; Voelker et al., 2020; Wang et al., 2026). Additionally, nonsport outcomes were frequently reported as secondary or incidental findings rather than the central focus of inquiry. For scientific and practical reasons, it is important to

study the direct impacts of self-compassion interventions on athletes, especially during adolescence when mental health vulnerability is often greatest (Sarooha et al., 2026). Additionally, although well-being outcomes of self-compassion are documented, it is crucial to understand which specific self-compassion mechanisms and tools athletes identify as impactful and helpful, and how they describe applying those within and beyond the sport context (Barrett et al., 2022; Cote et al., 2019; Reis et al., 2024; Voelker et al., 2020; Wang et al., 2026).

The Present Study

The present study addresses the aforementioned gaps in the literature by qualitatively examining youth athletes ages 13 to 18 who participated in the Self-Compassion, Mindfulness, and Athlete Resilience Training (SMART) program, a self-compassion intervention developed specifically for sport contexts. More specifically, it aims to answer the following qualitative research question: What psychological mechanisms and mental tools do youth athletes identify as contributing to changes in well-being following participation in a self-compassion intervention, and how are these applied across sport and nonsport contexts? Based on the resulting themes, we aimed to apply relevant theoretical frameworks in mindfulness and self-compassion to explain the findings.

Method

Participants and Design

Participants were 33 youth athletes ages 13–18 in the midwestern and southwestern U.S. Upon IRB approval, we recruited participants through their corresponding school or club affiliation and obtained parent consent and child assent forms before the study. The athletes participated in the 8-week SMART program in person or virtually with their sport teams, schoolmates, or clubmates. Specifically, there were 5 groups in this study: (1) MW was the only in-person intervention, consisting of mixed-gender and mixed-sport athletes in a high school, (2) BBB consisted of boys' basketball athletes in a high school, (3) GBB consisted of girls' basketball athletes in a high school, (4) SCA consisted of mixed-gender athletes in a soccer club, and (5) SCB consisted of girls in a soccer club. One to two weeks after the intervention, they completed an individual interview.

Guided by a critical realism research paradigm that lies between positivism and interpretivism, the importance of both causation and interpretation for generating knowledge are acknowledged in the research process. Instead of simply concluding the impacts of the program on well-being, causality is established by interpreting the mechanisms and conditions under which these impacts occur (Zachariadis et al., 2013). Further, research is seen as an attempt to align data, interpretations, and theories with reality by considering individual and sociocultural contexts (Ryba et al., 2022).

Intervention

Adapting both the Mindful Self-Compassion (MSC; Neff & Germer, 2013) and Mindful Self-Compassion for Teens (MSC-T; Bluth & Eisenlohr-Moul, 2017) programs, the first author developed the SMART program based on his expertise as a Certified Mental Performance Consultant and experience working with youth athletes. To accommodate athletes' schedules, the SMART sessions are shorter (45 minutes) than the MSC (270 minutes) and MSC-T (90 minutes) sessions. The shorter duration involves a reduction of didactic components and shortened meditations that work better for youth (Bluth et al., 2016). Additionally, the SMART program targets the sport context by using examples from well-known athletes and specific mental skills (e.g., imagery/visualization, motivational vs. instructional self-talk) in addition to self-compassion. Table 1 shows a breakdown of the session content and activities.

Table 1
Content and Practices in the 8-Session Self-Compassion, Mindfulness, and Athlete Resilience Training (SMART) Program

