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Introduction

The Safe Combat project aims to promote safer sport environments for athletes from different combat sports and martial arts (CS&MA) disciplines, contributing to their human development and welfare. As voiced by one participant during the focus groups, "it's about discipline with empathy". This statement captures the essence of what this project seeks to promote in CS&MA: environments where performance and discipline coexist with respect and care.

Based on the project's goal of developing a comprehensive safeguarding code and an accessible massive online open course (MOOC), this Research Report synthesizes the knowledge generated through three complementary research activities, namely 1) literature review, 2) desk research, and 3) focus groups. Together, these components map the current safeguarding landscape within CS&MA across Europe, identify needs and gaps, and highlight opportunities to strengthen athlete welfare. In what follows, the three reports of the different research activities are presented, after which a general conclusion is provided.

Firstly, the Literature Review Report presents the scientific knowledge on safeguarding within CS&MA. As CS&MA present unique characteristics (such as weight categorization, close physical contact that may involve hits to the head, and hierarchical structures), several safeguarding concerns are relevant to these sports disciplines. While interpersonal violence tends to be the focus of many discussions about safeguarding, CS&MA demands a more holistic perspective, encompassing other safeguarding issues. Based on that, the findings were divided into five major areas: I. Interpersonal violence, bullying and discrimination; II. Weight-cutting, eating disorders and supplement use; III. Injuries and skin infections; IV. Brain injuries and concussions, and; V. Coaches' role and practitioners' well-being. The Report ends with a set of preliminary recommendations calling for stronger and more holistic safeguarding practices across CS&MA. These include implementing mandatory safeguarding education, adopting age- and gender-appropriate policies, reinforcing medical, nutritional, and psychological support systems within clubs, and ensuring systematic documentation of athletes' injury histories.

Secondly, the Desk Research Report, based on a cross-national stakeholder questionnaire, maps existing safeguarding structures and practices within CS&MA clubs. The total sample consisted of 328 participants, including 154 safeguarding officers and/or board members, and 174 other club members, such as athletes, coaches, parents, and referees. Results showed high variability in the presence, visibility, and implementation of safeguarding policies across clubs and countries. Although many clubs reported having safeguarding officers or policies, gaps remained in reporting systems, training access, awareness, and resource availability. The findings highlight both the growing recognition of safeguarding and the practical challenges that clubs face in operationalizing it.

Thirdly and finally, the Focus Groups Report presents stakeholders' lived experiences, perceptions, and expectations regarding safeguarding in CS&MA. Participants representing four different countries (Ireland, North Macedonia, Portugal, Serbia) emphasized key dimensions of safety, including clear rules, respectful training environments, appropriate coaching behavior, accessible reporting mechanisms, psychological safety, and transparent communication. Across countries, stakeholders noted significant differences in national safeguarding frameworks but expressed a shared need for consistent standards, better education, and stronger support structures.

Together, these three reports provide a comprehensive and interconnected understanding of safeguarding in CS&MA. They highlight recurring themes — such as gaps in understanding and reporting safeguarding concerns, the central role of coaches, and cultural norms that may normalize harmful behaviors — which underscores the importance of the Safe Combat project goals: developing a unified safeguarding code and implementing a MOOC tailored to CS&MA contexts.

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Literature Review Report

Background

This literature review has the purpose of mapping the state of the art regarding safeguarding in combat sports and martial arts (CS&MA). This work is part of the broader objectives of the SAFE-COMBAT project, which seeks to promote safer sporting environments for athletes in these disciplines. To achieve this, the review aims to synthesize existing scientific knowledge, conceptual frameworks, and evidence-based practices related to safeguarding in CS&MA. By identifying existing gaps and key risk areas, it provides a robust knowledge base to inform the development of a safeguarding code.

Combat sports and martial arts (CS&MA) offer positive developmental benefits, including positive impacts on general health (Bu et al., 2010; Vertonghen & Theeboom, 2010). However, they also present elevated safeguarding concerns due to sport-specific dynamics. As noted by Avelar Rosa & Nery (2021), these sports involve high tolerance for physical aggression, close contact, and hierarchical structures. Moreover, the often-blurred boundary between accepted physicality and potential abuse, particularly in high-intensity practices where knockouts (KOs) are integrated into the competitive structure, further emphasizes the need for clearly defined safeguarding protocols.

Safeguarding in sport has increasingly gained attention as a critical component of athlete protection and well-being. According to International Olympic Committee (IOC), safeguarding encompasses "all proactive measures to both prevent and appropriately respond to concerns related to harassment and abuse in sport as well as the promotion of holistic approaches to athlete welfare" (Tuakli-Wosornu et al., 2024, p. 2). It is best understood as an umbrella term that integrates prevention, protection, education, and cultural change to ensure that athletes can train and compete in safe environments. Such an environment should be "a physically and psychologically safe and supportive athletic environment where participants can thrive and experience the full benefits of sports participation" (Tuakli-Wosornu et al., 2024, p. 2). This holistic understanding of safeguarding guides the present review.

Interpersonal violence (IV) remains a core safeguarding concern. It is defined as "the intentional use of physical force or power against other persons by an individual or small group of individuals. It can occur online, be perpetrated by different actors and take different forms" (Tuakli-Wosornu et al., 2024, p. 5). This broad definition encompasses physical, psychological, sexual, and neglect-related harms, which can emerge in training, competition, or digital environments. Recognizing and addressing IV is essential not only to protect athletes from harm but also to support their holistic development in the sport.

While IV is central to safeguarding, it is not the only issue of concern. In the specific context of CS&MA, a broad range of harmful experiences and health-related risks must be integrated into safeguarding efforts. The unique characteristics of these disciplines — such as their emphasis on physical contact, weight categorization, and cultural norms surrounding toughness — underscore the importance of considering additional risk factors and harmful practices within safeguarding frameworks. To address these broader concerns, this literature review identifies several key areas that shape CS&MA athlete's safety and well-being, providing a structured framework for understanding safeguarding challenges in these environments.

The findings are presented through five themes:

1. Interpersonal violence, bullying, and discrimination: This theme examines the prevalence and dynamics of different forms of violence, bullying and discrimination in martial arts and combat sports, including power dynamics, cultural factors, and their impact on athletes. Bullying is highlighted separately here because, although it is a type of interpersonal violence, its features (such as its repetitiveness and its frequent occurrence among younger peers) give it a distinct character that deserves focused attention. Similarly, discrimination is also a form of IV, but discussed separately to reflect how unequal or unfair treatment based on characteristics such as gender or race can systematically limit athletes' opportunities, recognition, or participation within CS&MA environments.
2. Weight-cutting, eating disorders and supplement use: Combat sports are closely tied to weight categories, and this theme explores the health risks of rapid weight loss (RWL), supplement use, and disordered eating behaviors, highlighting their safeguarding relevance.
3. Injuries and skin infections: Focuses on the prevalence, types, and management of injuries, emphasizing how injury prevention and management intersect with safeguarding responsibilities. It also discusses skin infections, which are health risks associated with close contact that can have significant implications for athlete health and participation.
4. Brain injuries and concussions: Repeated head impact is a critical safeguarding issue in CS&MA disciplines. This theme reviews the risks, knowledge gaps, and attitudes toward concussion management, particularly among youth. While brain injuries are technically a subset of injuries, they are treated separately in this review because the literature identified on concussions and head trauma is both extensive and highly specialized. By separating this theme from general injuries, we can examine concussion-related concerns with the level of detail and nuance that reflects the volume and specificity of the literature.
5. Coaches' roles and practitioners' well-being: Coaches' leadership styles and role boundaries influence practitioners' well-being, while practitioners' own experiences are shaped by training demands, interpersonal dynamics, and their broader psychosocial context. Understanding both perspectives is essential. The term "practitioners" is used instead of "athletes" to acknowledge that CS&MA participants include not only competitive athletes but also recreational practitioners whose experiences and safeguarding needs are equally relevant.

Taken together, these themes reflect a comprehensive understanding of safeguarding as an umbrella concept, extending beyond IV alone. By examining multiple sources of harm and risk, this literature review aims to support the development of evidence-informed strategies that strengthen protective measures, promote athlete welfare, and foster safer training environments in martial arts and combat sports.

Methods

This literature review focused on published articles in peer-reviewed journals, academic books, and official reports. The scope was limited to three main areas within combat sports and martial arts (CS&MA): (a) conceptual issues, (b) the nature and prevalence

of the different types of interpersonal violence and other safeguarding concerns in CS&MA, (c) evidence-based programs/policies to prevent and address interpersonal violence and other safeguarding concerns within CS&MA.

To achieve these aims, a scoping review was conducted in three major electronic databases (i.e., Web of Science, Scopus and PubMed) between March and April of 2025. These databases were selected to cover a broad range of disciplines. The search strategy was developed in consultation with the project partners and can be found below:

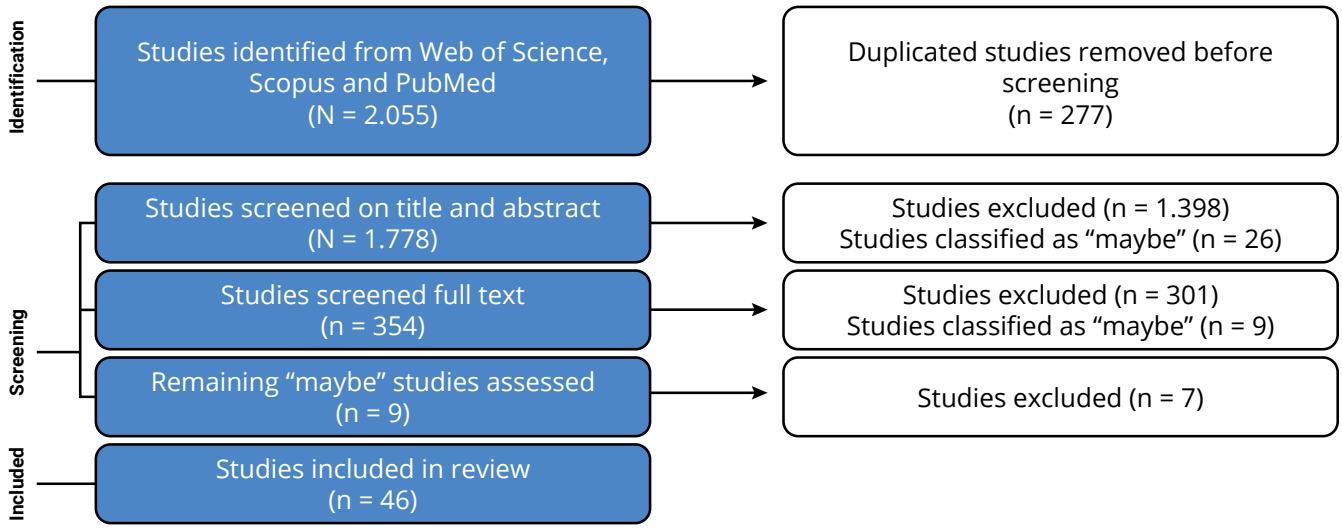
Table 1. Search string

Concept	Keywords/Search terms	Boolean logic
Sport type	"combat sports" OR "martial arts" OR "fencing" OR "judo" OR "kendo" OR "kickboxing" OR "muaythai" OR "sambo" OR "sumo" OR "taekwondo" OR "wrestling" OR "wushu" NOT "sumolyation"	AND
Type of harm/Issue	"abuse" OR "violence" OR "harassment" OR "neglect" OR "bullying" OR "maltreatment" OR "assault" OR "aggression" OR "racism" OR "discrimination" OR "health"	AND
Safeguarding/Conceptual focus	("safeguard*" OR "protection" OR "welfare" OR "sports ethics" OR "safe sport" OR "well-being" OR "duty of care") OR ("conceptual framework" OR "theoretical" OR "definitions" OR "terminology") OR ("policy" OR "regulation" OR "governance" OR "guidelines" OR "legislation") OR ("prevention" OR "intervention*" OR "evidence-based programs" OR "education" OR "campaigns" OR "prevalence strategy")	—

The search was then refined using the following inclusion criteria: only including peer-reviewed journal articles, published or accepted for publication after 2010 and written in the English language. Articles that didn't follow these criteria were excluded from this review.

A total of 2.055 articles were identified and imported to the Rayyan Software for screening. After removing 277 duplicates, 1778 records remained for title and abstract screening. Of these, 1.398 were excluded and 26 were classified as "maybe", leaving 354 records for full-text screening. Following full-text review, 301 articles were excluded and 9 were classified as "maybe". These remaining 9 "maybe" articles were further assessed, resulting in the exclusion of 7. Ultimately, 46 studies were included in the review.

Figure 1. Flowchart illustrating study selection process for the review



The 46 included articles were clustered into 5 themes based on their primary focus, content, and areas of interest of the research: (1) Interpersonal violence, bullying and discrimination, (2) Weight-cutting, eating disorders and supplement use, (3) Injuries and skin infections, (4) Brain injuries and concussions, (5) Coaches' roles and practitioners' well-being. An overview of the studies distributions within the themes can be found in the appendix section.

It is important to note that while the thematic categorization aimed to assign each article based on its primary focus, three articles were relevant to more than one theme due to the breadth of their content. As a result, Mathisen et al. (2022) was included in both Theme 1 and Theme 2, reflecting its dual emphasis on sexual harassment and disordered eating behaviors. Tjønndal (2019) was categorized under both Theme 1 and Theme 5, as it addressed both gender-based abuse and female coaches' experiences in women's boxing. Finally, de Borja et al. (2025) was included in both Theme 3 and Theme 4, due to its coverage of both general injuries and head trauma considerations. This overlap illustrates the interconnected nature of health and safety concerns in combat sports literature.

Results

1. Interpersonal violence, bullying and discrimination

This theme explores the various forms of harm that can occur within CS&MA environments, including psychological, physical, and sexual violence, as well as bullying and different forms of discrimination. It addresses their prevalence, the contexts in which they emerge, and their impact on athlete's well-being.

1.1. Interpersonal violence

Prevalence

Available research highlights a concerning prevalence of IV within CS&MA, although reported rates vary widely. A recent international study by Dallam et al. (2024) found that 58% of athletes from various Olympic teams — including judo and fencing — reported experiencing some form of IV. In Lithuania, Vveinhardt et al. (2020) reported that 20% of combat sport athletes had experienced abusive behavior, nearly twice the rate found in team sports (10.8%) and individual sports (10.1%) within the same study. Another smaller-scale study focusing on female athletes found that 41% reported unwanted sexual harassment in a combat sport context (Mathiesen et al., 2022).

These variations in prevalence are not unexpected. Differences in measures, methodologies, and definitions of IV contribute to inconsistent figures across studies (Dallam et al., 2024).

Forms and Perpetrators

When it comes to IV and its types, our review found that the most frequently reported form of IV was psychological violence (54.5%), followed by sexual violence (8.8%) and physical violence (6.9%) (Dallam et al., 2024). Men reported more physical assault, while women experienced higher rates of sexual assault (Dallam et al., 2024). In combat sport settings, concerns have been raised about inappropriate physical contact in mixed-sex training environments, particularly for female athletes (Mathisen et al., 2022). Although sexual harassment was found to be more common outside sport, a significant number of incidents were still reported within combat sport contexts, reinforcing the need for preventive and safeguarding measures (Mathisen et al., 2022).

Coaches were the main perpetrators (55%), followed by peer athletes (35%), with some athletes reporting abuse from both groups (28%) (Dallam et al., 2024). In some cases, parents acting as coaches were also identified as perpetrators, accounting for 10.9% of reported incidents (Dallam et al., 2024).

Implications of interpersonal violence in CS&MA

The effects of IV are far-reaching. Athletes who reported experiencing IV were twice as likely to have a psychiatric diagnosis compared to those who did not (Dallam et al., 2024). The same study also reported significant links between experiences of IV and eating disorders.

Combat sport & martial arts as protective factors

The literature suggests that participation in CS&MA can act as a protective factor against violent behaviors. Aggression is typically defined as physical or verbal behavior that violates the norms of sport and is intended to harm an opponent, teammate, referee, or spectator (Boostani et al., 2011). Although findings on aggression levels among CS&MA athletes remain mixed, Boostani et al. (2011) reported that practitioners from both Olympic and non-Olympic CS&MA disciplines scored lower in anger, physical aggression, verbal aggression, and hostility compared to non-athletes — with judo athletes showing the lowest scores across all categories. These findings suggest that participation in structured CS&MA may be linked to lower tendencies towards aggression and violence.

1.2. Bullying

Definition of bullying

Bullying can be understood as intentional, repetitive aggressive behaviors, including some sort of power imbalance against a specific target (the impacted person) who cannot defend him or herself easily (Vveinhardt et al., 2020). While both bullying and harassment are grounded in power imbalances between individuals, bullying is distinguished from harassment by its repeated nature, whereas harassment may occur as a single event (Vveinhardt et al., 2020).

Prevalence of bullying in CS&MA

Bullying is a prevalent issue across all types of sport, with combat sports (8.5%) ranking nearly as high as individual sports (9.8%) and above team sports (7.3%). The most common form of bullying in sport is verbal abuse, including name-calling, ridicule, and hostile comments. Furthermore, 21.3% of surveyed athletes across various disciplines — including combat sports — agreed that bullying and harassment are major problems in their sport (Vveinhardt et al., 2020).

Bullying protective factors and sport culture

Some disciplines, like judo, may offer protective cultural factors. Emphasizing values such as mutual welfare, empathy, and self-discipline, judo appears to foster responsible and empathetic behavior among adolescents, potentially reducing bullying behaviors (Khitaryan et al., 2023).

Disclosure of bullying

When athletes do choose to disclose experiences of bullying or harassment, they are most likely to communicate it to parents (38.8%) and coaches (31.9%) (Vveinhardt et al., 2020). This highlights the need to equip these individuals with the tools and knowledge to respond effectively.

One of the most helpful actions reported by athletes was when coaches initiated open conversations with their teams about bullying (Vveinhardt et al., 2020). This underscores the coach's critical role in shaping safe and respectful environments. However, such proactive actions remain infrequent, with more than half of respondents reporting that no such intervention ever took place. The authors also point out that while one third of respondents indicated they would report incidents of bullying to their coach, this figure might lack the necessary training in bullying prevention.

1.3. Discrimination

Gender-based discrimination

Beyond IV and bullying, the literature reviewed also offered deeper insights into how gender discrimination manifests in CS&MA environments. A qualitative study exploring women's experiences in boxing (both as athletes and coaches) revealed persistent gender-based challenges in the sport. Female boxers reported experiences of unequal power dynamics with older male coaches, which in some instances manifested as exclusion, discrimination, and even sexual abuse (Tjønndal, 2019). These findings highlight how gendered power relations continue to shape and undermine women's participation in combat sports.

Another layer of discrimination may arise from rigid gender categories in sports. While categorization in sport is intended to ensure fairness, Martínková (2020) argues that overly rigid divisions, such as binary gender or strict weight classes, can lead to exclusion and discrimination. The author advocates for greater athlete autonomy, suggesting that athletes should be allowed to voluntarily compete in categories typically considered more competitive, similar to how lighter boxers may choose to fight in higher weight classes. She argues that this is particularly relevant at non-elite levels, where, according to the author, performance differences between sexes

are minimal, and athlete agency should be prioritized. From a safeguarding perspective, the paper challenges combat sport organizations to revise eligibility rules that reinforce outdated gender norms and limit athlete autonomy. According to the study, this could lead to higher inclusion of athletes who are non-conforming with gender binaries.

Racial discrimination

Another dimension of discrimination highlighted in the literature relates to race and ethnicity within CS&MA. In a study of a Muay Thai and Kickboxing gym, Singh (2022) found that shared training and bodily proximity fostered cooperation and the reshaping of racial prejudices. The author argues that these environments can challenge racist ideologies at an interpersonal level, showing the potential of CS&MA to act as spaces of inclusion. However, the author also notes that while interpersonal attitudes may shift inside the gym, these environments do not automatically dismantle broader societal structures and historical systems that sustain racism.

2. Weight-cutting, eating disorders and supplement use

This section examines the widespread practice of rapid weight loss (RWL) and related weight management strategies in CS&MA, including the link between these practices and eating disorders as well as other health risks. It also explores the high prevalence of supplement use and the possible risks associated with their use without medical supervision. The evidence discussed here connects these practices to safeguarding concerns, as they directly affect athletes' physical and psychological health.

