To screen or not to screen? Critical reflections on the use of mental health screening in high-performance sport

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1. Introduction

Mental health has become an increasingly prominent concern within high-performance sport. A major reason for this growing attention is the accumulating epidemiological evidence that athletes experience symptoms of mental disorders at rates comparable to, and in some cases exceeding, those observed in the general population (Gouttebarge et al., 2019; Poucher et al., 2021; Rice et al., 2016). Recent research has broadened this perspective by demonstrating that mental health concerns are not limited to athletes alone. Comparable rates of psychological distress are also reported among coaches (Kegelaers et al., 2021; Oevreboe et al., 2026) as well as other members of the sporting entourage (Pilkington et al., 2022; Spolverato et al., 2026). Accordingly, mental health is now viewed as an integral component of any high-performance environment (Henriksen et al., 2024), and organisations are increasingly expected to uphold a duty of care by protecting and promoting the mental health of all individuals within their system.

In response, a growing body of literature offers guidance and recommendations for sport organisations on how to promote mental health. Leading bodies, such as the European Federation of Sport Psychology (FEPSAC; Moesch et al., 2018), the International Society of Sport Psychology (ISSP; Schinke et al., 2024), and the International Olympic Committee (IOC; Reardon et al., 2019), have issued position statements outlining key strategies to embed mental health into organisational policies. In parallel, more tailored recommendations are available which address the distinct demands of different types of sport settings, including elite sport (Henriksen et al., 2020), dual career development environments (Kegelaers et al., 2024b), and community sport organisations (Vella et al., 2025). Building on this expanding

body of knowledge, Vella et al. (2021) conducted a systematic review of existing position statements, concluding that mental health initiatives in sport should be grounded in evidence-based practice rather than driven by well-intentioned but untested approaches. This call for evidence-based practice provides a critical benchmark against which contemporary strategies should be evaluated (Vella & Rice, 2026).

Within this rapidly evolving field, *mental health screening* has emerged as one of the most visible and widely endorsed organisational strategies to protect and promote mental health. Screening typically refers to the routine assessment of potential mental health symptoms or disorders, using standardised self-report measures administered at fixed or indicated time points. Several authors have used notably strong language to advocate for its implementation, describing screening as a "fundamental component of psychological support" (Silvester et al., 2025, p.2) or as "imperative" for promoting mental health and well-being (Drew et al., 2023, p.133). Screening is also referenced in multiple policy documents and position statements as a key mechanism for early detection, prevention, triage, and timely referral (Chang et al., 2020; IOC, 2023; Neal et al., 2015; Purcell et al., 2019; Reardon et al., 2019; Spörri et al., 2025).

The appeal of mental health screening is further reinforced by its proposed alignment with well-established medical screening and monitoring practices in high-performance sport. Specifically, elite athletes are routinely screened for a range of health risks, including injury, concussion, illness, and cardiovascular conditions, as part of integrated medical monitoring systems (International Olympic Committee Injury and Illness Epidemiology Consensus Group, 2020; Ljungqvist et al., 2009). In this context, mental health screening is now presented as a logical and necessary extension of existing health screening practices, intended to place mental health on equal footing with physical health within integrated athlete care models (Meidl et al., 2024b; Spörri et al., 2025; Steffen et al., 2024; Tomalski et al., 2019).

Several sport organisations have already begun to promote or even mandate mental health screening within their own context (Drew et al., 2023; Generoso et al., 2025; Schaal et al., 2011). A prominent example is the National Collegiate Athletic Association (NCAA), which actively encourages preparticipation screening as part of its mental health best practice framework (Kroshus-Havril et al., 2025; NCAA Sport Science Institute, 2016). This has translated into growing uptake of screening practices across collegiate athletic programmes (Kroshus, 2016). A recent survey reported that 70.8% of NCAA member institutions have adopted some form of formalised mental health screening for their student-athletes (Drew et al., 2023).