Session Topic	Content and Activities	Home Practice
1. Discovering Mindful Self-Compassion	• Conduct self-introduction • Learn the definition and misconceptions of self-session • Reflect on a negative event in sport that was demanding or challenging to show mindfulness, common humanity, and self-kindness	Formal Practice: Complete the self-compassion thought log and journaling for sport and life Informal Practice: Use self-affirmation statements
2. Paying Attention on Purpose	• Understand the goals of mindfulness • Learn diaphragmatic breathing and practice mindful breathing • Establish a 3As (Aware, Accept, Action) routine	Formal Practice: Practice 3–5 minutes of mindfulness breathing every day Informal Practice: Focus on sensory experience during a daily activity (e.g., mindful eating, mindful seeing, and mindful breathing)
3. Practicing Acceptance and Kindness	• Introduce and explore loving-kindness phrases along with meditation • Explore kindness gestures (e.g., a hand on the heart) • Practice affectionate breathing	Formal Practice: Practice 3–5 minutes of mindfulness or kindness meditation every day Informal Practice: Use loving-kindness phrases or gestures in sport and life
4. Recognizing Inner Critic and Inner Coach	• Practice quieting the inner critic with inner coach voices, alongside yin and yang self-compassion meditation • Learn and reflect on helpful and unhelpful self-talk • Apply a 3Rs (Recognize, Recognize, Refocus) routine with the WIN (What's Important now) mentality	Formal Practice: Practice 3–5 minutes of yin or yang self-compassion exercise every day Informal Practice: Use self-encouragement phrases in daily life and the 3R's routine in sport.
5. Finding Common Humanity and Core Values	• Reflect on progress in the “muddy middle” of the program • Engage in “A Person Just Like Me” common humanity meditation with visualization • Explore core values and create a Sport GPS (value-based actions for pursuing goals) with a vow	Formal Practice: Reflect on core values and the use of the Sport GPS every day Informal Practice: Use the vow at least once before or during every sport practice
6. Working with Difficult Emotions	• Discuss the “Guest House” poem by Rumi	Formal Practice: Practice 3–5 minutes of Soften, Soothe, Allow every day

Session Topic	Content and Activities	Home Practice
	• Learn to label (“name it to tame it”) and locate (“feel it to heal it”) emotions • Apply Soften, Soothe, Allow (SSA) with a meditation	Informal Practice: Use individualized emotion management strategies (e.g., labeling, locating) when difficult emotions arise
7. Exploring and Imagining Resilience	• Learn the definition of resilience along with the challenge (vs. threat) appraisal • Write a challenging performance script for resilience imagery practice • Understand and apply “Controlling the Controllable” using the Circles of Control, Influence, and Concern	Formal Practice: Practice 3–5 minutes of the resilience imagery routine every day Informal Practice: Implement the Circle of Control in handling difficult situations and emotions
8. Embracing Challenges with Joy and Gratitude	• Understand the pervasiveness of negativity bias • Learn savoring, gratitude, and self-appreciation techniques • Share gratitude and pictures that bring joy • Write a self-appreciation letter to remind oneself of strengths and positive qualities	Formal Practice: Spend 3–5 minutes counting blessings or expressing gratitude each day Informal Practice: Use self-appreciation when facing setbacks and (self)criticism

Interviews and Data Analysis

Upon completion of the intervention, each athlete engaged in a semi-structured interview, conducted by the first author or a research assistant. Each interview began with questions about sport and personal background to build rapport and comfort and encourage honest and elaborate responses to the main interview questions. Beyond athletes’ perceived impacts of the SMART program and self-compassion on their well-being—the focus of this study—interview questions included other topics such as individual and social factors that influenced having and learning self-compassion. After each main interview question and response, interviewers asked probing questions to offer an opportunity for the athletes to provide additional insights.

To answer the research question, we transcribed the transcripts verbatim and conducted the 6-step reflexive thematic analysis (Braun & Clarke, 2019): (1) read and reread the transcripts to familiarize ourselves with the data; (2) generated initial codes using primarily semantic coding (i.e., explicit meanings) and secondarily latent coding (i.e., underlying contexts); (3) searched for themes and created an initial codebook to encapsulate codes based on the patterns and literature relevant to self-compassion and well-being; (4) reviewed themes throughout the process during which three researchers met after each transcript coding to review whether the themes fit the data, reflected the codes, and

addressed the research questions; (5) defined and named the themes after reviewing and refining them throughout the coding process; and (6) wrote and interpret the results by contextualizing the themes and responses. Two researchers involved in the study but not the analysis process served as critical friends, who provided additional perspectives on the data and themes, to enhance the rigor of the analyses and results through exploring multiple interpretations (Smith & McGannon, 2018).