2.1. Weight-cutting

Prevalence of weight-cutting

CS&MA are structured around weight categories to ensure fair competition between similarly sized opponents. As having a higher mass within a given weight class may confer a competitive advantage, athletes frequently resort to RWL strategies prior to competition.

Despite some variation in reported figures, the literature consistently demonstrates a high prevalence of RWL across disciplines and levels. In a study of wrestling and taekwondo athletes, Castor-Praga et al. (2021) reported that 96% of the 160 participants engaged in RWL, with over half (57%) losing more than 5% of their body mass. Similarly, Roklicer et al. (2022) found that 69% of Olympic-style wrestlers had previously lost weight to compete in a specific category. In Poland, Anyżewska et al. (2018) reported a 58% prevalence of RWL among martial arts practitioners. A review by Santos et al. (2024) confirmed that RWL is widespread among judo athletes, with prevalence rates ranging from 40% to over 90%, particularly among senior and lighter-weight competitors. Among female combat sport athletes, Mathisen et al. (2022) found that over 20% employed potentially harmful methods (such as laxative and diuretic use) during short weight-cutting periods.

Strategies adopted

The methods employed to achieve RWL are diverse. Castor-Praga et al. (2021) identified the most common strategies as increased exercise, training in plastic or heavy clothing, fluid restriction, food omission, spitting, and fasting. In Roklicer et al. (2022), athletes most frequently used increased exercise, gradual dieting, training in heated environments, and sauna use. Berkovich et al. (2019) found that severe caloric restriction and dehydration were among the most widely reported practices.

Influential people in the adoption of RWL

The literature consistently identifies coaches as the most influential figures in the adoption of RWL strategies among athletes (Roklicer et al., 2022; Castor-Praga et al., 2021). It is common for coaches to discuss athletes' weight status in the lead-up to competitions and to provide advice on how to cut weight (Berkovich et al., 2019). However, without appropriate training, some coaches may recommend harmful practices, such as vomiting, to achieve rapid weight-cutting (Berkovich et al., 2019). To mitigate this risk, intervention strategies should prioritize educating coaches on evidence-based, health-centered approaches to weight management. Nonetheless, this education should not serve as a substitute for professional dietary support; rather, coaches should be equipped to recognize the complexity of nutritional needs and refer athletes to qualified sports nutritionists or registered dietitians when appropriate.

In addition to coaches, parental figures are also highly influential in shaping athletes' engagement with RWL strategies, ranking second in influence according to Castor-Praga et al. (2021). This influence is particularly relevant given that weight-cutting behaviors often begin at a young age (Roklicer et al., 2022; Berkovich et al., 2019). As such, parents play a critical role in modeling or reinforcing these behaviors, and should therefore be included in preventive educational efforts aimed at reducing the adoption of unsafe practices.While nutritionists hold the most technical expertise in weight management, they ranked only third in influence over athletes' RWL behaviors (Castor-Praga et al., 2021). This finding reinforces the importance of strengthening the visibility and role of sports nutrition professionals within the athlete support network.

Beyond coaches, parents, and nutritionists, peer influence from other athletes (or former athletes) also plays a significant role. Pocecco et al. (2024) propose the development of educational programs that include elite athletes (active or retired), who can act as role models. By sharing personal experiences, including both harmful and successful practices, these athletes may foster more responsible decision-making among younger competitors. This approach aligns with Castor-Praga et al. (2021), who emphasize the value of influential sport mates to influence athletes in making responsible decisions regarding their health.

Risks associated with RWL

Weight management strategies used to qualify for lower weight classes in CS&MA are associated with serious health risks, including reported athlete fatalities (Sadek et al., 2022; Reale et al., 2017). The severity of these risks increases with greater relative weight loss, and athletes who lose more than 5% of their body mass are particularly vulnerable to physiological symptoms such as altered blood pressure and rapid breathing (Castor-Praga et al., 2021). Beyond the amount of weight reduced, risk levels also depend on the duration and frequency of the strategies used (Castor-Praga et al., 2021).

Although some studies suggest that RWL may not impair physical performance when adequate recovery time is allowed (e.g., >4 hours), the evidence consistently links RWL to psychological distress, immune suppression, and an elevated risk of eating disorders — especially among female athletes (Santos et al., 2024). These risks are often exacerbated by a culture that frames RWL as a demonstration of mental toughness or a route to competitive advantage, rather than a serious health concern.

Mood changes are a frequent consequence of RWL. For instance, Brandt et al. (2018) found that RWL can induce negative mood states such as higher confusion. Although Lakicevic et al. (2020) point out that findings on the psychological effects of RWL are mixed, their review found a general pattern of increased tension and fatigue as well as decreased vigor. Castor-Praga et al. (2021) similarly observed that athletes engaging in more extreme weight loss strategies (e.g., >5% body mass) were more likely to report fatigue and confusion, whereas those with higher vigor tended to use less severe weight loss methods.

More severe physiological risks have also been identified. In a case study of an MMA athlete, Kasper et al. (2018) reported symptoms consistent with Relative Energy Deficiency in Sport (RED-S), including reduced resting metabolic rate, impaired aerobic performance, hormonal imbalances, and hypercholesterolemia. Kidney function

is another major concern, as dehydration is central to many RWL methods. Pocecco et al. (2024) highlight that repeated dehydration is associated with markers for acute kidney injury in wrestlers. Kasper et al. (2018) similarly noted potential long-term kidney complications. However, their case study also found that several health indicators (including hydration status, endocrine profile, and kidney function) returned to or approached normal levels within two weeks post-competition, suggesting that some RWL-related damage may be reversible with adequate recovery. Despite this, the authors emphasize the need for regulatory bodies to implement stronger safeguards, which is relevant not only for MMA but for all CS&MA disciplines employing RWL strategies.

Beyond physiological risks, RWL may increase susceptibility to injury. Castor-Praga et al. (2021) suggest that athletes experiencing fatigue from RWL are at greater risk of injury during both training and competition. Lakicevic et al. (2020) further support this, reporting a correlation between weight cuts exceeding 5% and an increased incidence of injuries during competition.

Lastly, although performance impacts of RWL remain debated, self-reported data suggests a negative effect. In the Castor-Praga et al. (2021) study, the majority of athletes who used RWL strategies reported a perceived decline in performance, underscoring the potential trade-offs between short-term weight targets and athletic output.

Long term implications of RWL

Given the high prevalence of RWL practices among combat sport athletes, it is important to consider the long-term implications of repeated exposure to such strategies.

Brandt et al. (2018) suggest that, over the course of an athletic career, recurrent engagement in weight-cutting may lead to both physical and emotional adaptations, allowing athletes to manage their emotions even under conditions of dehydration and nutritional deficit.

However, this perceived resilience may come at a cost. Kasper et al. (2018), for example, reported that although the athlete in their case study had consistently used similar RWL methods across competitions, he found making weight increasingly strenuous, indicating that psychological and physiological strain can accumulate over time, despite familiarity with the process. Supporting this, Flores et al. (2024) found that female Olympic wrestlers with greater training experience reported higher levels of disordered eating attitudes, including increased dieting and bulimia, suggesting that prolonged exposure to weight management demands may be associated with greater psychological burden, rather than improved coping capacity.

Recommended strategies and interventions for safer weight management

Although RWL is widely discouraged due to its potential harm to athlete health and well-being (Santos et al., 2024; Brandt et al., 2018; Jagim et al., 2024; Lakicevic et al., 2020), several strategies have been proposed in the literature to manage weight in a safer and more controlled manner prior to competition.

Some authors advocate for strict regulatory approaches, including a ban on RWL, reducing the time between weigh-ins and matches, and implementing mandatory regular weight screenings to define each athlete's minimum competitive weight (Lakicevic et al., 2020). This perspective aims to eliminate the opportunity for extreme short-term weight manipulation and encourage long-term weight stability.

Others suggest more moderate approaches focused on nutritional planning and controlled methods. For example, Santos et al. (2024) recommend combining a low-carbohydrate, energy-restricted diet with training to reduce body mass without impairing strength or power. Additional strategies — such as short-term fiber reduction, passive sweating prior to weigh-in, and targeted rehydration post-weigh-in — are proposed as ways to manage RWL safely in sports like judo, where recovery windows are longer. Similarly, Brandt et al. (2018) emphasize the importance of long-term diet and training adjustments over abrupt strategies.

From an individualized perspective, Reale et al. (2017) recommend limiting weight loss to 5–8% of body mass, with close attention to recovery periods and proper planning. They also highlight the importance of educational programs for athletes and coaches, and the involvement of sports nutrition professionals who can conduct trial strategies and optimize individualized plans ahead of major competitions.

Hydration strategies have also been explored. Roklicer et al. (2022) recommend water loading prior to fluid restriction, noting that this technique does not adversely affect blood chemistry or physical performance and can be implemented as part of safer RWL protocols.

As the time available for recovery between weigh-in and competition determines the degree of acute weight loss that can be implemented and reversed (Reale et al., 2017), this recovery period may unintentionally encourage athletes to reduce even more body mass, as the additional time allows for rehydration and performance recovery. This might explain why authors such as Lakicevic et al. (2020) recommend weigh-ins happening with no more than 1 hour before matches. The issue of post weigh-in rehydration is particularly accentuated in wrestling athletes, since such discipline normally has a stricter recovery time of just 1-2 hours, increasing the danger through insufficient rehydration (Jagim et al., 2024).

An alternative regulatory approach can be to focus not on weight loss but on weight regain after the weigh-in. For example, in response to extreme weight-cutting practices, the California State Athletic Commission implemented a 10-point strategy including a 10% maximum weight regain allowance, introduction of additional weight classes, routine hydration checks, and intermediate weigh-ins to enhance athlete safety (Kasper et al., 2018).

Attention to sex-specific recommendations has also emerged. Jagim et al. (2024) argue that the widely cited 12% minimum body fat standard for female athletes may be too low due to insufficient safety evidence, suggesting instead that 18% would be a more appropriate and protective threshold.

Monitoring and support structures are also critical. Santos et al. (2024) emphasize that athletes undergoing significant energy restriction should be monitored by a multidisciplinary team throughout the season, and recommend tools such as the Eating Attitudes Test and Eating Disorders Inventory for screening. In a similar vein, Anyszewska et al. (2018) advocate for individualized dietary plans tailored to the athlete's energy and training demands, developed in collaboration with a qualified dietitian.

Mental health support is another emerging focus area. According to Santos et al. (2024), interventions such as mental health support programs may help mitigate the negative consequences of RWL and enhance overall athlete well-being and performance. Complementing this, Pocecco et al. (2024) stress the need for athletes to receive education on healthy weight control and to have access to dietary consultations and early screening for eating disorders, that can have negative impact on athletes' mental health.

Finally, at the institutional level, Flores et al. (2024) call on sports organizations to adopt robust policies promoting healthy weight management, including ample resources and ongoing support systems, in order to safeguard athlete health and longevity in elite-level competition.

2.2. Eating disorders

One of the most pressing concerns linked to RWL is the development of eating disorders (EDs). Pocecco et al. (2024) argue that, in sports like judo, ED prevention should be a primary focus when evaluating RWL risks. Flores et al. (2024) note that ED prevalence is significantly higher among athletes than in the general population, with female athletes being at particularly high risk. Supporting this, Jagim et al. (2024) highlight that RWL poses sex-specific health risks, particularly for adolescent females, including menstrual dysfunction and impaired bone health.

Several studies also point to the role of training intensity and athletic experience in the development of disordered eating. According to Flores et al. (2024), athletes with higher training loads and longer competitive experience report significantly more ED symptoms than less experienced peers.

Altogether, the literature makes clear that eating disorders are a significant health issue in combat sports, as weight categories sports have been identified as more susceptible to EDs than the general population (Pocecco et al., 2024; Flores et al., 2024).

2.3.Supplement intake

Supplement intake appears to be highly prevalent among CS&MA athletes. In a Lebanese study, Sadek et al. (2022) reported that 73.2% of combat sport athletes used dietary supplements, placing them among the highest consumers across different sport types. The study surveyed a broad athletic sample, including combat sport practitioners, weightlifters, ball game players, and endurance athletes.

Notably, the study found that coaches (74%) and online sources — such as websites and social media (64%) — were the primary sources of information regarding supplement use, while healthcare professionals were the least consulted (Sadek et al., 2022). This reliance on non-expert guidance raises concerns about the accuracy and safety of the information athletes receive, particularly when it comes to banned substances or potential drug interactions.

Educational attainment was also identified as a significant predictor of supplement use. Athletes with a university degree were found to be twice as likely to use supplements compared to those with only a high school education or less (Sadek et al., 2022). However, the pursuit of competitive advantage may lead athletes to follow unverified marketing claims, resulting in misconceptions and inappropriate supplementation practices. As such, Sadek et al. (2022) highlights the urgent need for structured guidance from qualified physicians and dietitians. This includes education on supplement efficacy, potential side effects, and the identification of substances prohibited by anti-doping regulations.

3. Injuries and skin infections

This theme focuses on the types, frequency, and contexts of injuries associated with CS&MA, including both acute trauma and overuse injuries. It considers contributing factors such as training volume, competitive settings, and protective measures, as well as the implications for athlete's well-being and performance. The section also underscores the importance of prevention strategies, structured rehabilitation, and multidisciplinary support.

3.1.Patterns and context

Hammami et al. (2018) emphasize that injury risk is inherently high in combat sports due to their goal of striking or projecting opponents with maximal power and speed. This constant exposure to high-impact actions places athletes at ongoing risk of injury, which can reduce training effectiveness, cause disability, compromise competitiveness, and in some cases, end athletic careers. However, injury prevalence and severity vary significantly across different combat sport disciplines.

Injury types vary according to the CS&MA discipline. The most common injuries overall are contusions (Hammami et al., 2018; Ranaweera et al., 2020), while in modalities such as boxing and mixed martial arts, laceration and abrasion were found amongst the most common (Hammami et al., 2018).

Additionally, most injuries in combat sports occur during tournaments (Hammami et al., 2018), with competitions between lower-performing athletes showing a higher frequency of injuries than higher level matches (Hammami et al., 2018; Ranaweera et al., 2020). On the other hand, while competition days often receive significant attention in terms of injury prevention, training environments also present their risks. For example, most severe spinal injuries in female wrestlers have been reported to occur during training (Song et al., 2024) and Hammami et al. (2018) found in their review that Taekwondo athletes experience more than half of their injuries during training sessions.

Similarly, Tabben et al. (2023) found that karate athletes perceive the risk of injury during training to be equivalent to that during competition. These findings underline the importance of not overlooking the risks posed by daily training routines when developing safeguarding protocols. Rather than shifting focus away from competitions, clubs and coaches must remain vigilant across all phases of sport preparation.

Finally, while not directly an injury, it is important to dedicate some attention to another health concern: skin infections. Skin infection transmissions can present a significant concern in CS&MA, due to the close contact and shared mat space in these sports environments (de Borja et al., 2025).

3.2. Risk factors

Injury risk in CS&MA is influenced by a variety of individual and training-related factors. Vitale et al. (2018) found that training volume and athlete age were significant predictors of injury occurrence. Specifically, younger martial arts athletes and those with higher training loads were more likely to sustain injuries, as well as higher body mass index (BMI) (Vitale et al., 2018).

Performance levels also seem to play a role in injury risk. Hammami et al. (2018) reported that competitions involving lower-performing athletes showed a higher frequency of injuries when compared to those at higher levels of performance. This may reflect discrepancies in technique, physical preparedness, or access to injury prevention resources.

Training-related characteristics also emerge as key contributors. Tabben et al. (2023) identified excessive training load, insufficient recovery time between competitions, and low muscle strength as primary risk factors among karate athletes. In line with this, Brzezińska et al. (2022) emphasize that restricted and highly demanding training regimens, combined with rapid weight reduction and excessive exercise, significantly elevate the risk of injuries and sport-related trauma in wrestlers.

Beyond the physical and training variables, structural and contextual factors also impact injury vulnerability. Song et al. (2024) reported that 64% of severe spinal injuries in wrestlers occurred during the student-athlete period, a time marked by limited access to specialized rehabilitation and shortened return-to-play timelines. This underscores the importance of ensuring equitable access to medical support and implementing medically guided rehabilitation protocols, especially for student-athletes who may lack safeguards. Premature returns to sport and insufficient recovery structures pose significant threats to athletes' long-term health and safety.

When it comes to skin infections, their transmission occurs primarily through direct contact or by contact with contaminated surfaces, such as mats, towels, or training equipment (de Borja et al., 2025).

3.3.Prevention and management

Injuries are an inevitable aspect of sports; however, targeted prevention strategies and effective management protocols can significantly reduce injury incidence and ensure a safer sport. Vitale et al. (2018) recommend implementing injury prevention exercises targeted at commonly affected areas, such as the lower extremities. Complementing this, Ranaweera et al. (2020) emphasize that many athletes lacked sufficient physical fitness and sustained injuries in the later rounds of competition, pointing to the need for standardized training programs that build both technical skills and physical endurance. In addition to that, de Borja et al. (2025) also recommends including strength and conditioning programs implemented by certified professionals to complement sport specific training and reduce the likelihood of injury.

Building on this, the successful implementation of such exercises and conditioning depends on carefully managing training volume and recovery. Regulating training loads and ensuring adequate rest periods is essential, as overuse has been identified as the main cause of many severe spinal injuries (Song et al., 2024). Coaches and clubs have a central role in establishing structured, sustainable routines that support long-term health over short-term gains.

Beyond training routines, de Borja et al. (2025) points out to other relevant elements that should be considered for injury prevention within martial arts. Implementing the mandatory use of protective equipment, for instance, can decrease the likelihood of certain injuries. Using headgear could be essential to decrease the likelihood of head and face injuries, such as lacerations – while it does not lessen the risk of concussions (Borja et al., 2025). Focusing on techniques and providing good supervision can also be a good approach. This can include, for instance, reinforcing competition rules and focusing on teaching blocking skills (Borja et al., 2025).

Prevention efforts must also consider the specific demands of each discipline. For instance, in grappling sports like judo and wrestling, where knee ligament injuries are common, targeted interventions to protect the knees are essential (Lystad et al., 2020).

Coach education and support play a pivotal role in injury prevention and management. Hammami et al. (2018) suggest that injury prevention can be improved through education for both athletes and coaches, alongside qualification standards for trainers and referees. This is echoed by Piussi et al. (2025), who found that coaches are often perceived as lacking adequate knowledge and support. Similarly, Brzezińska et al. (2022) emphasize the need to properly train coaches responsible for organizing training sessions. Improved education on injury recovery, along with collaborations between combat sport organizations and healthcare providers, could facilitate earlier diagnoses and more sport-specific rehabilitation protocols (Piussi et al., 2025).

Including a dedicated fitness coach alongside the head coach can significantly enhance injury prevention efforts. Tabben et al. (2023) found that athletes reported more frequent engagement in preventive practices when supported by a fitness coach. These professionals provide targeted training and valuable advice on injury prevention. Notably, athletes who had previously received guidance were nearly three times more likely to implement preventive strategies (Tabben et al., 2023), highlighting the importance of education and access to qualified support staff such as fitness coaches and physiotherapists.

The structure of CS&MA competitions must also be carefully considered. A particular concern is when coaches serve as referees during the same competitions in which their athletes compete. Even if officiating unrelated matches, this dual role limits their ability to offer crucial support (such as overseeing warm-ups, nutrition, and motivation), which may indirectly contribute to higher injury risk (Ranaweera et al., 2020). Beyond personnel, competition rules themselves can impact athlete safety. For example, the elimination of mandatory headguards in boxing was followed by an increase in injury rates (Lystad et al., 2020). This illustrates the need for evidence-based regulatory decisions that prioritize athletes' well-being when modifying or introducing new rules.

Yet even the most carefully designed rules and competition structures cannot eliminate injuries altogether. To address the limitations of preventive measures, it is recommended to adopt tailored rehabilitation plans. This can be composed of many different professionals, including a physician, a physiotherapist, and a sports psychologist (Witkowski et al., 2019).

The contribution of sports psychologists is frequently underestimated, yet it is vital, as a critical dimension of injury management involves addressing its psychological consequences. With nearly half of athletes (48%) reporting fear of re-injury (Song et al., 2024) and injured athletes facing increased risk of mental health issues (Piussi et al., 2025), safeguarding must include interventions that target not only physical but also mental recovery.