Globally, the idea of routine mental health screening has arguably gained its strongest momentum through the introduction of the Sport Mental Health Assessment Tool 1 (SMHAT-1; Gouttebarge et al., 2021), developed under the auspices of the IOC. The SMHAT-1 is a structured, sport-specific, stepped screening framework to detect a wide range of mental health issues. Since its publication, it has been piloted in multiple countries, including the Netherlands (Bilgoe et al., 2024), Poland (Waleriańczyk et al., 2024), Croatia (Sore et al., 2025), Japan (Ojio et al., 2025), the US (Anderson et al., 2023), Ireland (Brown et al., 2025), and Canada (Mountjoy et al., 2023a); underscoring the rapid growth of mental health screening within different sport settings. Yet despite its apparent popularity and uptake, critical reflection on the use and implications of mental health screening has remained almost absent.

While screening holds strong intuitive appeal, insights from public health indicates that screening programmes are often accompanied by substantial technical, practical, and ethical challenges that limit their effectiveness. To guide the evaluation of such programmes, the World Health Organization (WHO) introduced the Wilson and Jungner criteria (1968), which for decades have served as the gold standard for assessing the appropriateness and

effectiveness of health screening. These criteria were later expanded and refined in the updated WHO screening guidelines (Andermann et al., 2008), which place greater emphasis on equity, proportionality, and the monitoring of potential harms. As illustrated in Figure 1, both frameworks converge on the principle that the justification of screening extends beyond the psychometric quality of the screening instrument itself, requiring careful consideration of aspects such as acceptability to the target population, availability of effective follow-up care, potential harms, and broader ethical implications. Collectively, these criteria underscore that screening is not a neutral or purely technical exercise, but a complex intervention whose value depends on how benefits and harms are weighed within the system in which it is implemented. Notably, while physical health screening in sport has been subject to critical discussion in view of these criteria (Bahr, 2016), comparable discussions have thus far been largely absent in relation to mental health screening.

The aim of this paper, therefore, is to critically examine the conceptual, empirical, and ethical foundations of mental health screening in sport, assessing whether current practices are supported by the available evidence. For this purpose, we adopt a critical narrative review approach (Grant & Booth, 2009) to scrutinise key methodological and conceptual issues (e.g., Bahr, 2016; Kegelaers, 2023). Relevant papers for this review were identified through iterative searches of key databases (i.e., SPORTDiscus, Google Scholar, Scopus), complemented by forward and backward citation searching of seminal papers in the field of mental health screening in sport (e.g., Gouttebarge et al., 2021).

This paper will first provide a concise overview of what is meant by mental health screening in the context of high-performance sport, followed by a discussion of the rationale behind its use. We then critically examine the available evidence supporting mental health screening in sport, structured around four key areas: (a) the adequacy and predictive validity of existing screening instruments, (b) implementation and feasibility considerations, (c) the

effectiveness of mental health screening programmes (drawing primarily on evidence from adjacent fields given the limited outcome data available in sport), and (d) potential harms and unintended consequences associated with screening. Through this structure, the paper aims to explore whether, and under what conditions, screening can be considered a responsible component of athlete mental health care. We conclude the paper by offering our recommendations on the conditions under which mental health screening may be considered, as well as situations in which alternative approaches may be more appropriate.

2. What is mental health screening?

Although the term mental health screening has become commonplace in sport science and applied practice, its meaning has not always been clearly defined (Silvester et al., 2024). In public health, screening is broadly defined as "the use of a test or a series of tests to detect preclinical disease in apparently healthy populations to permit prevention and timely intervention" (Dans et al., 2011, p.231). When applied to the mental health domain, screening involves the systematic use of validated psychometric tests to detect early signs or symptoms of (subclinical) mental health problems or disorders. In practice, this most often takes the form of self-report questionnaires, although examples of screening based on structured clinical interviews have also been proposed (Moesch et al., 2018).