Trustworthiness and Rigor

Trustworthiness was drawn on Tracy's (2010) criteria for qualitative research and Smith and McGannon's (2018) sport and exercise psychology context. Consistent with a critical realist approach, trustworthiness was established through interpretive markers including rich rigor, sincerity, credibility, and meaningful coherence instead of through post-positivist, descriptive markers such as inter-rater reliability and member checking (Braun & Clarke, 2019; Smith & McGannon, 2018). Rich rigor was supported by a sample of diverse athletes drawn from five distinct group contexts that varied by sport, gender composition, and delivery modality (in-person and virtual), verbatim transcription of all interviews, and a structured six-step analytic process. Sincerity was addressed through ongoing reflexive attention to the first author's dual role as SMART program developer and analyst along with other analysts; this positioning offered contextual and programmatic knowledge that informed the interview process and analysis, while also requiring deliberate attention to avoid over-interpreting athletes' accounts in ways that favored the program. Credibility was supported through consulting, comparing, and contrasting, the literature in the process of reviewing and refining themes and subthemes. Meaningful coherence was established through multivocality: three researchers met and discussed emerging themes after each transcript was coded, and two additional researchers not involved in coding served as critical friends to offer alternative interpretations and challenge emerging analytic decisions throughout the process (Smith & McGannon, 2018; Tracy, 2010). These practices do not eliminate the influence of the analysts' perspectives on the resulting themes. Rather, they are intended to make that influence visible, examined, and productive, consistent with reflexive thematic analysis (Braun & Clarke, 2019).

Results

Reflexive thematic analysis yielded four themes describing athletes' experiences of the SMART program and its effects on their well-being. These themes are presented in a sequence that moves from athletes' shifting relationship with their internal experience to the concrete tools that supported that shift, to broader promotion of emotion regulation and resilience, and finally to the extension of program application beyond sport.

Theme 1: Noticing What Was There Before

Athletes described the SMART program as shifting the relationship with their internal experience not by changing the thoughts and emotions they felt, but by noticing and naming what they thought and felt.

GBB 02 described this as a shift away from avoidance: "I kind of just pushed thoughts aside and didn't really think about it, but the program helped me realize that I should acknowledge those emotions." MW 06 (baseball) and MW 07 (softball) echoed this increased awareness of thoughts and emotions in simpler terms, reporting feeling "more aware of my mental state" and "a lot more in tune with my emotions," respectively.

Some athletes' enhanced mindfulness extended beyond general awareness to specific labeling of intentions, plans, and actions. GBB 07 described this precisely: "After the program, I'm just more aware of it [mindfulness and self-compassion] and I can put a name or a title to what I'm doing... that's probably the biggest thing. I can identify what I'm doing instead of just doing." This distinction in doing something unreflectively versus recognizing and naming it was a consistently described shift after participating in the SMART program.

Theme 2: Turning Inner Critic into Inner Coach

Building on Theme 1, Theme 2 extended to exercises and tools that turned previously unintentional patterns of self-criticism (i.e., Inner Critic) into intentional patterns of self-compassion (i.e., Inner Coach). SCB 03 described their application in sport performance:

I think I've become more aware of, like fixing, and like rewording, and like changing what my focus is on, like on the negative thoughts. Like if I'm struggling through some workout at the gym, like not hitting the squat that I want to, just becoming aware and not being like "I can't do this." Instead, just like being able to reword it to "I'm not able to do this today, but I will take my time to recover and be able to do it tomorrow. Like that, it's not all neat.

SCA 06 traced this skill to a specific program exercise comparing how one responds to a friend's mistake versus one's own:

Before the program, I was definitely much harsher on myself. Something in the program that was... a revelation, I guess, was when we did the comparison of how you would react to your friend making a mistake versus how you would react to yourself making a mistake... I'm so much harsher on myself than I would be to someone else... I feel like applying that to myself is really beneficial.

This sense of shared experience and common humanity, as part of the inner coach, resonated with many athletes. Taking this one step further, some athletes shared their ability to adopt their inner coach stance not only with themselves but with others as well. GBB 04 stated:

I've become more aware of how I'm treating myself... I feel like I have been treating myself with more self-compassion, but I also feel like I've been treating others with more compassion too. I've been able to realize my mistakes more and then realize that other people are also making mistakes and it's fine, so yeah.