Embedding psychological support — such as counseling, stress management, and confidence-building techniques — into rehabilitation can ensure a safer and more confident return to sport. These psychological interventions might assist athletes in building resilience, which has been found to be a key component in injury rehabilitation processes (Patenteu et al., 2024).

Finally, the prevention of skin infection transmission should also be considered. Preventive measures should include routine cleaning and disinfection of mats and equipment, as well as monitoring and excluding athletes with visible skin infections to prevent outbreaks (de Borja et al., 2025)

4. Brain injuries and concussions

Given the centrality of striking and physical contact in many combat sports, this section explores the risks, recognition, and management of brain injuries and concussions. It discusses cultural attitudes toward injury, knowledge gaps that affect prevention and reporting, and existing recommendations for safer practices. Particular attention is given to children and adolescents, for whom head trauma can have especially severe consequences.

4.1. Cultural norms and conceptual gaps

As striking is a central objective in many CS&MA, blows to the head are common and can result in head injuries, including brain injuries and concussions — particularly in disciplines where inducing head trauma or even loss of consciousness is regarded as a marker of success (Nalepa et al., 2017). In addition to that, continuing to fight despite such injuries and "negotiating with pain" has been linked to cultural norms surrounding masculinity and the construction of fighter identity (Malcolm et al., 2023), raising further concerns. These cultural and structural dynamics further complicate how brain injuries and concussions are recognized and managed in CS&MA.

Ambiguous terminology and lack of correct notions of what they consist of may also contribute to environments in which athletes are not properly evaluated or treated. A common misconception is that concussions always involve a loss of consciousness, when this is only the case in 10-20% of concussions (du Preez et al., 2022). In the same line, while knockouts (KO) and technical knockouts (TKO) may involve concussions, these can occur even in the absence of such outcomes (Neidecker et al., 2019). To ensure a safer environment in CS&MA, it is essential to understand the risks of brain trauma, implement effective prevention strategies, and establish appropriate protocols for their management.

4.2. Possible damaging effects

There are different possible negative outcomes of hits to the head. Amongst them, traumatic brain injury (TBI), concussions, persistent post-concussion symptoms and chronic traumatic encephalopathy, and even later life pathologies can be found (Anderson et al., 2023). While all these possible outcomes are negative to all persons, brain injuries are particularly damaging for children, as they are in developmental stages that can suffer long lasting impacts (de Borja et al., 2025; Anderson et al., 2023). This calls for a rethinking of child participation in combat sports, which might mean restricting or prohibiting hits to the head between younger athletes (Anderson et al., 2023).

4.3. Prevention and management

Malcolm et al. (2023) argue that health efforts to address sports-related concussions (SRC) face unique challenges in environments where injury tolerance and risk acceptance are culturally embedded. Athletes often underreport SRCs for many reasons, including lack of knowledge, failure to recognize concussion symptoms and distinguish them from normal effects of fatigue, and not wanting to let down teammates and coaches (du Preez et al., 2022). Moreover, for the fact that head contact is an objective of combat sports, it has been argued that the management and treatment of concussions in these sports should be held to stricter standards than in non-contact sports (Neidecker et al., 2019). For instance, a general recommendation is that combat sport athletes, including winners, should be neurologically evaluated immediately post-fight for signs and symptoms of concussion (Neidecker et al., 2019; Nalepa et al., 2017).

As coaches are commonly the first to witness SRCs (Manaseer et al., 2024), they should be a primary target of educational initiatives focused on prevention and management of head injuries. Training should equip them to recognize the signs and symptoms of concussion promptly, with similar education extended to athletes, parents and referees (Neidecker et al., 2019). Specific concussion training should also be encouraged to all healthcare professionals involved in combat sports (du Preez et al., 2022).

Manaseer et al. (2024) study examined coaches' knowledge and attitudes toward SRC and found that martial arts coaches scored highest in knowledge when compared to caches in other sports yet simultaneously demonstrated attitudes less aligned with current best-practice recommendations. Notably, no significant correlation was observed between knowledge and attitude scores, suggesting that educational interventions alone may be insufficient to foster safer concussion-related behaviors. Hence why developing and implementing comprehensive, evidence-based and periodically updated concussion guidelines is essential for shaping attitudes and enhancing athlete safety in sport (du Preez et al., 2022). Monitoring the compliance of these guidelines and creating an environment that encourages such compliance is just as important (Davis et al., 2020).

Guidelines should contain detailed recommendations for concussion prevention and management, as well as safe return-to-play protocols. For the prevention aspect, Nalepa et al. (2017) mention the need for baseline neuropsychological testing for CS&MA athletes. The authors reinforce this by recommending that all combat sports athletes complete a validated and supervised baseline neuropsychological evaluation annually, with additional vestibular, ocular, and balance assessments where possible, to support accurate post-injury comparisons and clinical decision-making.

Nalepa et al. (2017) also proposes a systematic protocol once an injury has taken place. This protocol involves monitored progression from light aerobic activity to full-contact sparring, ensuring symptom-free stages throughout. The concern with athletes competing or engaging in sparring activities while experiencing signs and symptoms of concussion is corroborated by Neidecker et al. (2019). In Nalepa et al.'s (2017) protocol, each phase is carefully structured to allow sufficient recovery time (minimum 24 hours between steps), aiming to minimize reinjury and support fighters' physical and cognitive reintegration.

While strategies for a better management of concussions and brain injuries targeting the individual are helpful, Malcolm et al. (2023) notes that it is important to promote a cultural change in a broader sense, to discourage risky behaviors such as continuing to fight while having such injuries. This broader change can come, for instance, through more sustained guarantees of income for CS&MA athletes and creation of meaningful opportunities for those who have experienced brain injury to remain engaged in non-combat roles (Malcolm et al., 2023).

Due to the heightened vulnerability of the developing brain, it has been argued that children should not participate in impact sports that involve blows to the head (Anderson et al., 2023). In this sense, Anderson et al. (2023) argues that facilitating children from receiving hits in their head should be considered a form of child abuse.

5. Coaches' roles and practitioners' well-being

This theme explores how leadership styles, role boundaries, gender dynamics, and training demands can influence coaches' experiences and athlete' welfare. It also considers the broader psychosocial dimensions of martial arts participation, including the positive impacts on personal development and well-being.

5.1. Coaches' roles

Coaches' thoughts and behaviors may affect not only athletes' performance, but also their emotional and cognitive states. In a study with boxing athletes, Huang et al. (2011) found that positive leadership has a significant positive effect on athletic enthusiasm and athlete's wellbeing. Positively influencing athlete's wellbeing can, in turn, strengthen their mental toughness and result in better sports performances (Huang et al., 2021). In this sense, positive leadership practices, including open communication, empathy, and consistent support, can serve as key safeguarding tools to improve athlete's wellbeing.

This important effect coaches can have on athletes may lead to struggles when identifying the limits of their role. Feddersen et al. (2021) found that coaches struggle with role clarity, as it seems hard for them to delineate the borders between when they could deliver psychological skills training and when to refer an athlete to sport psychology experts. A coach interviewed in their study also mentioned a lack of existing clear lines for when the athletes should be referred to physiotherapists or strength and conditioning trainers.

In this sense, as much as delivering training for coaches in the realms of mental well-being and injury prevention can be valuable, this might also create potentially exploitative coach-athlete relationships. This led the authors to recommend that coach education programs should include content on ethical dilemmas to safeguard against potential abuse of the coach-athlete relationship, as an excessive openness can create dilemmas for both parties (Feddersen et al., 2021). Having the support of a sport psychologist could then be critical for coaches navigating such dilemmas (Feddersen et al., 2021).

Another aspect related to coaches' role is related to intergenerational sports, that is, sporting environments involving people of different age groups, serving as a tool for active aging, social inclusion and community cohesion. Ciaccioni et al. (2024b) notes that coaches play a crucial role in facilitating these social interactions and bonds between generations that share the same passion: their sport. Yet, coaches also report a need for knowledge, capabilities and skills to train older individuals (Ciaccioni et al., 2024a).

For this, it has been suggested that coaches should be trained in courses that include aspects of intergenerational judo programs, to learn how to navigate the age differences barriers and physical limitations of different ages (Ciaccioni et al., 2024b), including both theoretical knowledge and practical exercises, such as falling techniques in motion to optimize coaches' capability to train older adults (Ciaccioni et al., 2024a).

Another issue in terms of coaches' experiences is related to gender. Societal gendered norms shape expectations around coaching styles, often positioning women coaches at a disadvantage. Female boxing coaches reported difficulties in gaining acceptance and being perceived as legitimate and competent professionals within a male-dominated environment (Tjønndal, 2019). They are frequently expected to demonstrate "feminine" leadership traits, which can undermine their perceived authority. In response, some female coaches reportedly adopt more traditionally "masculine" leadership behaviors to gain respect and be taken seriously (Tjønndal, 2019). Interestingly, while these coaches may view their style as aligned with feminine norms, athletes often perceive them as more masculine and authoritative than typical female figures (Tjønndal, 2019).

Male coaches are commonly associated with authority and respect, while female coaches are perceived as more democratic and nurturing — traits valued socially but often regarded as less effective in leadership within boxing contexts (Tjønndal, 2019).

In a study with female coaches in boxing, Tjønndal (2019) found that female coaches were often criticized for being either too masculine or too feminine. Although some adopt masculine behaviors to gain authority, they are still perceived as too soft or not sufficiently autocratic, highlighting how women continue to be seen as outsiders in a combat sport that was the last Olympic discipline to include female participation.

5.2. Practitioners' well-being

Sandford et al. (2021) suggest that martial arts may be linked to potential benefits for practitioners, such as enhanced optimism, humility, self-esteem, self-regulation, and reduced anxiety. To have a more nuanced measurement of the experiences of martial arts practitioners, the authors developed a Martial Arts Inventory (MAI). They aimed at going beyond current broad systems of measuring physical activities to understand the full benefits of martial arts. Their insights suggest that safeguarding strategies in combat sports should consider the diversity of participant motivations and structures within martial arts practice, promoting supportive environments that reinforce mental health, and personal growth.

A study by Ouergui et al. (2020) studied judo athletes and found that higher training loads were strongly linked to athlete's poorer well-being and recovery states, particularly during intensified training periods. The findings highlight the value of monitoring tools, which can improve athletes' experiences by helping coaches adjust training intensity, reduce overtraining risks, and support athlete welfare.

Another dimension of athletes' experience reported in the literature is related to their romantic relationships. Kent et al. (2024) explored how romantic partners of professional athletes experience and manage stress due to their proximity to the demands of elite sport. This study offers insights on the emotional toll that elite sports can place not only on athletes but on their support networks, as well as the role of partners in buffering or exacerbating athlete stress. This suggests the importance of including education on the broader psychosocial ecosystem around athletes and encouraging communication between clubs/organizations and those surrounding the athlete.

Preliminary recommendations

CS&MA present distinct risks for athletes' wellbeing. The findings in this review underscore the urgent need for comprehensive safeguarding mechanisms. The following recommendations aim to promote athlete well-being, ensure inclusive practices, and support a culture of safety in CS&MA.

1. **Establish a broad definition of safeguarding**
   Adopt internationally recognized conceptual frameworks (e.g., IOC Consensus Statements) that define safeguarding comprehensively, encompassing psychological, physical, sexual, and discriminatory forms of harm, as well as sport-specific risks relevant co CS&MA, such as concussions and pre-competition weight-cutting practices.

2. **Develop and mandate comprehensive safeguarding education**
   All coaches, club's staff, and safeguarding officers should be required to complete safeguarding training. This training will be provided through the MOOC developed by the Safe Combat project and should include modules on (a) recognizing, preventing and reporting interpersonal violence and abuse, (b) safe and unsafe weight management practices, emphasizing the risks of RWL and the roles of qualified professionals, (c) general injuries, brain injuries and concussions, with guidance on identifying and managing them, as well as their psychological effects on the athletes, (d) the potentials and limitations of the coaches' role. The MOOC can include testimonials and real-life scenarios from athletes to improve relatability and engagement. Optional training can also be offered to other CS&MA stakeholders (e.g., athletes and parents) to learn about safeguarding.

3. **Create age- and gender-sensitive safeguarding policies**
   As children and adolescents are at an important developmental phase, they should be prohibited from being involved in practices that include head strikes in training and/or competition. Another relevant point is to address inappropriate physical contact in mixed-sex training environments, including clear guidelines for physical interaction, ensuring coach supervision during partner work and offering opt-out or same-gender partner alternatives.

4. **Regulate coaching practices**
   Aligned with the MOOC, require safeguarding as a core competency for coaches. Ensure that the training coaches receive includes the boundaries on the coach-athlete relation and the power dynamics involved in it. Provide coaches with the understanding of the limits of their role, especially in injury, nutritional and mental health management.

5. **Strengthen medical, nutritional, and psychological support systems**
   A multidisciplinary team should be in pace. This can include sports psychologists for mental health support (addressing issues like disordered eating, psychological strain and trauma), physiotherapists and concussion specialists for injury management, nutritionists and dietitians for safe and individualized weight management throughout the year. Promoting annual neuropsychological baseline testing for the athletes is a recommended practice.

6. **Enhance monitoring and accountability mechanisms**
   Clubs should follow minimum requirements pre-established in our safeguarding code and should be encouraged to adopt policies to further develop their own safeguarding framework. There should be clear confidential reporting lines for cases of concern, and systems in place to implement measures for accountability and trauma.

7. **Encourage athlete empowerment and voice**
   Establish simple mechanisms (such as anonymous online forms) for athletes to provide feedback on measures implemented and suggestions on possible future measures.

8. **Implement safe training and competition environments**
   During training, enforce injury prevention strategies tailored to each sport (e.g., knee injury prevention in judo and wrestling). The physical space of trainings and competitions should also be kept clean, with mats and equipment being regularly disinfected to prevent infections and skin diseases. In the case of an athlete suffering of brain damage or concussion, adopt protocols with slow return-to-play guidelines based on medical clearance and prohibit athletes with symptoms of concussion from returning to practice. In competition, introduction of rules limiting post-weigh-in weight regain (e.g., a maximum of 10%) is recommended, to avoid drastic weight cuts prior to competition.

9. **Maintain athlete injury history records**
   Encourage clubs to create and maintain injury records for each athlete, recording type and location of injury, cause of the injury, duration of absence from training/competition, protocol followed for recovery. Use this data to develop targeted prevention and return-to-play strategies, particularly for those with recurring injuries.

Based on these recommendations, the next step is to integrate them with the findings from the Focus Groups Report and the Desk Research Report to develop a European safeguarding code. This code will be supported by a massive open online course to guide its implementation and will help ensure a CS&MA environment that is inclusive, respectful, and safe.

References

Anderson, E., Turner, G., Hardwicke, J., Parry, K., Anderson, E., Turner, G., Hardwicke, J., & Parry, K. D. (2023). Sport Structured Brain Trauma is Child Abuse. SPORT ETHICS AND PHILOSOPHY. https://doi.org/10.1080/17511321.2023.2284923

Anyżewska, A., Dzierżanowski I, Woźniak A, Leonkiewicz M, & Wawrzyniak A. (2018). Rapid Weight Loss and Dietary Inadequacies among Martial Arts Practitioners from Poland. International Journal of Environmental Research and Public Health, 15(11). https://doi.org/10.3390/ijerph15112476

Avelar Rosa, B., & Nery, M. (2021). Safeguarding children and youth in martial arts and combat: The need for wide and systematic policies and pedagogic approaches. ICM Insight, 4, 5–8.

Berkovich, B., Stark, A., Eliakim, A., Nemet, D., Sinai, T. (2019). Rapid Weight Loss in Competitive Judo and Taekwondo Athletes: Attitudes and Practices of Coaches and Trainers. INTERNATIONAL JOURNAL OF SPORT NUTRITION AND EXERCISE METABOLISM, 29(5), 532–538. https://doi.org/10.1123/ijsnem.2018-0367

Boostani, M., Javanmardi, R., Tabesh. (2011). Investigation and comparison of aggression in Olympic and Non-Olympic athletes of sport fields. IDO MOVEMENT FOR CULTURE-JOURNAL OF MARTIAL ARTS ANTHROPOLOGY, 11(3), 37–41.

Brandt, R., Bevilacqua GG, Coimbra DR, Pombo LC, Miarka B, & Lane AM. (2018). Body Weight and Mood State Modifications in Mixed Martial Arts: An Exploratory Pilot. Journal of Strength and Conditioning Research, 32(9), 2548–2554. https://doi.org/10.1519/JSC.0000000000002639

Brzezińska, P., Mieszkowski, J., Waldzinski, T., Durzynska, A., Waldzinska, E., Mieszkowski, D., Sarwinska, J., Skoniecczny, P., Knas, M., Petr, M., Kochanowicz, A., (2022). Musculoskeletal injuries in freestyle wrestling—Sport specification. ARCHIVES OF BUDO, 18, 241–250.

Bu, B., Haijun, H., Yong, L., Chaohui, Z., Xiaoyuan, Y., & Singh, M. F. (2010). Effects of martial arts on health status: A systematic review. Journal of Evidence-Based Medicine, 3(4), 205–219. https://doi.org/10.1111/j.1756-5391.2010.01107.x

Castor-Praga, C., Lopez-Walle, J., Sanchez-Lopez, J. (2021). Multilevel Evaluation of Rapid Weight Loss in Wrestling and Taekwondo. FRONTIERS IN SOCIOLOGY, 6. https://doi.org/10.3389/fsoc.2021.637671

Ciaccioni, S., Guidotti, F., Palumbo, F., Forte, R., Galea, E., Sacripanti, A., Lampe, N., Lampe, S., Jelusic, T., Bradic, S., Lascau, M., Rodica-Borza, A., Pérez, R., Rodríguez-Montero, F., Kapan, M., Gezeker, K., Capranica, L., Tessitore, A., (2024a). Judo for older adults: The coaches' knowledge and needs of education. FRONTIERS IN SPORTS AND ACTIVE LIVING, 6. https://doi.org/10.3389/fspor.2024.1375814

Ciaccioni, S., Perazzetti, A., Magnanini, A., Kozsla, T., Capranica, L., & Doupona, M. (2024b). Intergenerational Judo: Synthesising Evidence- and Eminence-Based Knowledge on Judo across Ages. SPORTS, 12(7). https://doi.org/10.3390/sports12070177

Dallam, S. J., Ortiz, A. J., Timon, C. E., Kang, J. S., & Hamilton, M. A. (2024). Interpersonal Violence in Elite U.S. Athletes: Prevalence and Mental Health Correlates. Journal of Aggression, Maltreatment and Trauma, 33(9), 1135–1153. https://doi.org/10.1080/10926771.2024.2350998

Davis, G., Makdissi M, Bloomfield P, Clifton P, Cowie C, Echemendia R, Falvey EC, Fuller GW, Green GA, Harcourt P, Hill J, Leahy K, Loosemore MP, McCrory P, McGoldrick A, Meeuwisse W, Moran K, Nagahiro S, Orchard JW, … Valadka AB. (2020). Concussion Guidelines in National and International Professional and Elite Sports. Neurosurgery, 87(2), 418–425. https://doi.org/10.1093/neuros/nyaa057

de Borja, C., Ocampo, R., & Teal, A. (2025). Primary Care Considerations for Youth Martial Arts Athletes. Current Reviews in Musculoskeletal Medicine, 18(3), 73–78. https://doi.org/10.1007/s12178-024-09942-7

du Preez, J., Jhala, P., & Lystad, R. P. (2022). Availability and content of concussion guidelines in Australian combat sports. Journal of Science and Medicine in Sport, 25(10), 800–804. https://doi.org/10.1016/j.jsams.2022.07.005

Feddersen, N. B., Keis, M. A. B., & Elbe, A. (2021). Coaches' perceived pitfalls in delivering psychological skills training to high-level youth athletes in fencing and football. INTERNATIONAL JOURNAL OF SPORTS SCIENCE & COACHING, 16(2), 249–261. https://doi.org/10.1177/1747954120959524

Flores, M., Martin-Castellanos, A., Lopez-Torres, O., Fernandez-Elias, V., Garcia-Gonzalez, J., Mon-Lopez, D. (2024). Eating Behavior Disorders and Disordered Eating Habits in Spanish High-Performance Women's Olympic Wrestling Athletes. NUTRIENTS, 16(5). https://doi.org/10.3390/nu16050709