Several levels of screening can be distinguished (Levitt et al., 2007). *Universal screening* refers to the systematic assessment of *all* individuals within a defined population, regardless of their prior or current risk status. This approach is conceptually distinct from *selective screening*, which targets individuals exposed to identifiable risk factors, and from *indicated screening*, which focuses on individuals already showing early signs of psychological distress (Levitt et al., 2007). In the sport literature, these distinctions are seldom defined or discussed. As a result, proposed screening initiatives blend universal, selective, and indicated approaches, often without clearly specifying their underlying logic.

For example, some position statements advocate for universal screening at fixed intervals throughout the season (e.g., pre- and mid-season), supplemented by selective assessments at key moments associated with heightened risk for psychological distress, such as following injury, in the lead-up to major competitions, or following athletic retirement (Mountjoy et al., 2023b; Purcell et al., 2019; Spörri et al., 2025). The SMHAT-1 can also be viewed as a combination of different screening levels, with an initial general distress measure functioning as a universal triage step, followed by indicated screening for specific mental disorders for those athletes who exceed predefined thresholds on the triage instrument (Gouttebarge et al., 2021). Importantly, universal, selective, and indicated forms of screening each rest on different assumptions regarding risk and prevention, and require different commitments in terms of time and resources (Levitt et al., 2007). In this paper, we primarily focus our critique on universal mental health screening; however, as noted above, this distinction is not always clear-cut due to limited conceptual and methodological detail in the existing literature.

A further point of clarification is the distinction between mental health screening and formal or informal approaches to monitoring athletes' mental health, such as regular check-ins or (brief) mood tracking embedded in athlete management systems (Kegelaers et al., 2024b; Silvester et al., 2025). While monitoring may play an important role in supporting athlete well-being by tracking intra-individual fluctuations over time, it does not constitute a systematic screening effort aimed at identifying individuals who warrant further clinical assessment based on established population norms. Importantly, mental health screening is also conceptually distinct from diagnostic assessment, which seeks to establish the presence or absence of a mental disorder through structured clinical evaluation. Screening instruments, by definition, cannot be used to establish a clinical diagnosis, but may provide a preliminary indication that further diagnostic assessment is warranted (Zimmerman, 2024).

Finally, mental health screening should not be conflated with research, even though the data generated through screening may be repurposed for research purposes. Early calls for increased mental health surveillance in sport, including those advanced by the IOC, appeared at least partly motivated by the need for more robust epidemiological evidence on the prevalence of mental health symptoms and disorders (Mountjoy et al., 2023b; Seil-Moreels et al., 2026). However, the function of screening differs from that of research. Research generally aims to answer specific scientific questions at the population level, typically with ensured anonymity for individual participants. Such group-level analyses may allow for the attenuation of individual-level measurement error. Screening, on the other hand, is inherently action-oriented with the primary goal of identifying individuals who may benefit from further diagnostic assessment or intervention. Results are, therefore, interpreted at the level of the individual with the purpose to inform decisions about follow-up or care. Consequently, any measurement error, bias, or misclassification carries more immediate consequences for the individual in screening contexts. Altogether, both research and screening require psychometrically sound instruments. However, it can be argued the level of evidentiary support required for their use in screening contexts may need to be particularly robust, given its direct and immediate impact on individuals' personal lives. At the same time, research conducted within higher education institutions typically operates under far stricter regulatory frameworks, including mandatory institutional ethical review, than mental health screening initiatives implemented by applied sport organisations.

3. The rationale for mental health screening in sport

At its core, the rationale for mental health screening is both simple and laudable. Screening is primarily promoted as a means of early detection, grounded in a secondary prevention approach that aims to identify signs of mental health problems before they escalate into more severe or chronic issues. By systematically gauging for symptoms of

mental disorders, screening is intended to facilitate timely referral to available mental health resources or appropriate professional care, reducing the likelihood of prolonged impairment. In addition, screening has been positioned as a potential safeguarding instrument for identifying acute mental health risks, such as self-harm or suicidality, that may require immediate crisis intervention (Meidl et al., 2024b; Tomalski et al., 2019).