Theme 3: Managing Emotion and Promoting Resilience to Perform

Athletes described an increased ability to manage stress and difficult emotions they faced in sport. GBB 01 shared:

Basketball season's definitely the hardest for me because I'm not very good at basketball. Whenever I make a mistake, I always dwell on it like forever. Like even after the game, I'm still thinking about it. I can definitely see an improvement because we had a few games where I've gotten in and I wasn't doing the best, but then at practice the next day I'd be completely fine. That would never happen before 'cause I would still be down.

Athletes were able to label specific tools from the SMART program that support such positive outcomes. Three tools were named consistently: breathwork, meditation, and self-talk.

Breathwork was the most frequently cited tool, described as both a general calming strategy and a response to specific stressors. MW 02 (soccer) connected this tool to self-forgiveness and inner coach relevant to Theme 2, "I forgive myself a lot easier than before... I used to feel anxious before no matter what, but once I do those breathing exercises, it's not as bad as it used to be, which is a big difference."

Meditation was described as a tool for stepping back and regaining perspective under physical or mental strain. MW 05 (football) described pairing meditation with breathing to reframe a difficult day:

After all the breathing [meditation], I kind of felt like I'm not sore anymore. It helped in a way... all the meditation helps you calm down and kind of realize it's not that bad, it's just one grade that's not as good as the others. Or that if you're having a bad day, it doesn't mean you have a bad life. It helps. It's kind of like a reset button to reset your mind and the way you're looking at things.

Self-talk appeared consistently as a brief, encouraging phrase deployed at a specific moment of stress, such as "I can do this" (GBB 02) and "you got it" (MW 06) before or during competition. GBB 04, recovering from a sport injury, described pairing breathwork with self-talk to manage fear about returning to play in the near future:

I definitely think I'll be able to calm myself down... I'll be able to take those deep breaths and remember that it's not my fault when bad things happen, or especially with my injury, that it's not my fault this happened... to not be scared or afraid but to remember 'I'm okay', 'I got this', and 'I'm going to do what I am good at'.

Although breathwork, meditation, and self-talk are the most commonly used tools, most athletes reported the variety of tools helped support their emotional consistency:

I think going to the program kind of like gave me more ways to implement self-compassion, and really like cemented that be consistent. It's not just, "You know, oh, you're having a great game, and you have one bad moment, and then you need to be self-compassionate." In your life, you need to be that, you know, every single play and every single time. It's not just like when you're at the top and when you're at the best, it's like you need to be consistent with it.

Theme 4: Carrying It Off the Field

Although the SMART program was framed within the sport context, athletes enjoyed having discussions and applications relevant to other parts of their lives, contributing to increased coping skills, resilience in school and life, and overall well-being. Athletes described using breathing, self-talk, and present-moment focus frequently, such as for academic test preparation, in-test coping, and post-test regulation. SCA 05 described breath as a direct tool during testing: "I'll take a test and if I'm stuck on something, I'll get stressed out... The test is going to be harder whenever I'm stressed out, so whenever I can just breathe, it'll be easier." MW 04 (football) described a similar shift toward present-moment focus in class: "I try to apply it [mindfulness] in school and when I'm in class or in tests... Try to live in the moment more than thinking about other things." MW 07 (softball) named breathing as her favorite tool for its everyday applicability, "That's probably my favorite thing out of the whole program because it is something that I apply to everyday life... now that I've learned breathing through your stomach instead of just your chest, it just helps so much."

Other settings in which athletes applied coping skills include managing general mental health, social comparison, and setbacks. For instance, SCB 04 described applying self-compassion while using social media:

If I see that, then I'll think about it and I'll tell myself, 'you don't need to be worried about that because I'm sure it's not picture perfect.' Then I'll think about a good thing that I'm doing or something that I'm working on to do better... instead of seeing what other people are doing.

BBB 03 was another example, who applied mindfulness as a nightly reflection routine to improve herself:

After the program, like at bedtime, when I just have a bad day, or when I have a bad crisis, I was just like, sit down and do my mindful routine, like "what I didn't do right," and "alright." But like before the program. I was just like don't really care but that was bad.

In addition to the perceived benefits athletes experienced, they suggested that the SMART program should be implemented more widely for greater benefits to their peers and social environment. SCA 07 reflected, "I think this is an eye-opening thing and more people, I think, would benefit from something like this." GBB 06 shared, "I think it would be really cool to do it with a bunch more school teams, so that we could all relate."