Hammami, N., Hattabi, S., Salhi, A., Rezgui, T., Oueslati, M., Bouassida, A. (2018). Combat sport injuries profile: A review. SCIENCE & SPORTS, 33(2), 73–79. https://doi.org/10.1016/j.scispo.2017.04.014

Huang, H., Lee, P., Lo, Y., Chen, I., Hsu, C. (2021). A Study on the Perceived Positive Coaching Leadership, Sports Enthusiasm, and Happiness of Boxing Athletes. SUSTAINABILITY, 13(13). https://doi.org/10.3390/su13137199

Jagim, A., Moschelli, J., Woodroffe, L., Horswill, C., Bloomfield, S., Oppliger, R. (2024). Contemporary Issue: Health and Safety of Female Wrestlers. CURRENT SPORTS MEDICINE REPORTS, 23(7), 262–269. https://doi.org/10.1249/JSR.0000000000001183

Kasper, A., Crighton, B., Langan-Evans, C., Riley, P., Sharma, A., Close, G., Morton, J. (2019). Case Study: Extreme Weight Making Causes Relative Energy Deficiency, Dehydration, and Acute Kidney Injury in a Male Mixed Martial Arts Athlete. INTERNATIONAL JOURNAL OF SPORT NUTRITION AND EXERCISE METABOLISM, 29(3), 331–338. https://doi.org/10.1123/ijsnem.2018-0029

Kent, S., McKenna, J., Mellalieu, S. (2024). Two on a tightrope: The stress experiences of the romantic partners of professional athletes. JOURNAL OF APPLIED SPORT PSYCHOLOGY. https://doi.org/10.1080/10413200.2024.2428656

Khitaryan, D., Stepanyan, L., & Lalayan, G. (2023). Exploring age-related psychophysiological patterns in bullying behaviors: An investigation of adolescent judokas. Journal of Physical Education and Sport, 23(10), 2842–2852. https://doi.org/10.7752/jpes.2023.10325

Lakicevic, N., Roklicer, R., Bianco, A., Mani, D., Paoli, A., Trivic, T., Ostojic, S., Milovancev, A., Maksimovic, N., Drid, P. (2020). Effects of Rapid Weight Loss on Judo Athletes: A Systematic Review. NUTRIENTS, 12(5). https://doi.org/10.3390/nu12051220

Lystad, R., Alevras, A., Rudy, I., Soligard, T., Engebretsen. (2021). Injury incidence, severity and profile in Olympic combat sports: A comparative analysis of 7712 athlete exposures from three consecutive Olympic Games. BRITISH JOURNAL OF SPORTS MEDICINE, 55(19), 1077-+. https://doi.org/10.1136/bjsports-2020-102958

Malcolm, D., Papathomas, A., & Warden, C. (2023). Concussion in professional wrestling: Agency, structure and cultural change. Qualitative Research in Sport, Exercise and Health, 15(5), 585–600. https://doi.org/10.1080/2159676X.2023.2175898

Manaseer T, Al-Nassan SM, & Taifour AM. (2024). The knowledge and attitude concerning sport-related concussion among coaches: A survey study. The South African Journal of Physiotherapy, 80(1), 1955. https://doi.org/10.4102/sajp.v80i1.1955

Martínková, I. (2020). Open Categories in Sport: One Way to Decrease Discrimination. SPORT ETHICS AND PHILOSOPHY, 14(4), 461–477. https://doi.org/10.1080/17511321.2020.1772355

Mathisen, T. F., Kumar, R. S., Svantorp-tveiten, K. M. E., & Sundgot-borgen, J. (2022). Empowered, Yet Vulnerable: Motives for Sport Participation, Health Correlates, and Experience of Sexual Harassment in Female Combat-Sport Athletes. Sports, 10(5). https://doi.org/10.3390/sports10050068

Nalepa B, Alexander A, Schodrof S, Bernick C, & Pardini J. (2017). Fighting to keep a sport safe: Toward a structured and sport-specific return to play protocol. The Physician and Sportsmedicine, 45(2), 145–150. https://doi.org/10.1080/00913847.2017.1288544

Neidecker, J., Sethi, N., Taylor, R., Monsell, R., Muzzi, D., Spizler, B., Lovelace, L., Ayoub, E., Weinstein, R., Estwanik, J., Reyes, P., Cantu, R., Jordan, B., Goodman, M., Stiller, J., Gelber, J., Boltuch, R., Coletta, D., Gagliardi, A., … Inalsingh, C. (2019). Concussion management in combat sports: Consensus statement from the Association of Ringside Physicians. BRITISH JOURNAL OF SPORTS MEDICINE, 53(6), 328–333. https://doi.org/10.1136/bjsports-2017-098799

Ouergui I, Franchini E, Selmi O, Levitt DE, Chtourou H, Bouhlel E, & Ardigò LP. (2020). Relationship between Perceived Training Load, Well-Being Indices, Recovery State and Physical Enjoyment during Judo-Specific Training. International Journal of Environmental Research and Public Health, 17(20). https://doi.org/10.3390/ijerph17207400

Patenteu, I., Gawrych, R., Bratu, M., Vasile, L., Makarowski, R., Bitang, A., Nica, S. (2024). The role of psychological resilience and aggression in injury prevention among martial arts athletes. FRONTIERS IN PSYCHOLOGY, 15. https://doi.org/10.3389/fpsyg.2024.1433835

Piussi R, Engström M, Prill R, Hägglund M, Ivarsson A, Samuelsson K, Holmberg HC, & Hamrin Senorski E. (2025). From the mat to mastery: A Judoka's quest in the wake of injury—Professional Judokas' experiences of suffering an anterior cruciate ligament injury. BMJ Open Sport & Exercise Medicine, 11(1), e002319. https://doi.org/10.1136/bmjsem-2024-002319

Pocecco, E., Schneider, F., Stavrinou, P., De Crée, C., Burtscher, J. (2024). Fasting in Judo-Between Healthy Weight Control and Health Hazard: A Narrative Review. OBESITIES, 4(4), 453–467. https://doi.org/10.3390/obesities4040036

Ranaweera, L., Kumari, M., Samaraweerachchi, U. (2020). Injuries at the National Sport Festival Taekwondo Championship in Sri Lanka. MEDICINA DELLO SPORT, 73(1), 96–106. https://doi.org/10.23736/S0025-7826.20.03596-6

Reale, R., Slater, G., Burke, L. (2017). Individualised dietary strategies for Olympic combat sports: Acute weight loss, recovery and competition nutrition. EUROPEAN JOURNAL OF SPORT SCIENCE, 17(6), 727–740. https://doi.org/10.1080/17461391.2017.1297489

Roklicer, R., Rossi, C., Bianco, A., Stajer, V., Ranisavljev, M., Todorovic, N., Manojlovic, M., Gilic, B., Trivic, T., Drid, P. (2022). Prevalence of rapid weight loss in Olympic style wrestlers. JOURNAL OF THE INTERNATIONAL SOCIETY OF SPORTS NUTRITION, 19(1), 593–602. https://doi.org/10.1080/15502783.2022.2119095

Sadek, Z., Mohsen, H., Yazbek, S., Nabulsi, Z., Sarraj, A., Hoteit, M. (2022). Dietary Supplements Use among Athletes in Lebanon: Knowledge, Attitudes, Practices, and Correlates. FOODS, 11(10). https://doi.org/10.3390/foods11101521

Sandford, G., Gill P., Morda R, & Jago A. (2021). Introducing the Martial Arts Inventory: Quantifying Student Training Experiences for Quality Control and Evidence of Efficacy. Perceptual and Motor Skills, 128(1), 200–219. https://doi.org/10.1177/0031512520946795

Santos, D., Yang W, & Franchini E. (2024). A scoping review of rapid weight loss in judo athletes: Prevalence, magnitude, effects on performance, risks, and recommendations. Physical Activity and Nutrition, 28(3), 1–12. https://doi.org/10.20463/pan.2024.0017

Singh, A. (2022). Kickboxing with Bourdieu: Heterodoxy, hysteresis and the disruption of 'race thinking'. ETHNOGRAPHY. https://doi.org/10.1177/14661381211072431

Song, M., Yoon, S., Choi, Y., Yoo, S. (2024). Analysis of Severe Spinal Injuries in Korean Elite Female Wrestlers. APPLIED SCIENCES-BASEL, 14(16). https://doi.org/10.3390/app14167250

Tabben, M., Augustovicová, D., Coquart, J., Alkhelaifi, K., Chamari, K., Arriaza, R., (2023). Karatekas educated on injury prevention and supported by fitness coaches are more likely to practise injury prevention. BIOLOGY OF SPORT, 40(1), 171–177.

Tjønndal, A. (2019). 'Girls Are Not Made of Glass!': Barriers Experienced by Women in Norwegian Olympic Boxing. SOCIOLOGY OF SPORT JOURNAL, 36(1), 87–96. https://doi.org/10.1123/ssj.2017-0130

Tuakli-Wosornu, Y. A., Burrows, K., Fasting, K., Hartill, M., Hodge, K., Kaufman, K., Kavanagh, E., Kirby, S. L., MacLeod, J. G., Mountjoy, M., Parent, S., Tak, M., Vertommen, T., & Rhind, D. J. A. (2024). IOC consensus statement: Interpersonal violence and safeguarding in sport. British Journal of Sports Medicine, 58(22), 1322. https://doi.org/10.1136/bjsports-2024-108766

Vertonghen, J., & Theeboom, M. (2010). The social-psychological outcomes of martial arts practise among youth: a review. Journal of sports science & medicine, 9(4), 528–537.

Vitale, J., Bassani, T., Galbusera, F., Bianchi, A., Martinelli, N. (2018). Injury rates in martial arts athletes and predictive risk factors for lower limb injuries. JOURNAL OF SPORTS MEDICINE AND PHYSICAL FITNESS, 58(9), 1296–1303. https://doi.org/10.23736/S0022-4707.17.07536-3

Vveinhardt, J., Fominiene, V., Andriukaitiene, R. (2020). THE DARK SIDE OF SPORT: MANAGERIAL BULLYING AND HARASSMENT CHALLENGES IN DIFFERENT TYPES OF SPORTS. JOURNAL OF BUSINESS ECONOMICS AND MANAGEMENT, 21(6), 1525–1542. https://doi.org/10.3846/jbem.2020.13458

Witkowski, K., Piepiora, P., Gembalski, K. (2019). Prevention and treatment of injuries sustained in combat sports by adolescents aged 15-16. ARCHIVES OF BUDO SCIENCE OF MARTIAL ARTS AND EXTREME SPORTS, 15, 151–158.

Appendix

Author	Title	Theme(s)
Anderson et al. (2023)	Sport Structured Brain Trauma is Child Abuse	Brain injuries and concussions
Anyżewska et al. (2018)	Rapid Weight Loss and Dietary Inadequacies among Martial Arts Practitioners from Poland	Weight-cutting, eating disorders and supplement use
Berkovich et al. (2019)	Rapid Weight Loss in Competitive Judo and Taekwondo Athletes: Attitudes and Practices of Coaches and Trainers	Weight-cutting, eating disorders and supplement use
Boostani et al. (2011)	Investigation and comparison of aggression in Olympic and Non-Olympic athletes of sport fields	Interpersonal violence, bullying and discrimination
Brandt et al. (2018)	Body Weight and Mood State Modifications in Mixed Martial Arts: An Exploratory Pilot	Weight-cutting, eating disorders and supplement use
Brzezińska et al. (2018)	Musculoskeletal injuries in freestyle wrestling	Injuries and skin infections
Castor-Praga et al. (2021)	Multilevel Evaluation of Rapid Weight Loss in Wrestling and Taekwondo	Weight-cutting, eating disorders and supplement use
Ciaccioni et al. (2024a)	Judo for older adults: The coaches' knowledge and needs of education.	Coaches' roles and practitioners' well-being
Ciaccioni et al. (2024b)	Intergenerational Judo: Synthesising Evidence- and Eminence-Based Knowledge on Judo across Ages	Coaches' roles and practitioners' well-being
Dallam et al. (2024)	Interpersonal Violence in Elite U.S. Athletes: Prevalence and Mental Health Correlates	Interpersonal violence, bullying and discrimination
Davis et al. (2020)	Concussion Guidelines in National and International Professional and Elite Sports	Brain injuries and concussions
de Borja et al. (2025)	Primary Care Considerations for Youth Martial Arts Athletes	Injuries and skin infections; Brain injuries and concussions
Du Preez et al. (2022)	Availability and content of concussion guidelines in Australian combat sports	Brain injuries and concussions
Feddersen et al. (2021)	Coaches' perceived pitfalls in delivering psychological skills training to high-level youth athletes in fencing and football	Coaches' roles and practitioners' well-being
Flores et al. (2024)	Eating Behavior Disorders and Disordered Eating Habits in Spanish High-Performance Women's Olympic Wrestling Athletes	Weight-cutting, eating disorders and supplement use
Hammami et al. (2018)	Combat sport injuries profile: A review	Injuries and skin infections
Huang et al. (2021)	A Study on the Perceived Positive Coaching Leadership, Sports Enthusiasm, and Happiness of Boxing Athletes	Coaches' roles and practitioners' well-being
Jagim et al. (2024)	Contemporary Issue: Health and Safety of Female Wrestlers	Weight-cutting, eating disorders and supplement use
Kasper et al. (2018)	Case Study: Extreme Weight Making Causes Relative Energy Deficiency, Dehydration, and Acute Kidney Injury in a Male Mixed Martial Arts Athlete	Weight-cutting, eating disorders and supplement use
Kent et al. (2024)	Two on a tightrope: The stress experiences of the romantic partners of professional athletes.	Coaches' roles and practitioners' well-being.
Khitaryan et al. (2023)	Exploring age-related psychophysiological patterns in bullying behaviors: An investigation of adolescent judokas	Interpersonal violence, bullying and discrimination
Lakicevic et al. (2020)	Effects of Rapid Weight Loss on Judo Athletes: A Systematic Review	Weight-cutting, eating disorders and supplement use
Lystad et al. (2021)	Injury incidence, severity and profile in Olympic combat sports: A comparative analysis of 7712 athlete exposures from three consecutive Olympic Games	Injuries and skin infections
Malcolm et al. (2023)	Concussion in professional wrestling: Agency, structure and cultural change	Brain injuries and concussions
Manaseer et al. (2024)	The knowledge and attitude concerning sport-related concussion among coaches: A survey study	Brain injuries and concussions

Martínková (2020)	Open Categories in Sport: One Way to Decrease Discrimination.	Interpersonal violence, bullying and discrimination
Mathisen et al. (2022)	Empowered, Yet Vulnerable: Motives for Sport Participation, Health Correlates, and Experience of Sexual Harassment in Female Combat-Sport Athletes	Interpersonal violence, bullying and discrimination; Weight-cutting, eating disorders and supplement use
Nalepa et al. (2017)	Fighting to keep a sport safe: Toward a structured and sport-specific return to play protocol	Brain injuries and concussions
Neidecker et al. (2019)	Concussion management in combat sports: Consensus statement from the Association of Ringside Physicians	Brain injuries and concussions
Ouergui et al. (2020)	Relationship between Perceived Training Load, Well-Being Indices, Recovery State and Physical Enjoyment during Judo-Specific Training	Coaches' roles and practitioners' well-being.
Patenteu et al. (2024)	The role of psychological resilience and aggression in injury prevention among martial arts athletes	Injuries and skin infections
Piussi et al. (2025)	From the mat to mastery: A Judoka's quest in the wake of injury—Professional Judokas' experiences of suffering an anterior cruciate ligament injury.	Injuries and skin infections
Pocecco et al. (2024)	Fasting in Judo-Between Healthy Weight Control and Health Hazard: A Narrative Review	Weight-cutting, eating disorders and supplement use
Ranaweera et al. (2020)	Injuries at the National Sport Festival Taekwondo Championship in Sri Lanka	Injuries and skin infections
Reale et al. (2017)	Individualised dietary strategies for Olympic combat sports: Acute weight loss, recovery and competition nutrition	Weight-cutting, eating disorders and supplement use
Roklicer et al. (2022)	Prevalence of rapid weight loss in Olympic style wrestlers.	Weight-cutting, eating disorders and supplement use
Sadek et al. (2022)	Dietary Supplements Use among Athletes in Lebanon: Knowledge, Attitudes, Practices, and Correlates.	Weight-cutting, eating disorders and supplement use
Sandford et al. (2021)	Introducing the Martial Arts Inventory: Quantifying Student Training Experiences for Quality Control and Evidence of Efficacy.	Coaches' roles and practitioners' well-being
Santos et al. (2024)	A scoping review of rapid weight loss in judo athletes: Prevalence, magnitude, effects on performance, risks, and recommendations	Weight-cutting, eating disorders and supplement use
Singh (2022)	Kickboxing with Bourdieu: Heterodoxy, hysteresis and the disruption of 'race thinking'	Interpersonal violence, bullying and discrimination
Song et al. (2024)	Analysis of Severe Spinal Injuries in Korean Elite Female Wrestlers	Injuries and skin infections
Tabben et al. (2023)	Karatekas educated on injury prevention and supported by fitness coaches are more likely to practise injury prevention	Injuries and skin infections
Tjønndal (2019)	'Girls Are Not Made of Glass!': Barriers Experienced by Women in Norwegian Olympic Boxing	Interpersonal violence, bullying and discrimination; Coaches' roles and practitioners' well-being
Vitale et al. (2018)	Injury rates in martial arts athletes and predictive risk factors for lower limb injuries	Injuries and skin infections
Vveinhardt et al. (2020)	The dark side of sport: managerial bullying and harassment challenges in different types of sports	Interpersonal violence, bullying and discrimination
Witkowski et al. (2019)	Prevention and treatment of injuries sustained in combat sports by adolescents aged 15-16	Injuries and skin infections



SAFECOMBAT

Desk Research Report

1. Introduction

The Safe Combat project aims to promote safer sport environments for athletes in different combat sports and martial arts (CS&MA). For this purpose, a cross-national survey was conducted to map information and existing safeguarding practices across CS&MA disciplines, actors, and countries. Together with the literature review and focus group reports, these findings will inform the development of a Safeguarding Code and a Massive Open Online Course (MOOC). The present report summarizes the findings from the survey.

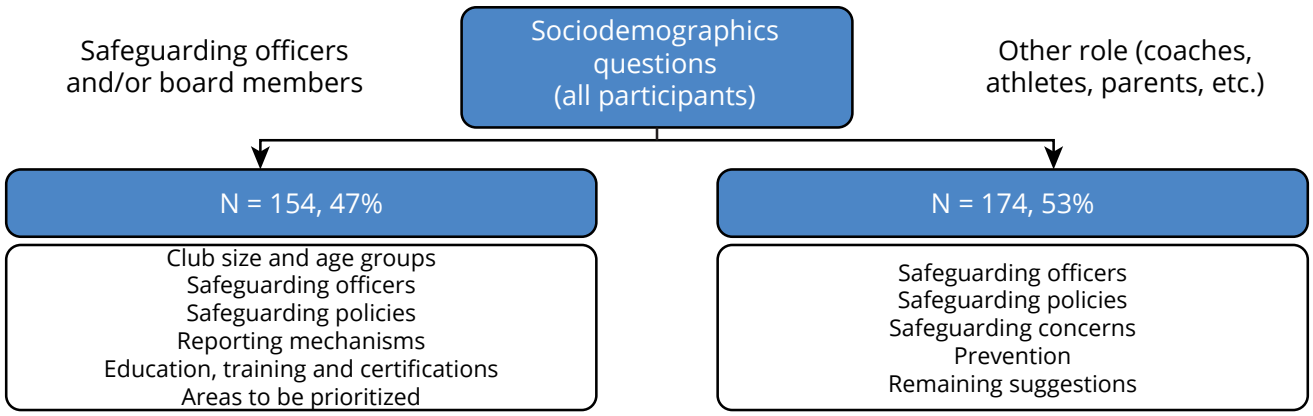
The questionnaire targeted a wide range of stakeholders, including athletes, coaches, referees, parents, board members, and safeguarding officers. It examined key areas such as the existence and accessibility of safeguarding policies, appointment and training of safeguarding officers, reporting mechanisms, education and training opportunities, and recruitment procedures for coaches. By gathering data from multiple roles within clubs, the study provides a multi-perspective understanding of safeguarding awareness, challenges, and priorities across combat sports and martial arts.