Beyond its detection function, proponents have also argued that mental health screening may reduce stigma and lower barriers to help-seeking among athletes. Mental health stigma is typically very high in athlete populations (Gulliver et al., 2012). Routine screening may, therefore, help normalise psychological distress as a legitimate performance and health concern, comparable to physical injury or illness (Seil-Moreels et al., 2026; Silvester et al., 2025). Screening initiatives are further thought to increase the visibility of available support services and to signal organisational commitment to mental health, which in turn may enhance athletes' confidence in seeking help when needed (Silvester et al., 2025; Tomalski et al., 2019).

Taken together, the rationale underpinning mental health screening is undoubtedly well intentioned and commendable. However, it remains necessary to consider whether screening is indeed an effective mental health intervention in sport, or whether it may also carry limitations or even potential for harm. As Wilson and Jungner (1968) cautioned in their seminal work, "in theory health screening is an admirable method… [but] in reality there are snags" (p.7). In the sections that follow, we, therefore, take a more critical look at the current evidence underpinning mental health screening in sport.

4. The state of the evidence on mental health screening in sport

4.1 Adequacy of existing screening instruments

A wide range of instruments are used for the purpose of mental health screening in sport. In some cases, authors have relied on self-developed screening tools, with little or no

information available regarding their psychometric properties (Tomalski et al., 2019). Similar practices have been observed in applied settings, as a recent study found that up to 40% of colleges within the NCAA used similar self-developed or non-validated instruments as part of their mental health screening practices (Drew et al., 2023). This raises important concerns, as effective mental health screening depends fundamentally on the availability of valid, reliable, and psychometrically sound measurement instruments (Andermann et al., 2008; Wilson & Jungner, 1968). The use of non-validated instruments increases the risk of systematic misclassification, such as falsely identifying clinically relevant problems or, conversely, failing to detect individuals who may genuinely require further assessment or support.

Glover and Albers (2007) provide a comprehensive overview of the technical characteristics required for effective mental health screening instruments, highlighting the importance of selecting instruments with demonstrated reliability, construct validity, and content validity. To date, the majority of research on mental health screening instruments in sport has focused on these psychometric aspects, most commonly examining the internal consistency and factor structure of different instruments across different athlete populations, languages, and cultural contexts (e.g., Alhowimel et al., 2023; Ojio et al., 2021; Sore et al., 2024; Taylor et al., 2023; Worley et al., 2025; Yang & Parent, 2025). While such work is important, it addresses only part of what is required for screening instruments to be considered fit for purpose. From a health screening perspective, the most important criterion to evaluate the technical adequacy of an instrument is its predictive validity (Levitt et al., 2007). That is, the extent to which the instrument can accurately distinguish between individuals who *do* and *do not* have the condition of interest. Without such demonstrated predictive validity, even well-constructed and psychometrically sound instruments will be ill-suited for use as screening tools in applied settings.

The most important indicators of an instrument's predictive validity are its sensitivity and specificity (Levitt et al., 2007). *Sensitivity* refers to the instrument's ability to correctly identify individuals who truly have the condition, often referred to as the true positive rate. A highly sensitive tool minimises false negatives, ensuring that individuals who are experiencing meaningful psychological distress are not mistakenly classified as "low risk." *Specificity*, in contrast, reflects the instrument's ability to correctly identify individuals who do not have the condition or the true negative rate. A highly specific tool minimises false positives, reducing the number of individuals who are incorrectly flagged as needing further evaluation or intervention. Although, from a health screening perspective, it may sometimes be appropriate to prioritise sensitivity in order to reduce the likelihood of missing cases, screening instruments are generally expected to strike a careful balance between sensitivity and specificity to ensure both clinical usefulness and practical feasibility (Dans et al., 2011).