Discussion

Consistent with the study's guiding questions, the four resulting qualitative themes from participating in the SMART program primarily address youth athletes' perceived effects, mechanisms of self-compassion on their well-being, and the specific tools they implemented, followed by the extension and evaluation of those effects. Results suggest that the SMART program functioned less by introducing athletes to entirely new experiences and more by giving them a structured, repeatable practice with tangible tools for recognizing, reframing, and regulating experiences they were already having. This pattern speaks directly to a distinction of growing interest in the mindfulness literature: the difference between dispositional mindfulness, a relatively stable individual difference in the tendency to attend to present-moment experience, and mindfulness cultivated through structured, time-limited training (Bishop et al., 2004; Kiken et al., 2015). Athletes did not describe themselves as having stable, trait-like awareness and self-compassion prior to the program. Rather, they described acquiring a specific, teachable skill with mindfulness, common humanity, and self-kindness over the course of SMART's eight structured sessions, generalizing across sport and nonsport settings in a manner consistent with early dispositional change. Consistent with the critical realist aim of interpreting not only what changed for athletes, but how and under what conditions, we consider each theme in relation to this distinction and the mechanisms that may underlie it.

Mindfulness and Self-Compassion as a Trained Skill

Theme 1: Noticing What Was There Before aligns closely with Bishop et al.'s (2004) two-component operational definition of mindfulness, in which self-regulation of attention allows previously unnoticed mental events to be detected in the present moment. Athletes' descriptions of being able to "put a name or a title" to an experience were a clear instantiation of this attentional component as newly learned, rather than as an ability they had always possessed. This result is consistent with theoretical accounts proposing that structured training can induce repeated states of mindfulness (and self-compassion) that, over time, contribute to more durable trait-level change (Kiken et al., 2015). Sport-based mindfulness literature also supports this interpretation, as prior Mindful Sport Performance Enhancement and Mindfulness Meditation Training for Sport research has found increases in trait mindfulness following intervention participation (Cote et al., 2019; Minkler et al., 2025). The eight-week structure of SMART, with its repeated group discussions and shortened meditations, may have functioned as exactly this kind of repeated-state exposure. Theme 1 documents the earliest and most direct evidence of that process, before the more generalized applications described in Theme 4.

From Self-Criticism to Self-Compassion

Theme 2: Turning Inner Critic into Inner Coach, extending beyond mindfulness from Theme 1, maps onto two other key components of self-compassion: self-kindness, in place of harsh self-judgment, and common humanity, in place of isolation (Neff, 2003a, 2003b). This enhanced self-kindness is consistent with sport-based self-compassion interventions with adult women athletes, which similarly reduced self-criticism, rumination, and concern over mistakes following a brief structured intervention (Mosewich et al., 2013). Gilbert's (2009) compassion-focused framework offers a possible explanatory mechanism for

the shift athletes described: self-criticism is theorized to reflect an overactive threat-based affect regulation system, while self-compassion practice is theorized to strengthen an underused soothing and self-reassurance system. Framed this way, athletes' own language of turning an "inner critic" into an "inner coach" describes, in lay terms, a shift in which the emotion regulation system dominates their response to mistakes, offering a mechanism consistent with the faster emotional and performance recovery that GBB 01 described.

In sport, self-kindness and "inner coach" seem to take the form of action beyond acceptance. Athletes' descriptions of shifts from self-criticism to self-compassion primarily involve action-oriented responses to setbacks. Similarly, high-performance athletes described this shift through balanced self-awareness and strategies that helped them calm themselves and move forward in more solution-oriented ways (Frentz et al., 2020). This pattern corroborated other studies in which athletes described self-compassion as helping them manage self-criticism, reframe criticism, reduce self-blame, and continue working toward improvement (Adam et al., 2021; Wang et al., 2026). These collective findings suggest that "inner coach" language may reflect a shift from threat-based self-criticism toward a more self-reassuring and corrective response to mistakes. This interpretation suggests that the SMART program operationalized self-kindness in a way that athletes could concretely apply to sport-specific mistakes.