The survey results revealed significant variation in safeguarding structures and awareness across CS&MA clubs. Most participants reported having safeguarding policies in their clubs and appointed safeguarding officers, although visibility and implementation remain inconsistent. Limited financial and human resources were the most common barriers to appointing safeguarding officers or developing safeguarding policies within clubs.

While many participants recognized the importance of safeguarding, there were still gaps in knowledge and awareness, with some unsure about the existence or purpose of safeguarding measures. Reporting mechanisms were reported to be present in just over half of the clubs, and very few concerns had been formally reported in the past year, suggesting possible underreporting.

Training and screening practices varied widely, though many clubs required verification of coaching qualifications and criminal record checks. Overall, the findings indicate growing commitment toward safeguarding in CS&MA but highlight the need for clearer structures, improved education, enhanced visibility of safeguarding officers, and stronger monitoring and reporting systems.

Figure 1. Participants



2. Methods

The questionnaire (see Attachment 1) was developed for the purpose of mapping existing safeguarding practices in CS&MA in each partner country and beyond, identifying needs and informing the development a Safeguarding Code and a MOOC for CS&MA. The questionnaire was distributed between May and August 2025 by the partners of the Safe Combat project (The European Judo Union, Sport Evolution Alliance, WAKO Europe, Karate Federation of Republic of North Macedonia, and Sport Innovation Hub) through... to be answered by CS&MA stakeholders (e.g., athletes, coaches, parents, safeguarding officers, board members). Partners recruited participants through social media posts (e.g., posts on LinkedIn), email communication (e.g., email marketing, emails to clubs and national federations), messaging channels (e.g. WhatsApp, Telegram), and direct local networking.

The questionnaire consisted of three major parts. The first part of the questionnaire was applicable to all participants and contained demographic questions regarding participants' country represented, club represented, sport discipline represented, and their role within their club (safeguarding officer, board member, athlete, coach, etc.).

Following the initial demographic questions, the second and third parts of the questionnaire differed based on the participant's role within the club. Participants who identified as safeguarding officers and/or board members were directed to the second part of the questionnaire, focusing on organizational structures and club-level practices. Those who reported having a different role (such as athlete, coach, referee, parent, etc.) were guided to the third part of the questionnaire, which explored their individual experiences and perceptions of safeguarding within their clubs.

The main questions focused on the clubs' safeguarding policy (their existence or not, elements included, if its publicly available, etc.), safeguarding officers (if the clubs has an appointed safeguarding officer, their professional status, their certifications, etc.), reporting mechanisms (whether participants know how and where to report concerns), education and training (e.g., the existence of safeguarding programs available in their countries), as well as coach screening and recruitment procedures (criminal record checks, sexual abuse offenders list, first aid certification, degree requirements, etc.).

In total, 498 participants started the questionnaire. To be included in the analysis, participants had to provide their consent, complete the sociodemographic section and answer the initial questions of their assigned part of the questionnaire. Consequently, 158 participants were excluded because they did not complete sociodemographic questions, such as role description (n = 155) or country (n = 3).

In addition, 18 participants did not answer the initial questions of their assigned part of the questionnaire. Of these, 12 participants were excluded because they also failed to provide any responses to subsequent questions, while 6 participants were retained as they provided valid responses to later items. After these exclusions, the final analytic sample comprised 328 participants. Because some participants skipped individual questions, the total sample size varies across analyses, with the maximum available sample being N = 328.

Within the total sample included for statistical analyses, 154 participants (47%) were safeguarding officers and/or board members, while 174 participants (53%) held other roles in the club such as athlete, coach, referee, or parent, resulting in an almost equal (near 50/50) distribution between the two groups.

2.1 Statistical analyses

Data analysis was descriptive in nature. Frequencies and percentages were calculated to summarize participants' demographic characteristics and their responses across key domains, including safeguarding policies, officers, reporting mechanisms, and education/training practices. Because some participants skipped individual items, the analytic sample size varies across questions, with the maximum available sample being N = 328. To ensure transparency, varying sample sizes are reported alongside each result to reflect item-level dropout.

3. Results

3.1. Demographics

Participants were asked to indicate whether they represented any of the five partner countries involved in the project (Austria, Hungary, North Macedonia, Spain, and Portugal) or other. Out of the 5 listed countries, Portugal had the highest representation with 11.5% (n = 37/322), followed by Spain with 8.7% (n = 28/322) and North Macedonia with 8.1% (n = 26/322). Smaller contributions came from Hungary with 3.7% (n = 12/322) and Austria with 2.8% (n = 9/322). Overall, 65.2% (n = 210/322) of participants chose 'other' as their country, encompassing almost 30 different countries (see Attachment 2) across and beyond Europe. Out of those who selected 'other', a considerable proportion came from the UK (23%, n = 74/322), Ireland (7.5%, n = 24), Switzerland (6.2%, n = 20) and Germany (3.4%, n = 11/322). There were also a few participants from outside of Europe, representing countries such as Australia, Egypt, Porto Rico, and Tajikistan; each of these accounted for 0.4% (n = 1).

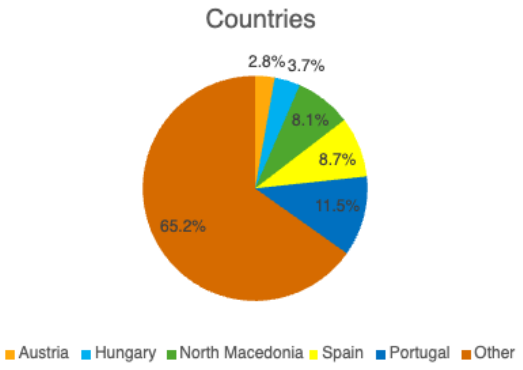


Figure 1 Countries represented by participants

The three most represented disciplines of CS&MA by participants included judo (50%, n = 164/328), followed by kickboxing (35.7%, n = 117/328), and karate (11.3%, n = 37/328). Other disciplines included: muaythai (2.4%, n = 8/328), taekwondo (1.5%, n = 5/328), kendo (0.9%, n = 3/328), wushu (0.9%, n = 3), wrestling (0.6%, n = 2/328), and others (8.2%, n = 27/328), such as boxing, mixed martial arts and Brazilian jiu jitsu.

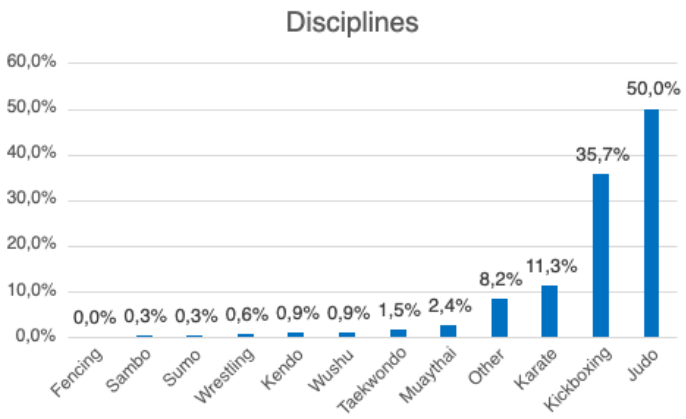


Figure 2 CS&MA disciplines represented by participants

In relation to the participant's role in the club, most answers came from those with 'another role in the club' (such as athletes, coaches, referees or parents) (53%, n = 174/328), as well as board members (22.9%, n = 75/328). The remaining answers came from safeguarding officers who were also board members (14.3%, n = 47/328) and safeguarding officers (9.8%, n = 32/328).

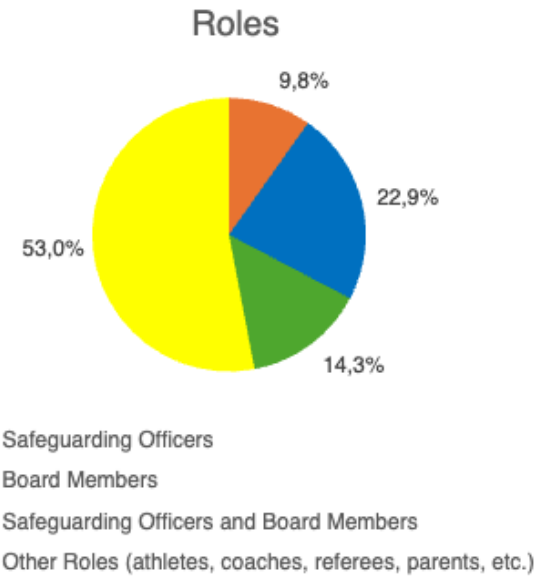


Figure 3 Roles represented by participants

3.2 Safeguarding Officers and/or Board Members

3.2.1 Club Size and Age Groups

Most safeguarding officers and/or board members (40.4%, n = 61/151) worked in clubs with more than 100 members. Out of the remaining participants, 25.8% (n = 39/151) indicated that their club had between 26 to 50 members, followed by 18.5% (n = 28) with 51 to 100 members, and, lastly, 15.2% (n = 23/151) responded that their club has between 0 and 25 members. Most of the clubs where safeguarding officers and/or board members are currently active cover all age groups, as seen in Figure 4.

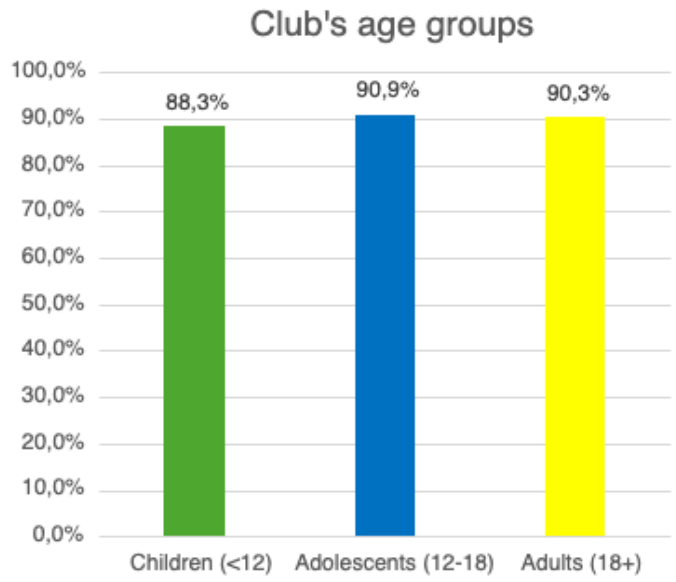


Figure 4 Club's age groups

3.2.2 Safeguarding Officers

Most participants reported that their club had an appointed safeguarding officer (63.8%, n = 97/152). Most participants (79.3%, n = 69/87) also reported that the name and contact information of the safeguarding officer are publicly available (e.g. via the club's website). The most common professional status of the safeguarding officer is voluntary (79.4%, n = 77/97), whereas only 3.9% (n = 6/97) is a full-time paid employee (Figure 5).

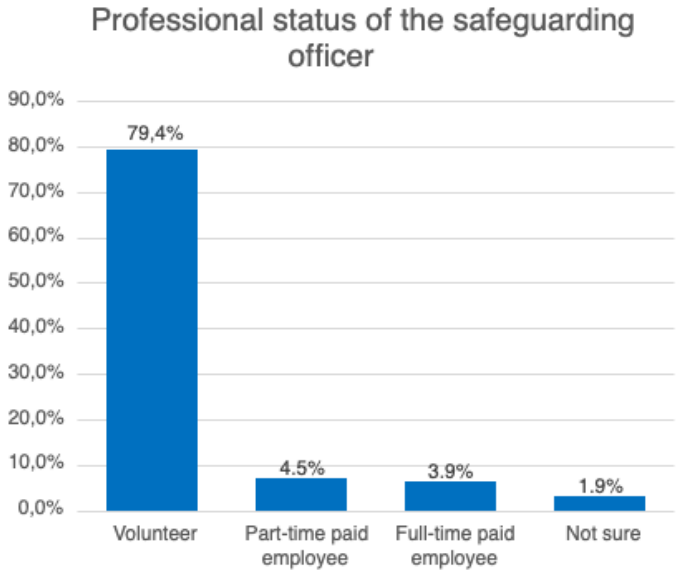


Figure 5 Professional status of the safeguarding officer

Of the safeguarding officers, most (74.2%, n = 69/93) completed a certified training to become a trained safeguarding officer. These training courses varied between IOC Certificate Safeguarding Officer in Sport (27.5%, n = 19/69), FIFA Guardians (2.9%, n = 2/69) and 'others' (56.5%, n = 39/69), mentioning courses such as the British Judo Association Training and the Vlaamse Trainerschool.

Almost 70% of safeguarding officers (67.1%, n = 55/82) have an additional role in their club. The roles varied, with most including leadership positions (e.g., board member or president of the club) and sport-related roles (e.g., coach or assistant coach).

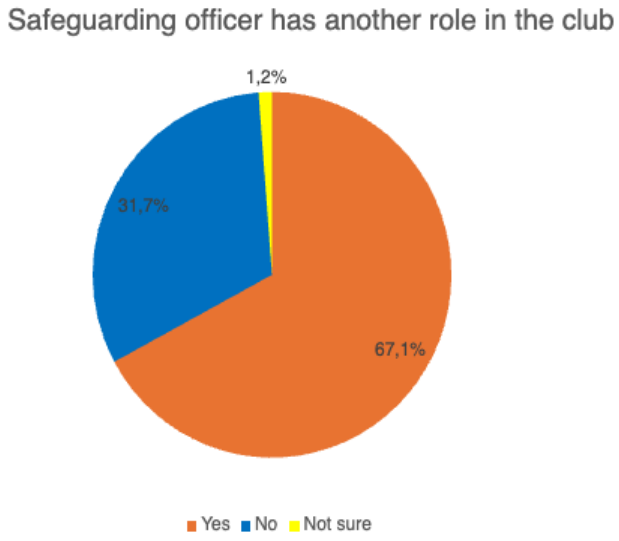


Figure 6 Whether safeguarding officer has another role in the club

For those clubs that did not yet have an appointed safeguarding officer, they also reported on the main barriers for the club to appoint a safeguarding officer. Barriers included limited financial resources (70.4%, n = 19/27), challenging to find individuals with the right qualifications (51.9%, n = 14/27), potential candidates not having enough time for this role (48.1%, n = 13/27), being hard to implement the position of a safeguarding officer (25.9%, n = 7/27) and the club not being focused on safeguarding (14.8%, n = 4/27). A bit more than one third of participants (37%, n = 10/27) reported other barriers than those predefined in the alternatives, including absence of knowledge on safeguarding, with one participant stating that "*I don't really know what safeguarding is*", whereas another said that "*there is no need for that so far*".

3.2.3 Safeguarding Policies

The majority of participants (86.7%, n = 104/120) recognized the value and importance of safeguarding in sport activities. However, 12.5% (n = 15/120) said they are not sure, and 0.8% (n = 1/120) did not recognize its importance.

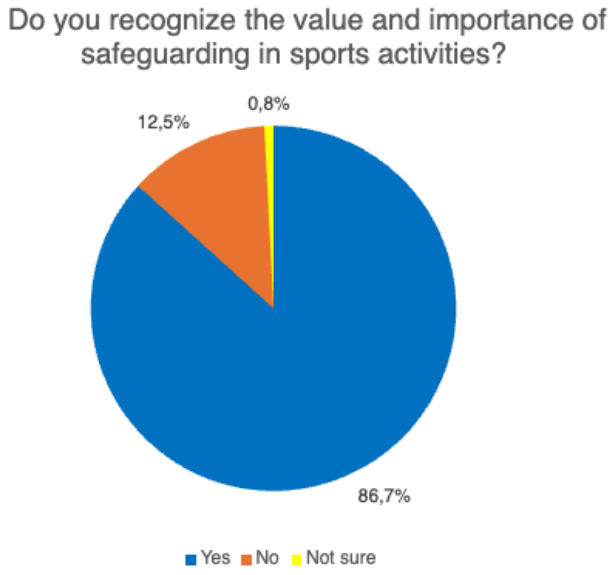


Figure 7 Whether participants recognize the value and importance of safeguarding in sports activities

Most participants (65.6%, n = 80/122) responded that their club

has a safeguarding policy in place, but 25% (n = 18/72) of them are not publicly available. In addition to that, most clubs (79,5%, n = 58/73) received training or information about safeguarding policies or procedures, ranging from only once to regular. However, approximately one fifth of participants (20.5%, n = 15/73) answered that their club has not received any training or information in this regard, as seen in Figure 8.

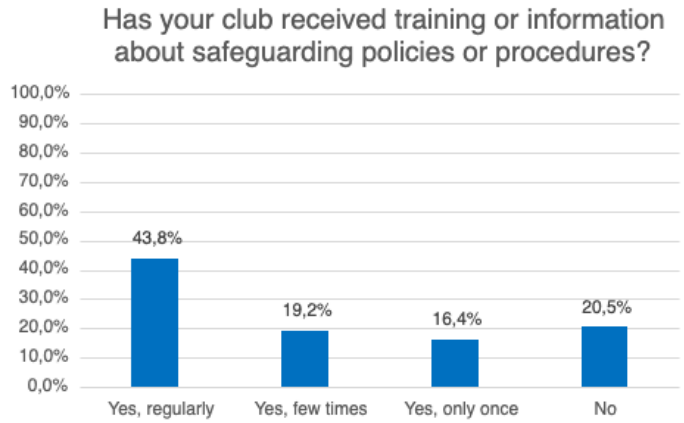


Figure 8 Whether participants' clubs have received training or information about safeguarding policies or procedures

When participants reported that their club had a policy in place, the most common elements included were a code of conduct with a description of the standards of behavior that apply (78.8%, n = 63/80); the club commitment towards safeguarding, such as a statement to keep everybody safe and the importance of safeguarding (75%, n = 60/80); and a description to whom the policy and procedures apply to (61.3%, n = 49/80).

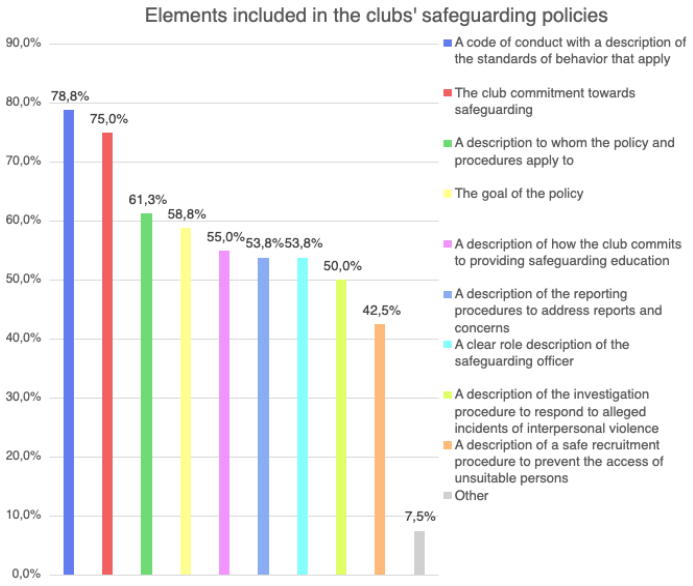


Figure 9 Elements included in the club's safeguarding policies

The people to whom the policies apply are usually the athletes (76.3%, n = 61/80) and coaches (76.3%, n = 61/80), followed by volunteers (65%, n = 52/80), referees (53.8%, n = 43/80), parents (52.5%, n = 42), officials (40.0%, n = 37/80), and supporters (46.3%, n = 32/80). A smaller proportion (12.5%, n = 10/80) selected "others." In this category, some participants explained in the text box that their safeguarding policies apply to everyone involved with the club — and in some cases, even to external partners or individuals affiliated with the club. More than half of the policies are monitored (70.3%, n = 45/64), regularly reviewed/updated (60.9%, n = 39/64), and evaluated (54%, n = 34/63).

When it comes to the main challenges their clubs face when it comes to developing and implementing a safeguarding policy, the answer most often pointed out was limited resources (e.g., financial, staff, time) (50%, n = 21/42), no clear understanding of the importance/priority to the topic of safeguarding (35.7%, n = 15/42) and lack of knowledge or training on safeguarding (28.6%, n = 12/42). The least selected option was lack of support from leadership or key stakeholders (2.4%, n = 1/42). An additional 7.1% (n = 3/42) selected 'other'; however, the explanations provided (e.g., references to policy development or ethical commitments) did not directly describe challenges faced.