Closely related to these metrics are the concepts of *positive predictive value* (PPV) and *negative predictive value* (NPV). PPV represents the probability that an individual who screens positive actually has the condition. NPV represents the probability that someone who screens negative truly does not have the condition. Crucially, PPV and NPV are influenced not only by an instrument's sensitivity and specificity, but also by the prevalence of a disorder in a given population. As a result, even instruments with acceptable sensitivity and specificity may yield a substantial proportion of false positives or false negatives when applied in populations with low base rates of mental disorders. Together, sensitivity, specificity, PPV, and NPV form the cornerstone of predictive validity and offer essential indicators of whether a mental health screening tool can be considered technically adequate. While there are no universally agreed minimum requirements for an instrument's sensitivity, specificity, or predictive values, some authors have suggested that values below 75%–80% may raise concerns regarding the practical utility of screening instruments (e.g., Glover & Albers,

2007). However, such thresholds should be interpreted cautiously, as acceptable levels depend on the specific screening context and the relative trade-offs between false positives and false negatives.

To date, only a limited number of studies have examined the predictive validity of mental health screening instruments specifically within athlete populations (see Table 1 for an overview). Despite the rapid uptake of screening in applied sport settings, the empirical foundation supporting these instruments remains relatively underdeveloped. The most commonly evaluated instrument is the Athlete Psychological Strain Questionnaire (APSQ; Rice et al., 2020a), which serves as the initial triage tool within the SMHAT-1 (Gouttebarge et al., 2021). Early validation studies reported strong predictive validity of the APSQ for detecting general psychological distress (Rice et al., 2020a,b). However, several key limitations of the APSQ's original development should be highlighted. First, the APSQ was initially developed exclusively among male Australian team-sport athletes (Rice et al., 2020a). Second, although a later study included female athletes, the number of women in the development sample remained very small (n = 84; Rice et al., 2020b). Together, these limitations raise questions about the applicability of the APSQ across different sports, cultural contexts, and athlete populations, particularly for female athletes. Third, the two initial validation studies relied in large part on the same original dataset (Rice et al., 2020a,b). While reusing datasets can, in some cases, be appropriate to address different research questions or apply alternative analytical approaches, reliance on largely overlapping samples may limit the extent to which findings can be considered independent validation evidence. When multiple articles rest on the same underlying observations, apparent consistency may reflect data reuse rather than true replication.

Subsequent evaluations of the APSQ present a more ambivalent picture of its predictive validity. While some studies indicate acceptable sensitivity for detecting symptoms

of depression and anxiety (Shannon et al., 2025), the APSQ appears substantially less sensitive to other mental health concerns, such as sleep disorders, eating disorders, and substance abuse (e.g., Anderson et al., 2025a; Whelan et al., 2025). This is particularly problematic in the context of the SMHAT-1, where the APSQ functions as a broad triage instrument to flag early signs across a wide range of potential mental health problems (Gouttebarge et al., 2021). If the initial triage tool lacks sensitivity for certain conditions, athletes experiencing these problems may not progress to further assessment. Additionally, several studies have reported low specificity and PPV of the APSQ (Ojio et al., 2025; Waleriańczyk et al., 2024), implying that a substantial proportion of athletes who score above the recommended cut-off values are false positives, who in reality do not require any follow-up support. Another limitation of the APSQ concerns the wide range of cut-off scores proposed in the literature (e.g., Gouttebarge et al., 2021; Rice et al., 2020a; Shannon et al., 2025). The absence of a consistent, empirically justified cut-off point complicates applied decision-making and hinders organisations' ability to determine when individual athletes should be considered for follow-up assessment.

Despite these criticisms, currently, there are seemingly no well-developed alternatives that have been robustly tested in athlete populations. Donohue and colleagues (2019, 2023) have offered preliminary investigations of several athlete-specific scales; whereas Keenan et al. (2023) tested the predictive validity of more generic depression screeners, in the PHQ-9 and CES-D. Although these studies suggest potentially acceptable predictive validity (see Table 1), to date none of these instruments have undergone extensive further testing or validation across diverse athlete populations, sports, or cultural contexts. As a result, organisations face a constrained choice between emerging athlete-specific tools and generic instruments, originally not designed for sport settings.