Notably, athletes' account of extending self-compassion to other-compassion comparison closely mirrors Neff's (2003b) initial conceptualization and illustration of self-compassion in the presence of common humanity, "Self-compassion entails seeing one's own experience in light of the common human experience, acknowledging that suffering, failure, and inadequacies are part of the human condition, and that all people—oneself included—are worthy of compassion... Compassion is not extended to oneself because one is superior or more deserving than others, rather, it is done precisely because the individual recognizes his or her interconnectedness and equality with others" (p. 87). In team sports, this mechanism may be even more critical as team culture and cohesion are often viewed as an essential component of success.

Emotion Regulation and Resilience Through Practiced Tools

Theme 3: Managing Emotion and Promoting Resilience to Perform provides direct evidence for a mechanism proposed but not yet firmly established in the broader self-compassion literature—emotion regulation is a pathway through which self-compassion practice influences mental health and well-being outcomes (Inwood & Ferrari, 2018). Athletes' accounts of breathwork reducing anxiety and easing self-forgiveness illustrate this pathway, linking the self-compassion shift described in Theme 2 to a concrete regulatory tool. The self-talk athletes described, such as "you got it," is consistent with its motivational function described in self-talk literature in sport (Hardy, 2006). Thus, self-compassion could be executed through various traditional psychological techniques to enhance effectiveness, providing support for implementing sport-specific self-compassion interventions such as the SMART program.

Athletes' descriptions of recovering more quickly from setbacks and managing fear around injury also align with definitions of psychological resilience in sport as the mental processes and behaviors that protect athletes from the negative effects of stressors (Fletcher & Sarkar, 2012). This resilience-building function is not unique to athletes. Self-compassion has similarly been found to prospectively relate to resilience and a greater willingness to embrace new challenges among general adolescent samples (Bluth et al., 2018).

Across qualitative literature, self-compassion appears to support resilience by helping athletes respond to stressors, setbacks, injury, and self-criticism with more adaptive action rather than prolonged rumination or harsh self-evaluation. This pattern also complicates traditional notions of mental toughness, as self-compassion may support persistence and recovery without requiring athletes to rely only on suppression, harshness, or playing through distress (Frentz et al., 2020; Reis et al., 2022). These mechanisms might be the most effective means that protect athletes against burnout and mental health symptoms.

Transfer Beyond Sport: From State to Trait

Theme 4: Carrying It Off the Field is arguably the study's most direct qualitative evidence relevant to clarifying the unique and interactive roles of dispositional mindfulness and structured mindfulness-based interventions. The sport psychology literature emphasizes that transfer from a structured program in sport to other life domains is not automatic; instead, it depends on intentional skill development and practices in ways that support generalization beyond the original context (Gould & Carson, 2008). Athletes in this study described applying SMART tools unprompted in testing situations, life challenges, and social media use, suggesting that self-compassion concepts and practices resonate with athletes as people, even though the program itself was framed within a sport context. As noted in Kiken et al.'s (2015) state-to-trait model, transfer beyond a training context is often treated in the broader mindfulness literature as an early sign of a structured skill beginning to function more like a stable, dispositional tendency. Although the present findings cannot confirm dispositional change in a psychometric sense, athletes' self-initiated use of program tools across nonsport contexts offers evidence consistent with this process of developing mental health awareness, literacy, and associated coping skills. Therefore, sport-specific self-compassion interventions such as the SMART program can provide mental health benefits in life beyond sport.

This pattern of transfer converges with findings from other sport-based mindfulness and self-compassion programs. NCAA Division I tennis players and semi-elite to elite athletes completing different mindfulness- and self-compassion-based programs have similarly described applying program skills to academic pressure, personal stress, and emotion regulation outside their sport context when asked directly about change beyond sport (Cote et al., 2019; Wang et al., 2026), suggesting the transfer pattern observed may reflect a more general feature of how self-compassion and mindfulness skills generalize through practices within a structured program. In the SMART program, this generalization was achieved through home practices and discussion reflections that require active participation as well as repeated exposure and implementation.

Practical Implications

Delivering self-compassion content through sport-specific framing and language, as SMART does, may lower resistance among youth athletes who otherwise associate self-compassion with self-indulgence or reduced competitiveness, consistent with the athlete-centered framing used in prior sport-based self-compassion interventions (Mosewich et al., 2013). The consistent transfer of tools into academic and everyday settings supports the feasibility of embedding brief, structured mindfulness and self-compassion training within school-adjacent and extracurricular contexts, supporting real-world applications of mindfulness-related interventions across school and community settings.