When asked what would help their club more easily develop, adapt, and implement safeguarding policies, participants placed the highest value on two factors: training and education on safeguarding, and clear guidelines and templates. Each of these options was chosen by 50% of participants (n = 21/42). This was closely followed by resources (financial, staff, time) (46.6%, n = 20/42). The least selected options were support from a sports governing body (31%, n = 13/42) and consultations with experts in safeguarding (21.4%, n = 9/42). An additional 2.4% (n = 1/42) selected 'other', however, the explanation provided (e.g., a note on how trainers in their club are busy with the safety of the club's members) did not address the question regarding what would help clubs develop, adapt, or implement safeguarding policies.

3.2.4 Reporting Mechanisms

Participants were asked about the reporting mechanisms and procedures within the club, with a focus on clear, published procedures that provide step-by-step guidance on what action to take if there are concerns about an individual's safety or well-being. The majority of participants (57.8%, n = 59/102) reported that their clubs have such mechanisms and procedures. On the other hand, 31.4% (n = 32) of participants reported that their club does not have reporting mechanisms and procedures, and 10.8% (n = 11) were not sure.

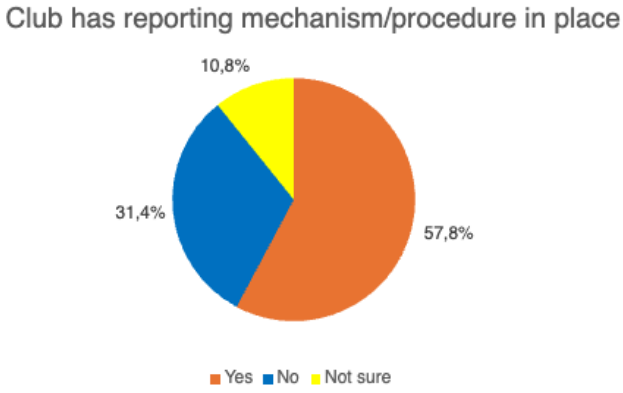


Figure 10 Whether participants' clubs have reporting mechanisms or procedures in place for safeguarding concerns

In most cases (80.4%, n = 45/56), incoming safeguarding concerns are managed by the designated safeguarding officer. In the remaining 19.6% (n = 11), these concerns are handled by someone else, for instance, the club president or someone with a directive role within the club.

Whereas 79.2% (n = 42/53) of participants reported that their club received 0 concerns in the past year, 15% (n = 8/53) said their clubs received between 1 to 10 reported concerns in the last year, and 5.7% (n = 3/53) received more than 10.

When asked about the biggest challenges participants currently face in responding to safeguarding concerns, they provided open-text responses covering a wide range of issues. Many cited a lack of personnel, institutional support, and resources, as well as limited understanding of safeguarding and reluctance among individuals to report incidents. Other challenges mentioned included the number of injuries sustained by practitioners and peer-to-peer bullying.

The main barriers reported by participants for installing a reporting mechanism/procedure were limited resources (e.g., financial, staff, time) (51.2%, n = 22/43), the belief that safeguarding is not a priority (30.2%, n = 13/43), lack of knowledge or training on how to implement such mechanisms (25.6%, n = 11/43), and the absence of a safeguarding officer (23.3%, n = 10/43). Other additional barriers reported by participants were that "*everything looks good on paper*" but highlighted that "*sometimes practice is better than policies that look good but are not enforced*".

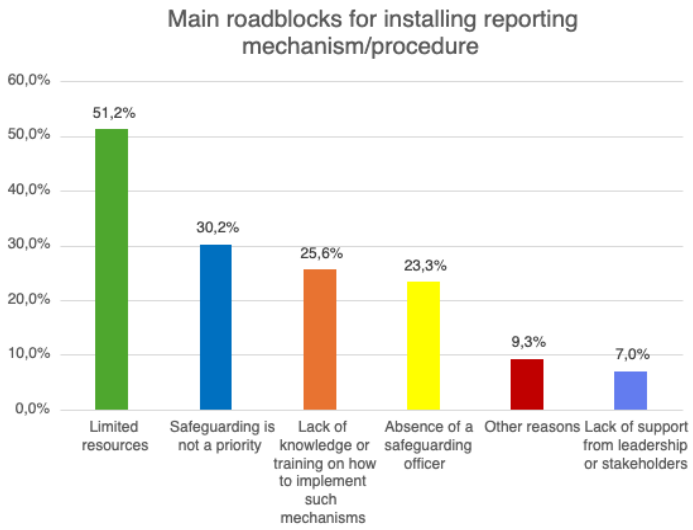


Figure 11 Main roadblocks for installing reporting mechanism or procedure

3.2.5 Education, training and certifications

In terms of education and training, 54.2% (n = 52/96) of participants indicated that they were aware of educational or training programs in their country aimed at fostering and ensuring safe sport environments, either already in place or planned for implementation. Participants mainly mentioned varied national/regional programs. Meanwhile, 33.3% (n = 32) reported not being aware of such programs, and 12.5% (n = 12) stated that no such programs exist in their country.

Most participants reported that safeguarding education, training, or workshops had been attended by either part of the technical staff (45.8%, n = 44/96) or the entire technical staff (25%, n = 24/96). In contrast, 17.7% (n = 17/96) indicated that no one from the technical staff had ever participated, while 11.5% (n = 11/96) were unsure.

When asked about the use of screening systems in the employment of coaches, 64.6% of participants (n = 62/96) reported that their clubs have such systems in place. In contrast, 26% (n = 25/96) indicated that no screening system exists in their club, while 9.4% (n = 9/96) were unsure.

The most reported screening system was verification of coaching degrees or certification requirements (79%, n = 49/62). This was followed by criminal record checks (69.4%, n = 43/62) and checks against a sexual abuse offenders list (46.8%, n = 29/62). A smaller proportion (16.1%, n = 10/62) selected the "Other" option, in which participants mentioned that their clubs require valid first-aid certifications for coaches, offer internal training courses (also open to non-trainers), conduct trial training sessions with new coaches, and provide supervision during initial training sessions.

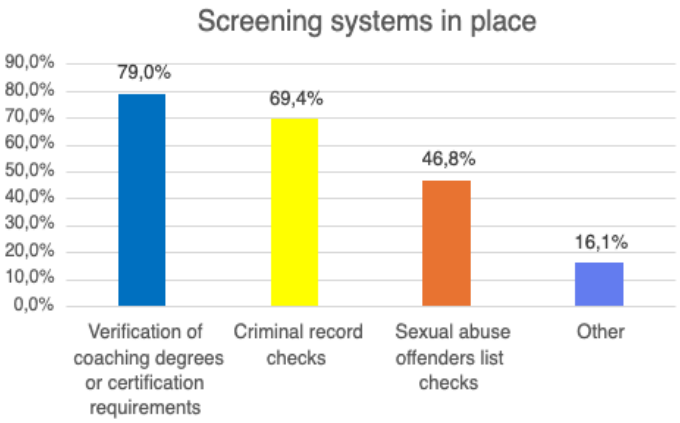


Figure 12 Screening systems in place

Regarding whether screening systems are mandatory, 80.3% of participants (n = 49/61) reported that these measures are required in their clubs. In contrast, 13.1% (n = 8/61) said they are not mandatory, and 6.6% (n = 4/61) were unsure.

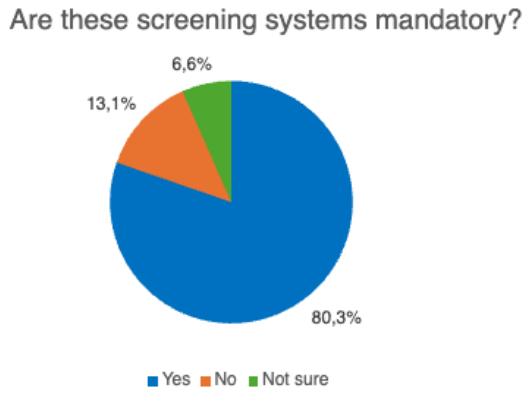


Figure 13 Whether screening systems in place are mandatory

3.2.6 Areas to be prioritized according to safeguarding officers and/or board members

At the end of the questionnaire, participants were invited to share what they believe deserves more attention in their club when it comes to safeguarding. Their suggestions reflected a strong desire for clearer structures, better communication, and greater inclusivity. Participants stressed the importance of embedding safeguarding into the everyday culture of the club, ensuring that rules are not only written, but also understood and applied consistently by everyone. Other suggestions included:

- Mandatory and regular background checks for coaches, board members, and volunteers.
- Verification of coaching qualifications, particularly for those working with children.
- Development and enforcement of a code of conduct not only for coaches, but also for athletes and parents.
- More frequent and comprehensive training on safeguarding, particularly on identifying and reporting concerns.
- Simplified and transparent safeguarding procedures that all members can easily understand and feel supported.

- Enforcing child protection protocols.
- Creating an atmosphere where female participants feel welcome and safe.
- Improved privacy and confidentiality in reporting mechanisms.

3.3 Other Members of the Club (Athletes, Coaches, Parents, Referees, etc.)

In the next section the emphasis lies on how other club members, next to the safeguarding officer and board members, perceive the different safeguarding elements in their club.

3.3.1 Safeguarding Officers

When asked whether their club has an appointed safeguarding officer, 46.2% of participants (n = 80/173) responded yes. In contrast, 28.3% (n = 49/173) said their club does not have one, while 25.4% (n = 44/173) were unsure, as seen in Figure 14. Out of those who have a safeguarding officer within their club, 25.3% (n = 19/75) said they had contacted this person in case of a concern or a complaint. The large majority (72%, n = 54/75), had never done so, and 2.7% (n = 2/75) were unsure.

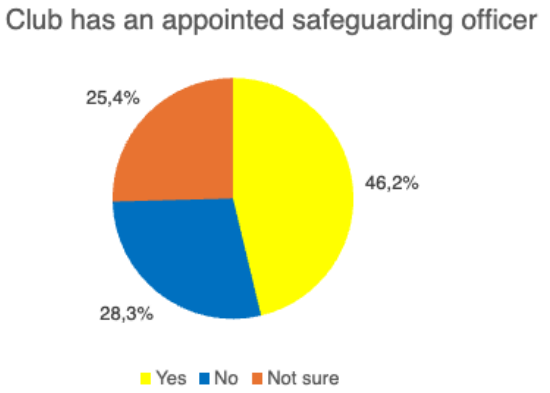


Figure 14 Whether participants' clubs have an appointed safeguarding officer

When it comes to the visibility of safeguarding officers, 69.9% (n = 51/73) reported that the name and contact information of the safeguarding officer is publicly available at their club, for instance through the club's website. However, 12.3% (n = 9/73) said this information is not available, and the remaining 17.8% (n = 13/73) were not sure.

3.3.2 Safeguarding Concerns

When faced with a safeguarding concern or complaint, 69.7% of participants (n = 53/76) reported that they knew who to contact within their club, whereas 11.8% (n = 9/76) said they did not know, and 18.4% (n = 14/76) were unsure.

In terms of actual experience, 33.8% (n = 27/80) of participants said they had previously contacted someone in the club regarding a concern or complaint. The majority, 65% (n = 52/80), had never done so, and 1.3% (n = 1/80) were unsure.

When asked about the reasons why they might not report a concern, the most frequently selected option was not knowing how or where to report (24.7%, n = 43/174). This was followed by 23% (n = 40/174) who said they were unsure why they wouldn't report, and 16.7% (n = 29/174) who selected a lack of trust amongst the reasons. Other reasons included fear of consequences (14.9%, n = 26/174) and 'Other' (15.5%, n = 27/174), with explanations such as not being taken seriously or fear of creating discomfort between colleagues. Language barriers were the least selected reason (2.3%, n = 4/174).

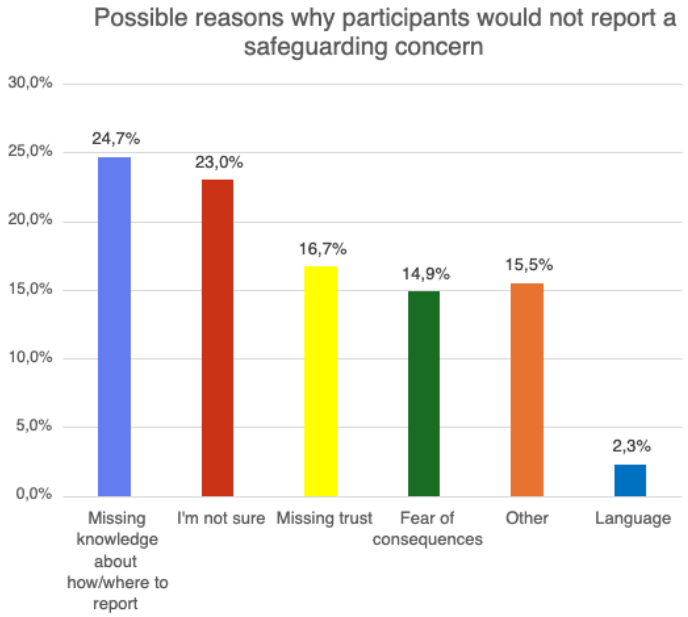


Figure 15 Possible reasons for not reporting a safeguarding concern

Participants were also asked to identify which situations they consider to be safeguarding concerns. The most selected issue was bullying or harassment by a coach, peer, or other individual (61.5%, n = 107/174). Other frequently selected concerns included unsafe sport environments (e.g., old or damaged equipment) with 52.9% (n = 92/174), lack of proper medical care (e.g., training with injuries) with 52.3% (n = 91/174), excessive pressure to perform with 49.4% (n = 86/174), and rapid or uncontrolled weight loss (i.e., before or during game or competition), with 44.3% (n = 77/174). Less frequently selected concerns included disagreements between teammates (17.2%, n = 30/174), 'I'm not sure' (8.6%, n = 15/174), and 'Other' (4.6%, n = 8/174). In the open-text responses, participants mentioned additional concerns such as injuries, lack of equipment, and, in one case, "*kids receiving brain damage by design*".

3.3.3 Prevention

Participants were also invited to share their suggestions on how clubs can prevent safeguarding issues. Their responses emphasized both structural and cultural changes. Many pointed to the need for designated safeguarding officers, clear protocols, and education and training for all involved. Other suggestions included:

- Ensuring both male and female leadership.
- Holding seminars on appropriate behavior in different roles.
- Creating clear guidelines, codes of conduct, and reporting procedures.
- Promoting a culture of open communication, involving parents.
- Conducting background checks and installing security cameras in the clubs.
- Ensuring proper equipment use and safety.
- Providing education on sensitive topics, such as weight management.
- Removing head contact for children.

3.3.4 Safeguarding Policy

When it comes to participants being aware of whether their club has a safeguarding policy in place, 55% (n = 71/129) confirmed a policy is present in their club. However, 14.7% (n = 19/129) said their club did not have it, and 30.2% (n = 3/129) were unsure. When participants reported a policy was in place, most of the time (80%, n = 56/70), the safeguarding policy was publicly available

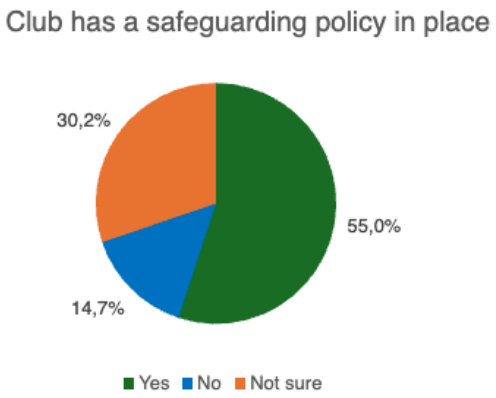


Figure 16 Whether participants' clubs have a safeguarding policy in place

The platforms through which the policy can be accessed are varied. Almost one third of participants (32.1%, n = 18/56) said it is available via social media, while 25% (n = 14/56) said it is available on the club's website. A further 19.6% (n = 11/56) of participants said it is available via education through webinars and workshops, 14.3% (n = 8/56) reported it to be available via newsletter and 7.1% (n = 4/56) reported it to be available via awareness raising activities. In addition, 28.6% (n = 16/56) of participants mentioned it was available in 'other way', and most specified it by saying it was physically found in the club (e.g., displayed on walls, printed on the club noticeboard, copies available at the club's office).

Regarding to whom the safeguarding policy applies, participants' answers showed that athletes and coaches are the most common groups, with 81.7% (n = 58/71) and 78.9% (n = 56/71) respectively. They are followed by volunteers, with 60.6% (n = 43/71), parents, with 59.2% (n = 42/71), and referees, with 54.9% (n = 39/71). Officials and supporters are at the bottom, with 50.7% (n = 36/71) and 49.3% (n = 35/71) respectively.

When participants were asked if they thought it would be beneficial for their club to implement a safeguarding policy, 71.4% (n = 40/56) said yes, 1.8% (n = 1/56) said no, and 26.8% (n = 15/56) were not sure.

3.2.5 Remaining suggestions made by club members

At the end of the questionnaire, participants could share additional comments. The messages revolved around:

- The fundamental need of a Safeguarding Policy with clear guidelines and standards applied to all those involved with the club
- A Safeguarding Policy that avoids unnecessary bureaucracies
- Education and periodical seminars and discussions about safeguarding
- Safeguarding officers and coaches' mandatory attendance to safeguarding courses
- Importance of financial support

4. Conclusions and recommendations

The survey findings highlight significant progress within combat sports and martial arts (CS&MA) clubs regarding safeguarding awareness and structures, while also exposing key inconsistencies and gaps that warrant attention. By comparing responses between the two parts of the questionnaire (one part for safeguarding officers and/or board members, and another part for other members of the club), a clearer picture emerges of both alignment and disconnection in safeguarding perceptions and implementation.

1. Appointing safeguarding officers and making them visible

The majority of safeguarding officers and/or board members (63.8%) confirmed that their club has an appointed safeguarding officer. On the other hand, less than half of other members (46.2%) reported the same. This may suggest a limited visibility of existing safeguarding officers. In this sense, almost one third of participants who were other members of the club (30.1%) answered that the name and contact information of their safeguarding officer is not publicly available, or they are not sure about it.
Recommendation: every club should formally appoint and publicize the contact details of at least one trained safeguarding officer. Visibility measures (e.g., posting contact details at the club, adding information to websites or event materials) are essential to build trust and encourage reporting of concerns.

2. Strengthening policy awareness and accessibility

The majority of safeguarding officers and/or board members (65%) as well as club members (55%) reported that their clubs have a safeguarding policy in place. However, 25% of safeguarding officers and/or board members reported that these policies are not publicly available. Among club members, 30.2% was unsure whether such policy existed. These results underscore the need for improved visibility and internal dissemination of safeguarding policies within clubs.
Recommendation: clubs should ensure that safeguarding policies are clearly communicated to all members, through websites, noticeboards, and onboarding processes. These policies should be regularly reviewed during meetings or training sessions, ensuring that everyone understands the groups to whom the policies are applied to.

3. Ensuring regular monitoring and review of safeguarding policies

Findings from participants who were safeguarding officers and/or board members indicates that while a majority of clubs monitor (70.3%), regularly review or update (60.9%), and evaluate (54%) their safeguarding policies, a considerable proportion still do not engage in these essential practices. This means that nearly one in three clubs do not monitor their policies; two in five fail to review or update them regularly, and almost half do not evaluate their effectiveness. These gaps suggest that safeguarding policies may become outdated or inconsistently applied over time.
Recommendation: clubs should establish a fixed and mandatory review cycle for their safeguarding policies (e.g. on a biannual basis) to ensure they remain current, effective, and aligned with national and international safeguarding standards. In terms of monitoring, each club could schedule annual reports by their safeguarding officers or directors, summarizing the number and types of safeguarding concerns raised, how they were managed, and patterns or challenges identified. This documentation can then be used for evaluation purposes, assessing the policy's outcomes and areas that need improvements.