Beyond instrument-specific concerns, an overarching limitation relates to the criterion measures used to evaluate predictive validity. Most studies rely on other self-report questionnaires to evaluate sensitivity and specificity, implicitly assuming that individuals who screen positive on both instruments have been "correctly" identified. This evidently raises new issues, as it is unclear whether these other self-report instruments used as criterion measures are themselves sufficiently accurate. Only two studies to date have incorporated clinical follow-up interviews as part of the validation process (Keenan et al., 2023; Waleriańczyk et al., 2024). Without clinical assessment, it remains unclear whether screening instruments accurately identify clinically meaningful symptoms or merely capture transient distress. For future research evaluating the predictive validity of mental health screening instruments in athlete populations, clinical follow-up interviews should, therefore, be considered the gold standard for validation purposes (Oevreboe et al., 2023; Zimmerman, 2024).

Another general limitation of current screening instruments concerns the implicit assumption that all items within a screening scale contribute equally to clinical risk. From a measurement perspective, symptom-level heterogeneity is well documented across mental health instruments (Allsopp et al., 2019; Fried & Nesse, 2015; Newson et al., 2020), with certain items disproportionately driving total scores and false positive classifications (Fournier et al., 2023). In this context, some items may be more prone to over-pathologising normative, context-bound reactions to high-performance sport demands. For example, items referring to feeling mentally exhausted, under pressure to perform, struggling to switch off from sport-related concerns, or experiencing temporary reductions in motivation may reflect expected responses during periods of high training load, competition stress, injury, or career transitions rather than clinically meaningful impairment. Although item-level analyses remain underexplored in the sport mental health screening literature, evidence from related fields

increasingly relies on item-level approaches (e.g., item-level structural equation modelling or item response theory) to examine which items are most strongly linked to functional impairment and clinically validated outcomes, thereby helping to distinguish transient distress from clinically meaningful need (Fournier et al., 2023; Fried & Nesse, 2015). Ignoring this heterogeneity may contribute to overinclusive screening outcomes, thereby inflating downstream referral demands without proportional clinical benefit (Zimmerman, 2024).

In sum, establishing accurate screening instruments is not a trivial or strictly methodological concern. It has key practical implications as it directly determines who is identified as needing follow-up, the volume of individuals requiring support, and the resources that must be mobilised in response. The following section will, therefore, discuss several key issues surrounding the implementation and feasibility of mental health screening, with particular attention to the systems and actions required once an individual is flagged.

4.2 Implementation and feasibility issues

It has long been recognised that mental health screening cannot function as a stand-alone activity, but must be embedded within a broader system of care and support (Tomalski et al., 2019). Screening inherently creates expectations of action, and its legitimacy depends on the availability of clear follow-up procedures. This includes sufficient time, qualified personnel, and resources available to respond to all individuals who screen positive, as well as efficient referral pathways to appropriate care when needed (Kroshus-Havril et al., 2025). Moreover, organisations must have clear policies in place to guide responses to elevated risk, including predefined crisis action plans for situations such as detected suicidality. However, sport organisations often lack clarity about how to act following a positive screen, particularly in high-risk cases (Kroshus-Havril et al., 2025). Without explicit protocols and clearly assigned responsibilities, screening risks generating uncertainty rather than support.

For example, Silvester et al. (2025) reported that participants viewed it as actively damaging to be informed that they might require additional mental health support while simultaneously being offered no meaningful access to that support.