The present findings also help address a developmental gap in the broader self-compassion in sport literature, much of which has focused on athletes of college age and older (Adam et al., 2021; Eke et al., 2020). The present sample of athletes ages 13 to 18 suggests self-compassion-related mechanisms and tools are accessible and applicable to younger adolescent athletes as well. Additionally, because the present sample included boys' basketball athletes alongside girls' and mixed-gender groups, the recovery-from-mistakes pattern found adds youth-specific evidence to prior findings that self-compassion can be framed as compatible with, rather than threatening to, male athletes' competitive and masculine identity when positioned as a tool for constructive recovery rather than reduced toughness (Reis et al., 2022, 2024).

Limitations and Future Directions

Several limitations warrant consideration. First, interviews were conducted one to two weeks post-intervention and relied entirely on self-report. Thus, the state-to-trait process proposed remains an interpretation of qualitative data rather than a confirmed finding. Second, the sample was drawn from five specific groups in the midwestern and southwestern U.S., which may limit generalizability across regions, cultures, and sport types, and athletes who volunteered for interviews may have been more favorably disposed toward the program than their nonparticipating counterparts. Third, although two critical friends provided independent perspectives on the coding and themes to support rigor (Smith & McGannon, 2018), the first author's dual role as SMART program developer and researcher warrants ongoing reflexive attention, consistent with the researcher-as-instrument stance central to reflexive thematic analysis (Braun & Clarke, 2019). Future research would benefit from pairing qualitative interviews of this kind with validated trait mindfulness and self-compassion measures collected across multiple timepoints, extending follow-up beyond two weeks to assess durability of transfer, and recruiting larger and more demographically diverse samples to examine gender and sport variability noted only briefly in this study.

As in much of the broader self-compassion in sport literature, SMART combines self-compassion content with psychological skills training (e.g., imagery, self-talk), which limits the degree to which the present findings can isolate self-compassion specifically, as opposed to the broader intervention package being the source of the well-being and nonsport benefits athletes described (Barrett et al., 2022; Cote et al., 2019; Reis et al., 2024; Voelker et al., 2020; Wang et al., 2026). Future work distinguishing the

unique contribution of self-compassion content from other SMART components would help clarify this. Additionally, long-term qualitative follow-up in other sport-based programs has found that athletes continue applying program skills years later, particularly across major life transitions (Barrett et al., 2022); similar longer-term follow-up with SMART participants would help establish whether the transfer patterns in this study persist beyond the immediate post-intervention period.

Conclusion

This study examined the psychological mechanisms and tools that youth athletes identified as contributing to changes in well-being following participation in the SMART program, and how these were applied across sport and nonsport contexts. Athletes described a progression from noticing previously unrecognized thoughts and emotions, to relating to themselves with greater self-compassion, to actively regulating emotion and building resilience using breathwork, meditation, and self-talk, to generalizing these tools well beyond the sport context in which they were taught. Coupled with the broader mindfulness and self-compassion literature, structured sport-specific self-compassion interventions can serve as a starting point for generalization consistent with early dispositional change, offering a youth sport-based contribution to shaping well-being across the lifespan.

Declarations

Funding

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Ethics approval and consent to participate

This study was performed in line with the principles of the Declaration of Helsinki. Ethics approval was granted by the University of North Carolina at Greensboro's Institutional Review Board. Child assent was obtained from all participants in the study, and informed consent was obtained from their parents.

Clinical trial number

Not applicable.

Consent to publish

Not applicable.

Competing interests

The authors declare no competing interests.

Author Contribution

AC conceptualized the research, obtained ethics approval, recruited participants, implemented the intervention, collected and analyzed the data, and wrote the report. SD analyzed the data, wrote part of the results, and proofread/edited the report. BC analyzed the data and edited/proofread the report.

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Data Availability

The data generated during the current study are not available due to the in-depth sensitive nature of the interview. The data analyzed are available from the corresponding author on reasonable request.

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Footnotes

1. There were more than 33 athletes in the interventions because not every athlete participated in the interview.