4. Enhancing safeguarding awareness and education

Although most participants who were safeguarding officers and/or board members (86.7%) recognized the value and importance of safeguarding in sport activities, a small proportion expressed uncertainty or lack of awareness, with one participant openly stating they don't know what safeguarding is and another considering that there is no need for it so far. This sheds light to the fact that there are people inside the clubs that don't see the value in safeguarding and hints to the possibility that more knowledge on the meaning of safeguarding can be offered.
Recommendation: safeguarding education should be continuous and inclusive, targeting all club members regardless of position. Introductory workshops, short online modules, and awareness campaigns can strengthen understanding of what safeguarding entails, why it matters, and how to act when concerns arise. Training should also be delivered in formats that are accessible and relevant to all members, ensuring the content feels applicable to their roles and experiences.

5. Addressing underreporting and strengthening reporting mechanisms

A striking finding across responses is the very low number of reported safeguarding concerns, with 79.2% of safeguarding officers and/or board members indicating that their clubs had not received any concerns in the previous year. Given the often hidden nature of abuse, relying solely on reported cases for sensitive offences (such as interpersonal violence) has its limitations[1]. While this might reflect genuinely safe environments, it might also reflect underreporting, driven by limited awareness of reporting channels, lack of trust, or fear of repercussions.

Open-text responses further highlighted a lack of dedicated personnel and reluctance among individuals to report incidents, both of which reinforce the possibility of underreporting.

Recommendation: establishing confidential, accessible, and well-publicized reporting systems is crucial. Clubs should adopt clear step-by-step procedures for handling concerns and actively communicate these processes. Providing assurance against retaliation and offering support for those who report, fostering a more transparent reporting culture.

6. Building capacity and resources

Across questions, limited financial and human resources repeatedly emerged as a barrier. Many clubs operate with volunteers, making it difficult to implement safeguarding measures.

Recommendation: national federations and umbrella organizations could provide structural support through shared safeguarding frameworks, templates, and funding opportunities. Centralized training resources, online tools, and standardized policy models can help smaller clubs meet safeguarding standards efficiently.

7. Strengthening screening procedures

The findings reveal that 64.6% of clubs have screening systems in place for coaches, with the most common measures being verification of qualifications (79%), criminal record checks (69.4%), and checks against sexual abuse offender lists (46.8%). However, this leaves a significant proportion of clubs without consistent vetting practices, particularly regarding background and offender list checks. Moreover, 13.1% of clubs indicated that these screening procedures are not mandatory, potentially leaving gaps in athlete protection.

Recommendation: clubs should be required to implement comprehensive and mandatory screening systems for all technical and leadership positions. This should include criminal record checks, verification of qualifications, and valid certifications (e.g. first aid certifications). National federations should provide clear guidance and support to ensure that these procedures are uniformly applied and regularly updated across all clubs.

5. Next steps

Building on the insights gathered throughout this report, the Safe Combat project will translate these findings into concrete tools to strengthen safeguarding in CS&MA. The next phase of the project will focus on the development of a safeguarding code, designed to establish clear and consistent standards that all CS&MA clubs can adopt and implement. This code will draw directly from the survey results, ensuring that it reflects the real challenges, priorities, and needs expressed by clubs and their members.

To support the implementation of the code, the project will also create a massive online open course (MOOC), offering accessible training on safeguarding principles and practices. Clubs that engage with the course and adopt the safeguarding code will be certified. The certification serves to recognize their commitment to creating safer environments within CS&MA. Through these next steps, the Safe Combat project will help clubs build capacity, raise awareness, and ensure that safeguarding measures are understood and applied across all levels of participation.

1. Tuakli-Wosornu YA, Burrows K, Fasting K, et al. IOC consensus statement: interpersonal violence and safeguarding in sport. British Journal of Sports Medicine 2024;58:1322-1344.



SAFECOMBAT

Focus Groups Report

1. Background

Despite the potential for combat sports and martial arts (CS&MA) to promote benefits on practitioners' general health — such as better control of aggressive impulses2 and positive psychosocial development3 — they also present elevated safeguarding concerns due to sport-specific dynamics. CS&MA disciplines involve high tolerance for physical aggression, close contact, and hierarchical structures4. This provides an important context for understanding how safeguarding concerns, such as interpersonal violence, manifest within CS&MA.

Beyond interpersonal violence, other safeguarding concerns (including injuries, concussions, and weight cutting prior to competition) are also relevant within CS&MA safeguarding discussions. Recognizing this wide range of concerns is essential to understanding safeguarding within the sport-specific context of CS&MA. This broad understanding of safeguarding aligns with the International Olympic Committee's (IOC) emphasis that safeguarding includes the "promotion of holistic approaches to athlete welfare" and that organizations should "implement a full range of athlete safeguarding prevention and response policies and practices". In line with this, this report presents safeguarding discussions held with focus groups including participants from different countries around Europe, whose reflections encompass this broad range of safeguarding concerns.

The focus groups discussions were held with the primary objective of understanding the national frameworks of participating countries and the comprehension of CS&MA stakeholders regarding safeguarding. This fits into the broader Safe Combat project as a complementary document that, together with the Desk Research Report and the Literature Review Report, will inform the development of a safeguarding code for CS&MA across Europe, as well as the development of a massive online open course (MOOC).

A total of four focus groups were conducted across four different countries (Ireland, North Macedonia, Serbia and Portugal), involving key CS&MA stakeholders. Overall, the findings reveal that CS&MA stakeholders across countries share a deep concern for both the physical and psychological wellbeing of practitioners. Participants emphasized the importance of clear rules and boundaries, the lack of clear and trustable reporting channels, the central role of coaches in fostering safer environments, and the need for better education on issues such as safeguarding, injuries, concussions, and weight cutting.

The focus groups also revealed disparities in national safeguarding frameworks. While some contexts demonstrated established systems with designated safeguarding officers and clear escalation pathways (such as the case in Ireland), others rely primarily on informal practices, verbal rules, or general legislation. Despite these differences, stakeholders across all countries expressed a strong desire for clearer standards, more accessible reporting mechanisms, and multidisciplinary support structures, highlighting the relevance and timeliness of developing a European-wide safeguarding code for CS&MA.

2. Methods

A total of four focus groups were conducted across four different countries (Ireland, North Macedonia, Serbia and Portugal), representing partners from the Safe Combat project. With the goal of understanding the national frameworks of these countries and the comprehension of CS&MA stakeholders regarding safeguarding, the focus groups were the chosen method because they allow for the exploration of lived experiences, collective perceptions, and contextual nuances that may not be captured through quantitative approaches alone.

Prior to the focus groups discussions, facilitators received preparatory training through an online seminar and a 10-page guideline document with practical information and the script with the themes to be discussed and key questions to be asked. All four focus groups followed these standardized guidelines, which included: the overview document with practical information for the facilitators (Attachment 3), the information letter to recruit participants (Attachment 4), and the informed consent to ensure voluntary participation (Attachment 5).

The overview document included information regarding the aim of the focus groups (understanding participants' comprehension of safeguarding and the national framework of their countries), where it could take place (e.g. in person or online), the three themes and key questions to be asked, who could participate (CS&MA stakeholders, such as athletes, parents, coaches, and managers), target group size (8 to 10 participants), and estimated duration (approximately 110 minutes). This overview document also included practical information on how to organize the time throughout the discussions, prompt participants to engage deeper in the conversation, and ask open-ended questions in a trauma sensitive way, allowing participants to pause or withdraw their participation at any point.

The discussions were structured around the following three main themes: understanding safeguarding, available national frameworks, and future steps. Each theme included at least one key question, supported by possible sub questions to encourage reflection and keep the conversation aligned with the project's objectives.

Table 1. Overview of themes and questions

Theme	Questions
1. Understanding Safeguarding	**Q1.** What words come to mind when you think about a "safe combat sport environment" in your sport/club/organization?
2. National Frameworks	**Q2.** What are the current policies, rules, or procedures in your country about safeguarding? **Q3.** What are the current safeguarding policies, rules, or procedures in your club/organization/sport?
3. Looking Ahead	**Q4.** What changes or supports could help ensure a safer sport/club/organization for everyone? **Q5.** How could a European-wide safeguarding code help improve safety in your country and in your sport/club/organization?

The information letter was used to recruit participants and provide them with essential information about the focus groups. Those who expressed interest were then sent an informed consent form, which outlined the voluntary nature of participation, the confiden-

2. Twemlow, S. W., & Sacco, F. C. (1998). The application of traditional martial arts practice and theory to the treatment of violent adolescents. Adolescence, 33(131), 505–518.
3. Vertonghen, J., & Theeboom, M. (2010). The social-psychological outcomes of martial arts practise among youth: a review. Journal of sports science & medicine, 9(4), 528–537.
4. Avelar Rosa, B., & Nery, M. (2021). Safeguarding children and youth in martial arts and combat: The need for wide and systematic policies and pedagogic approaches. ICM Insight, 4, 5–8.

tiality of discussions, data protection measures, and contact information for local helplines in case of distress related to the topics discussed.

By obtaining informed consent from participants, confidentiality was guaranteed through ensuring that all data collected was anonymized and treated confidentially, without the use of real names. Anonymity in data was guaranteed by removing all identifying information from data sets and ensuring that data was only used for scientific purposes. These measures helped to ensure that the project was conducted ethically and responsibly, and that the rights and well-being of all participants were protected.

At the end, a total of 4 focus groups were conducted in 4 different countries, with almost 40 participants in total.

Table 2. Overview of focus groups characteristics

Partner	Country	Number of participants	Date	Language
WAKO	Ireland	5	02/09/2025	English
KFRSM	North Macedonia	10	27/09/2025	Macedonian
SEA	Portugal	11	09/10/2025	Portuguese and English
EJU	Serbia	10	13/10/2025	Serbian

3. Results

3.1 Theme 1: Understanding Safeguarding

Within the first theme, participants were invited to discuss what words come to mind when they think about a safe combat sport and martial arts environment in their sport/club/organization. They were also invited to mention what makes them feel safe and unsafe when practicing their sport discipline.

Participants mentioned words such as protection, protective equipment, fewer injuries, and control. Others explained their understanding of safeguarding with phrases, mentioning the importance of keeping aggression within boundaries and having clearly defined rules especially to "*blows to the head*" (in reference to strikes to the opponents' head). However, one participant underlined the importance of having rules "*not just written down on paper*" but also having them applied. The discussions also emphasized how important it is to clarify the rules for those engaging in CS&MA. This is relevant because, in the participants' words, you should know "*what you are getting yourself into*".

One participant also underscored the importance of ensuring not only rules, but also channels for athletes' voices to be heard, saying that "*It's not only about rules, but about knowing that if something feels wrong, we can speak up without consequences*". This was complemented by someone stating that if an athlete is afraid to talk "*It's responsibility of coaches to create that atmosphere*", while another participant said, "*There should also be a reporting system*". In addition to that, it was also mentioned how open communication, together with structure and respect, are the "*three pillars of safety*".

Within this first theme, the topic of physical wellbeing was commonly discussed. This included protective gear but also rules for competition as well as ensuring a safe physical environment to train and compete. One participant stated that "*Safety in sport starts with having the proper protective equipment*" and added "*We should also talk about verbal violence*". In line with this, broadening the notion of safeguarding beyond physical safety, one participant noted that "*Feeling safe isn't only about not getting hurt, but also about not being humiliated or overburdened*". Another participant underscored the importance of having a holistic understanding of safety, including both physical and emotional wellbeing. This emotional well-being can be at risk in cases of excessive pressure, and, according to one participant "*clubs are very focused on the competitive aspect and on what it takes to achieve a certain result, forgetting that they are dealing with a person*". This is particularly an issue for CS&MA disciplines because, according to the same participant, these athletes feel the need to be tough and keep fighting with the pain: "*You're injured. No problem. Grit your teeth and keep training*".

Another participant highlighted how the interests of different CS&MA practitioners can differ — while most start learning the discipline for the purpose of self-defense, only some enter the sport with competition in their minds. This was considered important, as according to the same participant, "*We need to create a concept of safeguarding to include people with different perspectives within the sport*". They highlighted how this can create a conflict, because, in their words, "*In competition, results are demanded*".

In this sense, excessive pressure was commonly highlighted as a threat to safeguarding, and while discipline is important, one participant noted that "*It's about discipline with empathy*". Another added that discipline creates safety, because "*when everyone respects the training rules, it all runs smoothly*".

Trust and its synonyms (e.g. confidence) were other words mentioned, particularly by parents, who underscored their will to ensure that children are in a space where misconduct in any of its forms (physical, psychological, emotional, verbal, sexual) is not accepted. This was highlighted as particularly important for children, as one participant noted that "*They're not fully capable of protecting their own interests, so it's our responsibility, as adults, to make sure that protection is in place for them*".

The importance of the coach's role in ensuring a safe environment was also highlighted by many. In this sense, many participants highlighted the importance of having a qualified coach, with one stating that having such coach "*makes us athletes feel safer, knowing that they are qualified and certified*".

Beyond having a coach qualified for supervising the training, another issue that was raised by participants included peer-to-peer relations and the coach's role in that. One participant mentioned that it is the coach's role to pair partners regarding weight, technical and competitive experience. Not only during training, but also during competition, participants highlighted how safeguarding should cover matching opponents appropriately. Another participant underscored that they feel safe when their training partner respects them and added that "*It's uncomfortable if someone uses*

too much force or wants to prove something". Another mentioned that fair play during training matters just as much as it does during competition, noting that "*When respect disappears, risk appears*".

To ensure safeguarding is in place, one participant noted the importance of education and building a safe culture. They underscored that "*The education we provide on the mat, within my sport, is a way to have a healthier and safer environment*". Another participant highlighted how "*With proper education, we can also minimize other forms of violence that occur when these safety boundaries are crossed*". Overall, participants also noted how there is a general culture within CS&MA that seems to be countercurrent to safeguarding notions, with one participant mentioning how coaches seem astonished when they are told they can't slap an athlete in the middle of the match to 'wake them up'. This culture, in participants' words, makes it difficult to adopt safeguarding measures and can create reluctance amongst practitioners of CS&MA.

a. Young practitioner's and adult practitioner's experiences in safeguarding

Here, participants discussed how different ages can experience safeguarding within CS&MA. Overall, participants recognized that the needs of each athlete are different at different developmental stages.

The coach's role in paying attention to the children is a particularly relevant topic to parents, and, as one said, "*I feel calm when I see coaches paying attention to details and caring for the kids like they're their own*". However, the coach's role also involves a balance between caring for the children and not overly pressuring them, as one participant noticed: "*When too much is expected from children, it stops being healthy"*.

As was noted in another group, children should experience sport as play and social interaction rather than focusing on results. To avoid unhealthy situations of excessive pressure — such as a situation described by one participant in which a child competed almost every Saturday throughout an entire year — participants mentioned that the focus should be on the coaches' understanding of the child's limits.

Another topic is the power imbalance between children and adults. To illustrate this, one participant shared a concrete example and described a situation in which a child reported unethical behavior by a coach. When the participant offered to intervene directly, the child insisted that they should not. The participant then emphasized how this reflects a broader problem: children often feel powerless to address safeguarding issues and afraid of repercussions. Another participant added how children are sometimes left with minor injuries, denied water, or treated very poorly, and it is common to see coaches yelling and screaming during competitions at them. Participants highlighted their concerns in these cases.

For younger generations, another issue raised was regarding their parents' reactions during competitions. Some participants argued that it can be difficult to control parents' emotional reactions, and this could affect the wellbeing of children competing. Participants also noted the importance of parents receiving information on the inherent risks of sports, so they can remain calm in case an accident occurs. Environmental safety is another relevant issue raised for the younger generations. Rules for changing rooms, transport to competitions and accommodation are relevant issues for all, but particularly highlighted for children.

An important difference underscored in many discussions was the difference between older and younger competitors. While older ones were perceived as understanding better their limits, younger generations were perceived as "*sometimes pushing too far*". This led some to discuss how these younger generations may need more supervision, because as they wish to impress, they might forget to care for their wellbeing.

Conversely, more experienced athletes may become overconfident in their abilities, assuming they know their limits, which can increase their risk of injury. Participants further observed that as athletes reach the end of their competitive careers, coaches may lose interest in training them. This perceived decline in coach support, combined with the athlete's confidence in their own experience, can heighten the likelihood of injury — and, as one participant noted, "*Often when an athlete is injured, they end up alone in their recovery*".

b. Injuries and concussions

The topic of physical wellbeing seems to be the most common safeguarding concern amongst participants of CS&MA. Participants from all groups highlighted many times the importance of injury prevention and restrictions to hits to the head in case of young fighters.

Regarding injuries, participants noted how rules can be effective in preventing injuries. In this sense, one participant mentioned how the new rules adopted by the Taekwondo World Federation that implemented the use of electronic vests and helmets showed efforts towards safeguarding the physical integrity of the athlete, since it meant that "*To score a point you no longer need to strike with as much power*".

In another group, it was mentioned that "*Safety always comes before points*", and another participant added that all their training sessions have available first aid kits and coaches are trained to reach quickly in case of injury. During competitions, participants mentioned that medical staff are always on-site and decide whether the match can continue. A commonly mentioned issue was athletes hiding their pain for wanting to keep competing. As much as this seems to be an individual issue, participants noted how there is a general culture of keeping training and competing, even when in pain or injured.

Another issue raised was the lack of communication regarding injuries from the club towards parents of athletes, with one participant pointing out that they would appreciate it if there was more transparency when injuries take place. Another participant pointed out that coaches could hold a first meeting with parents of newcomers, to talk about the likelihood of concussions and typical injuries, so parents are informed and prepared in case an accident happens.

When it comes to concussions, this was a widespread concern amongst the discussions held. One participant noted that "*I'd say at least 90% of us have experienced a concussion, often without even realizing it"* and further added *"We usually just ignore it, we say, 'It'll pass' and we don't go for a medical check-up"*. Another noted how difficult it can be to identify a concussion "*In the moment, it's hard to determine whether it's actually a concussion or something else*".

One participant highlighted their knowledge in identifying concussions, saying that some basic tests can be applied following a hit to the head, by asking simple questions like what their name is and what day it is. Another participant added that the general advice is to monitor the person closely, as symptoms can appear many hours after the incident. This made a participant note the importance of this knowledge to be passed on to parents as well, who are responsible for monitoring the child after they leave the spots environment. Another participant added that the coach should be obliged to inform parents of the likelihood of concussions and injuries, so they are aware of the inherent risks of the sport.

In another line of discussion, one participant reported the existence of Mixed Martial Arts (MMA) rules that prohibit hits to the head for athletes under 18 years old. They explained that this regulation is based on the understanding that younger athletes' brains are still developing and therefore more vulnerable to injury. However, participants also acknowledged that implementing similar restrictions in other combat sports, such as boxing, could be more challenging due to the nature of those disciplines.

When it comes to education on concussion, participants noted that coaches should receive education in it and there should be a uniform procedure known by everyone. At the same time, they pointed out that managing concussions requires medical expertise, which can place an excessive burden on coaches, as they are not healthcare professionals.

c. Rapid weight loss

The discussions held in terms of weight cutting before competitions showcase how this is a relevant concern amongst athletes. The adoption of weight cutting practices is seen as widespread, as one participant noted "*I don't know of any athlete in combat sports who hasn't cut weight at some point*". Even though many recognized the unhealthy side of it, one participant noted that the "*pressure to fit a category is real*".

Participants defended the idea that clubs should provide support for athletes cutting weight through access to nutritionists and guidance on proper methods, especially for younger athletes. While some participants mentioned that it can be a good idea to learn from older athletes how to manage weight cutting, it was also highlighted that older and more experienced athletes considered role models can adopt unhealthy practices and thus influence younger generations to follow the same risky methods adopted.

In line with this concern, a participant emphasized the responsibility of coaches and senior athletes in shaping younger athletes' attitudes toward weight management. They reflected on the issue of how to achieve the right body weight for competitions, questioning "*to what extent older, more experienced athletes, who are role models for younger ones, influence them with practices considered dubious, unhealthy, and leading to weight loss in young people*".

Special concerns regarding rapid weight loss for children and women arose from many discussions. When it comes to children, one participant who was both an athlete and a parent highlighted how even though they've engaged in weight cutting practices, they would not let their child do it: "*I've done the weight cutting thing and starving myself and I wouldn't let my child do it, not in a million years*".

In another focus group, a participant noted that in their club, coaches talk to parents about children who are on the borderline for their weight category and how they could proceed with the weight cutting (how many days in advance to start cutting weight, if sauna is needed, etc.). As much as this advice comes from the coach, participants reported that this is done in agreement with doctors and nutritionists. Still, in this same group discussion, another participant mentioned how, in their view, younger athletes should not cut weight for competitions, and this should be only something for juniors and seniors.

Regarding women and weight cutting before competition, a female participant said they've seen other women have their periods stop because cutting too much weight. The participant then continued to note that even though this is not sustainable, "*It didn't stop me from doing it*".

While some participants mentioned the pressure they felt from the coach to do it, others mentioned the influence of peers, especially older and more experienced athletes. One participant reflected that, in his case, he felt like the pressure was self-imposed, explaining the following: "*I did it myself. I put the pressure on myself*".

As a result of weight cutting, some participants across groups mentioned how the effects of diet fatigue and dehydration can lead to injuries. The dangerous side of weight cutting was mentioned in many discussions, with one participant underscoring how unsafe dehydration methods can increase the risk of knockouts. Another participant, who is also a coach, mentioned their need for better education on nutrition to guide athletes. Parents also showed an interest in being included in this education. However, it was also highlighted that having a dedicated professional to oversee the weight cutting process would be ideal.

To avoid damaging effects of rapid weight cutting prior to competitions, some discussions raised the possibility of multiple weigh-ins before events. This would be intended to reflect the athlete's real condition, instead of only assessing their weight immediately prior to competition.

Overall, participants recognized the risks on health and performance of diets that aim for sudden weight cutting practices, but still many reported adopting unhealthy habits to achieve the desired weight category.

d. Relation between athletes, coaches, parents, referees

Overall, participants reported positive relationships between athletes, coaches, parents, and referees. However, it was noted that during competitions "*emotions run high*", meaning that the high-pressure environment can lead to misunderstandings, especially when the roles boundaries are not clearly defined. Coaches noted how parents trying to coach and coaches trying to manage many things at once can lead to these misunderstandings. In this sense, clear boundaries between roles was considered essential, and education and awareness were seen as a way to promote and clarify these boundaries.

Participants also described situations where coaches were overly strict, creating fear rather than motivation among athletes. Communication challenges were another recurring theme. Parents expressed a desire for more open dialogue and the ability to voice concerns without being dismissed, while athletes shared that they often remained silent to avoid being seen as disrespectful. They emphasized that they simply wanted communication to feel safer.

Some participants reported situations of discrimination or exclusion. Even though some thought of it as "*isolated cases*", it was noted that girls hear comments about appearance, and while it might not seem serious, it can "*leave an impact*". To address such issues, participants explained that clubs typically respond through dialogue and mediation, and if inappropriate behavior persists, the individual responsible for these behaviors is removed from the club. At the same time, participants pointed out that there are also cases where coaches have reportedly treated athletes poorly, yet no disciplinary action was taken against them.

Building on this concern, participants also discussed situations involving verbal abuse by coaches toward athletes, including children. They emphasized how such behavior can negatively affect young athletes' psychological well-being and highlighted the importance of having psychologists integrated into clubs' support structures to better protect and assist athletes.

In one example in which boundaries were crossed within the coach-athlete relation, a participant reported a case in

which a coach insulted an athlete and denied them water during a match, believing that this harsh and pressuring approach would improve performance. The athlete did in fact perform better in the following round, which led the participant to question the appropriateness of such methods. They acknowledged that while the approach produced results, it represented clearly unacceptable behavior, noting that "*if this involved a minor, it would be an absolute violation*", and "*even with adults, this kind of treatment cannot be accepted as a general principle*". Another participant reinforced this view, stating that "*There's no room for debate about whether it was effective or not*," as the outcome, according to the participant, does not justify harmful or abusive coaching practices.

For this reason, participants stressed the need for clear guidelines on acceptable coaching behavior and communication. As one participant put it, "*It's important to clearly define how a coach should behave, how feedback should be given, whether it's constructive or crosses the line into being intimidating, threatening, or overly critical*". They argued that establishing such boundaries would help prevent abusive practices from being normalized under the guise of discipline or motivation. Participants also highlighted the importance of coach education and ethical training, noting that many boundary violations occur not only out of ill intent but also from a lack of awareness or understanding of appropriate conduct. Developing consistent standards across clubs and federations was seen as essential to creating a safe and respectful sporting environment for all athletes.

e. Inappropriate physical contact

Out of the four focus groups, only one (the EJU focus group, Table 2) engaged in a direct discussion about inappropriate physical contact. Participants initially interpreted the topic in different ways. Some understood it primarily in terms of injury prevention, referring to existing sport rules that define physical limits, for example, "*In judo there are no strikes, and in boxing, you're not allowed to hit the back of the head*". Others interpreted the issue more broadly, explaining that "*In terms of the sport itself, there are clear rules about which techniques are allowed, what score points, and so on, but situations like this go beyond that*". Another participant observed that in their sport, no clear line exists defining what is considered appropriate or inappropriate physical contact within the coach–athlete relationship.

One participant literally described these situations as "*grey zones*", that is, areas that aren't clearly defined but should be, so they become "*black and white*". Another participant further noted that ensuring a safe environment for all athletes is complex and depends greatly on the characteristics of each sport. They explained that "*What is considered appropriate physical contact in one sport might be completely inappropriate in another*".

And added *"physical contact between a coach and an athlete is often necessary, but it needs to be defined, what kind of contact, to what extent, and in what way. Those standards need to be developed for every sport individually. Finally, coach education could play a major role in reducing violations of these norms, not only those that happen out of bad intentions, but also those that happen out of ignorance. With proper education, we can also minimize other forms of violence that occur when these safety boundaries are crossed."* The same participant added that "*Physical contact between a coach and an athlete is often necessary, but it needs to be defined: what kind of contact, to what extent, and in what way. Those standards need to be developed for every sport individually*". They also emphasized that coach education plays a crucial role in reducing violations of these norms, addressing not only intentional misconduct but also behavior that occurs out of ignorance. With proper education, they argued that other forms of violence that arise when safety boundaries are crossed can also be minimized.

Another participant concluded that inappropriate behavior is too often tolerated in the pursuit of results, as practitioners in combat sports and martial arts may accept harmful practices if they believe it brings them closer to success.

3.2 Theme 2: National Frameworks

In this second theme, participants were asked regarding current policies, rules or procedures in their country about safeguarding. They also discussed the current policies, rules, or procedures in place within their sport/club/organization. It was noticed that there is a high variance amongst countries' levels of safeguarding readiness. While Ireland seems to have well established and clear procedures, other countries are still in early stages of safeguarding development.

In Serbia, as much as participants mentioned the existence of principles, they questioned how much these principles are applied and underscored the lack of information regarding rules. Many were not sure who to turn to in case of a concern and thought of the coach as the first point of communication. As one participant explained, "*It seems like everyone knows this implicitly, but it's never explicitly written down as a rule*". Another participant expanded on this point, noting that this becomes problematic when the coach is the source of the issue, and remarked that "currently, nothing exists. Everything is left to general laws." They stressed the need for an alternative reporting route that does not rely on directly approaching the coach.

Regarding current rules to ensure a safe sporting environment, the Serbian group mentioned the mandatory renewal of coaching licenses through attendance to educational courses. While they emphasized the importance of such training, they also noted that education alone is not sufficient, as they argued that what is learned must be actively applied in practice.
In Ireland, participants reported that in case of concerns within their club, the coach is the first person they report the concern to, as their coach is also the safeguarding officer. Participants reported it to be mandatory for sports clubs to have a safeguarding officer, and to become one it is needed to go through an online course. Amongst the participants, one of them was a safeguarding officer, who reported the course content to be informative and made them feel "*better prepared*".

Participants further reported that the safeguarding officer further reports concerns received to the KBI Kickboxing Ireland, which is the governing body affiliated with the Irish government. It was also highlighted that the function of the safeguarding officer is not to investigate the conduct, but rather to *"pass it up the chain immediately*".

In North Macedonia, participants mentioned at the national level the existence of basic child protection guidelines, while also highlighting that these guidelines need to be more concrete and enforced across all sports. In this sense, the lack of visibility of this type of policy was also mentioned, as this information many times does not reach athletes or parents. Participants also underscored how these rules tend to focus on physical safety while lacking information on psychological protection and holistic well-being.

At the club level in North Macedonia, participants reported how the rules in their clubs are mostly verbal. They reported that having official documentation or written rules displayed throughout the clubs would give them reassurance. One participant, however, mentioned that their club has a code of conduct and mandatory medical checks. The level of adherence to safeguarding rules was reported to be varied, with some clubs being stricter than others, and overall participants mentioning a need for a national standard for all clubs. However, it was also noted how what matters is not only having a formal code but rather whether the principles are followed in practice.

In terms of background checks, in North Macedonia it was reported that licensed coaches must submit their clean criminal record but highlighted how annual renewal of such checks would make the system stronger. For referees, they undergo administrative checks. One participant noted that they believe all coaches and referees should be required to go through the same procedure, with transparency.

In relation to who has the responsibility for safety in clubs and events in North Macedonia, participants indicated that they usually report to the coach when they have any concerns and highlighted it would be helpful if contact information of a responsible person was publicly available. They also mentioned that, due to limited resources, there is often no clearly designated safeguarding officer, but there are plans to appoint official safeguarding officers at the federation level. In competitions, in case of concerns, head referees and delegates are the people responsible for safety decisions. Rules around reporting and support system exist in North Macedonia but were reported to lack consistent implementation. No clear or confidential mechanism was mentioned to be in place for reporting safeguarding concerns, as reporting is in person, leading participants to underscore how an online platform would make it easier. Overall, participants highlighted the need for confidentiality to ensure the safety of those wishing to report concerns.

In terms of safeguarding training and education in North Macedonia, coaches and referees receive information through occasional seminars, but they are not regular nor mandatory, and don't include what participants considered to be enough "*real-life cases*". Athletes and parents reported not receiving training in this topic but mentioned how they could benefit from that so they can recognize risks early. It was mentioned that the National Federation is planning to launch a series of workshops and online sessions for parents, athletes, and staff involved in karate.

Even though many participants mentioned the lack of reporting systems, participants in the Portugal group noted some channels are in place. Examples mentioned included the CPCJ (Commission of Protection of Children and Youth), APAV (Portuguese Association for Victim Support) and IPDJ (Portuguese Institute for Sport and Youth). Another participant complemented this by stating that the IPDJ allows anonymous reports and follow-ups on complaints submitted in writing. It was underscored, however, that the channels mentioned might not be the most appropriate or fully implemented yet.

Within the focus group held in Portugal, participants mentioned projects such as the UAARE (Units of Support for High Performance in Schools), which aim to conciliate academic achievements and sports performance. One participant informed that this project helps athletes to "*Reach their sporting potential alongside their educational and social potential*", and while it is not yet fully developed, there are a few schools in the country that are part of this program.

Finally, participants from the Portuguese focus group reported that some coaches are not required by their clubs to have coaching courses but only physical activity trainer licenses, and this remains underreported to federations. This reality raised by many participants underscored their concern towards coaches not having the appropriate skills to teach classes.

3.3 Theme 3: Looking Ahead

For the final theme, participants were asked to look ahead and suggest what changes or support systems could be in place to help ensure a safer sport/club/organization for everyone. Participants were also invited to think about how a European-wide safeguarding code could help to improve safety in their country and in their sport/club/organization.

In Serbia, participants discussed what they considered as priorities for a safeguarding code in CS&MA. They mentioned maltreatment as a number one priority, as this was considered the main reason that many children leave the sport. This was followed by participants highlighting awareness about injury prevention as another important topic to be covered in a safeguarding code. Monitoring the rules (e.g. mandatory education) prescribed by the code was another concern raised in the discussions.
The importance of education was underscored by the Serbian group, who noted its relevance while also mentioning its need to have a practical application. To guarantee the information is passed on to coaches, participants noted how a simple and clear manual could help to specify what is allowed and what is not for each sport and discipline. To ensure the implementation of these rules, another participant had the idea of having a commission to monitor warmups, matches and after-matches, so they can provide oversight over the coaches' treatment towards practitioners in these settings. The importance of control mechanisms to guarantee the applicability of rules seemed to be an important issue.

Providing psychological support within clubs through sport psychologists was seen as essential by participants from Serbia. They mentioned how these psychologists could hold workshops regularly, conduct assessments and monitor psychological development, especially of children and teenagers.

In Ireland, participants overall were satisfied with the safeguarding mechanisms and policies in place, reporting to feel safe in training and competitions. It was noted, however, that there are no standardized rules of conduct for all clubs to follow, and Federations could standardize that.

In terms of what could be improved, participants from the Ireland group mentioned the importance of referees receiving safeguarding information, as well as coaches behaving appropriately.

In Portugal, participants noted that having a centralized and confidential system for reporting channel for each sport would be ideal. In terms of education, participants mentioned that having a course on safeguarding as a training program for coaches and technical staff and awareness-raising activities for parents, coaches and athletes could help reduce safeguarding concerns. Focusing on the beginner levels to receive safeguarding information was also considered important, as one participant noted: "*If we pay extra attention to the beginner levels and stages of development, in the medium and long term, we will have a different culture in terms of sport, in this case in terms of judo*". In this sense, participants reported a need for more awareness of safeguarding. As one participant noted: "*There is still no real awareness of what safeguarding is*".

Also in Portugal, it was highlighted the importance of each club having a safeguarding officer and their own code of conduct for athletes, parents and coaches. These codes of conduct, according to participants, should be displayed on the clubs' walls, together with a reporting channel in case of behaviors that go against its prescriptions.

In addition to that, participants from the Portuguese group noted the importance of support systems in place for the athletes, beyond the coach. A participant highlighted this importance while noticing the possible financial aspect of this: "*it's essential to have multidisciplinary teams, but that has costs*".

In North Macedonia, participants mentioned the need for a better coordination between the federation and clubs, clearer reporting rules and early education, more safeguarding training with real-life simulations and information to all, especially the referee (as a participant noted they are "*the first line of defense during matches*") and more information given to parents about safeguarding procedures. This education was highlighted as being ongoing, regularly repeated, and not a "*one-time situation*". Adding a handbook for referees with real examples was also deemed helpful.

In North Macedonia, participants mentioned how a European safeguarding code could standardize what is expected, ensuring everyone knows their responsibilities to ensure a safe sporting space for all stakeholders.

4. Preliminary recommendations

Before presenting the preliminary recommendations, it is important to briefly reflect on the key findings that emerged across the four focus groups. Overall, participants highlighted that safeguarding in CS&MA is shaped by a combination of structural gaps and cultural norms, with significant variation in readiness across countries.

While stakeholders commonly associated safe environments with protection, clear rules, appropriate equipment, respectful communication, and trustworthy coach–athlete relationships, they also described recurrent challenges such as inconsistent application of rules, limited reporting mechanisms, cultural acceptance of excessive pressure, concussion-related risks, and widespread but often unsafe weight-cutting practices. Participants further emphasized the need for psychological safety and despite contextual differences, there was broad agreement that clearer standards, better education, and more accessible support systems are essential to strengthening safeguarding across CS&MA.

Based on these insights gathered from the findings of the four focus groups, several key recommendations emerged.

a. Prioritize rules for physical and psychological wellbeing

To ensure both physical and psychological safeguarding, participants emphasized the importance of developing clear, enforceable, and realistically applicable rules and codes of conduct that apply across all levels of CS&MA. The European safeguarding code should include a comprehensive and accessible Code of Conduct defining acceptable and unacceptable behaviors for all stakeholders, along with clear and confidential reporting mechanisms in case of misconduct. Recommended rules could include explicit restrictions on strikes to the head for athletes under 18 years old, stricter regulation of rapid weight-cutting practices under the supervision of qualified nutritionists, and the introduction of regular weigh-ins to ensure that athletes compete within healthy and sustainable weight categories. Similarly, standardized concussion management procedures should be adopted, requiring coaches and referees to follow a uniform response protocol after any suspected head injury, and obliging clubs to ensure the presence or on-call availability of medical personnel during competitions and high-intensity training sessions. To safeguard athletes psychologically, the Code of Conduct should set clear standards for communication and behavior, ensuring that coaching practices promote motivation through respect and constructive feedback rather than fear or humiliation. Verbal abuse, intimidation, or excessive pressure should be explicitly identified as unacceptable. The Code should also define and provide further information that illustrates examples of appropriate vs inappropriate physical contact boundaries between coaches and athletes as well as between athletes, clarifying when, how, and for what purposes such contact is permissible.

b. Strengthening education and its applicability

Participants across countries strongly emphasized the importance of education and capacity building as the foundation of effective safeguarding. In this sense, the recommendation inferred from the discussions analyzed is to ensure mandatory safeguarding training for all coaches, referees, and club officials. This training should include practical examples and real-life case studies, as well as they should be regularly refreshed to ensure that knowledge remains up to date. Awareness-raising activities should also extend beyond professionals to reach parents and athletes, helping to create a shared understanding of responsibilities in maintaining a safe environment. A simple manual can be used to clearly outline acceptable and unacceptable behaviors, while also being general enough to be adapted to each CS&MA discipline.

c. Establish clear reporting and support mechanisms

A third area of focus is one related to reporting and support mechanisms. Participants underlined the need for transparent, confidential, and easily accessible reporting channels, including digital and anonymous options to increase safety and accessibility. They stressed that there should be clear escalation procedures to ensure that concerns are not handled solely by coaches, particularly in cases where the coach may be the source of the problem. Each club should have a trained safeguarding officer responsible for receiving and referring reports. The escalation protocol should be clear, and stakeholders of CS&MA should be aware of this point of contact between the club and higher instances. This escalation can be supported by oversight structures at the federation level. This would ensure consistency in responses and greater accountability across clubs.

d. Promote Multidisciplinary Support within Clubs

Participants also highlighted the importance of multidisciplinary support within clubs. They emphasized that safeguarding and athlete wellbeing require collaboration between professionals such as psychologists, nutritionists, and medical specialists. Having a multidisciplinary team available in CS&MA clubs is essential to ensure athlete well-being and to provide clearer role boundaries for coaches, who should not be expected to act as mental health or medical professionals. However, as much as the necessity for such multidisciplinary support is recognized, the financial challenges of implementing these structures remain a major concern. To address this, practical strategies can include forming partnerships with local universities, sports medicine clinics, or public health institutions to access professional expertise at lower or shared costs. Federations could also develop shared-service models where several clubs pool resources to hire professionals collectively.

e. Ensure Monitoring and Accountability

To ensure real progress, participants underscored the need for monitoring and accountability. Safeguarding measures should include mechanisms to assess compliance, such as regular audits or observation systems during training and competition. Violations should be addressed through reporting to the safeguarding officer, who should further report the violation to the federation and ensure a follow-up of this referral to the higher instance.

5. Next steps

These recommendations address both structural and cultural aspects of safeguarding and will be incorporated into the development of the safeguarding code, as well as the massive online open course launched by the Safe Combat project.

Closing Remarks

The combined findings of the literature review, desk research, and focus groups show that safeguarding in CS&MA requires a multi-dimensional approach. Across all data sources, several common patterns emerged: athletes of all ages face risks that are often normalized or overlooked; safeguarding structures vary widely between clubs and countries; reporting systems are either absent, unclear, or underused; and education for coaches and club personnel remains inconsistent despite their central role in shaping safe training environments. While many clubs and stakeholders demonstrate strong commitment and willingness to improve safeguarding in CS&MA, they frequently lack the tools, knowledge, or clear standards to do so effectively.

These insights provide the foundation for the next steps of the Safe Combat project and beyond. The forthcoming safeguarding code will integrate the scientific evidence and stakeholders' reported experiences identified in WP2, offering clear guidelines, procedures, and minimum standards tailored to the realities of CS&MA. It will address key thematic areas — such as interpersonal violence, weight management, injury prevention, concussion management, coach's role and athlete's wellbeing — and provide practical tools for clubs to strengthen their safeguarding capacity.

In parallel, the development of the MOOC will transform the research insights into accessible, actionable education for coaches, club managers, safeguarding officers, and technical staff. By equipping stakeholders with knowledge, and practical guidance, the MOOC will support the implementation of the safeguarding code and foster a shared understanding of safeguarding across countries and CS&MA disciplines.

Through this evidence-based approach, the Safe Combat project supports the creation of stronger safeguarding structures at club, national, and European levels, advancing the protection and wellbeing of all athletes participating in CS&MA.

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