Establishing and maintaining such a comprehensive support system is fundamentally a matter of resources. Some well-resourced organisations may have the infrastructure required to deliver screening alongside guaranteed access to support services, such as ensured access to in-house or closely affiliated mental health care resources (Anderson et al., 2025b; Tomalski et al., 2019). Other authors have offered recommendations for setting up screening and referral systems within less-resourced environments. For example, Rancourt et al. (2020). propose that mental health screening in lower-resourced settings can be implemented through a stepwise, resource-adapted model, starting with the identification of referral networks and partnerships with existing community mental health providers, followed by brief screening administered within the organisation and immediate triage to available care. Crucially, this model emphasises that even in low-resource contexts, screening should be embedded within clear referral pathways, mental health literacy efforts, and interdisciplinary collaboration to ensure that identified needs can be appropriately addressed. This raises a broader societal question regarding the extent to which the responsibility for providing mental health care should lie within sport systems themselves, or whether sport organisations should rely more strongly on existing regional or national healthcare systems. However, challenges will likely remain, as community healthcare providers will lack contextual knowledge of the high-performance sport environment and may be constrained by limited capacity as well (e.g., long waiting lists). These limitations raise important questions about the added value of screening when meaningful follow-up cannot be guaranteed. In this regard, a proportionality principle may be useful, whereby the scope and intensity of screening efforts are aligned with the level of available resources and follow-up capacity, rather than applied as a one-size-fits-all model.

Resource considerations are also inherently tied to the predictive validity of the adopted screening instruments. As noted earlier, commonly used instruments, such as the APSQ, appear to prioritise sensitivity over specificity, increasing the likelihood that individuals without a need for clinical support will still screen positive. For example, one of the few studies adopting clinical follow-up interviews indicated that up to 70% of athletes who screen positive on the APSQ could be false positives, requiring no referral to a mental health professional (Waleriańczyk et al., 2024). Moreover, scholars have now argued for brief clinical interviews to complement screening, in order to add a more nuanced understanding of contextual factors and mitigate the risk of over-pathologising screening data (Waleriańczyk et al., 2026). However, implementing such approaches will inevitably further increase the downstream burden on support systems, even in well-resourced organisations. Importantly, once an athlete screens positive, organisations carry an ethical responsibility to initiate follow-up, regardless of whether the result ultimately reflects a false positive. If such follow-up cannot be ensured, screening risks devolving into a tokenistic exercise rather than a meaningful intervention. Adequate resources are, therefore, required not only to provide specialist care, but also to conduct initial follow-up assessments that distinguish transient distress from more persistent or clinically significant concerns.

Another challenge relates to the appropriate frequency of mental health screening. Proposed screening schedules vary widely, ranging from weekly (e.g., Balcombe & De Leo, 2020; Meidl et al., 2024b) to annual screening (e.g., Chang et al., 2020; Kroshus-Havril et al., 2025). Determining an effective screening frequency requires balancing sensitivity to the dynamic nature of mental health against practical feasibility (Hopwood et al., 2022). Mental health states fluctuate over time, and screening only once per year is unlikely to provide meaningful predictive insight into these fluctuations. At the same time, overly frequent screening increases the risk of survey fatigue (Whelan et al., 2025) and may further strain

already limited support systems. To date, empirical evidence remains insufficient to define optimal screening frequency across different sport contexts. Moreover, measures used for repeated screening must demonstrate sensitivity to change over time. While some initial evidence of such temporal sensitivity is available for certain instruments (Meidl et al., 2024a), most commonly proposed screening tools have not yet been systematically evaluated for their suitability in repeated or longitudinal screening contexts.

The effectiveness of a comprehensive screening programme also depends on sustained engagement. Athletes must not only be willing to complete screening instruments, but also to do so repeatedly over time. Evidence on this point is mixed. One study reported sustained average weekly response rate of around 84%, over the course of two years, for a very brief screening tool (Meidl et al., 2024b). In contrast, one of the few studies examining longitudinal use of the more extensive SMHAT-1 observed a sharp decline in response rates, from 98% at baseline to 24% after just three measurement points (Mountjoy et al., 2023a). Moreover, the effectiveness of screening instruments does not only depend on athletes' willingness to complete the instrument, but also on their willingness to engage with the proposed follow-up actions. Anderson et al. (2025b), for example, found that about a quarter of flagged athletes in their sample were either unable to be contacted or declined further follow-up actions when offered. Taken together, these findings raise questions about whether the substantial investment required for screening represents the most efficient use of resources, when a considerable proportion of the target population does not engage with the screening or the subsequent interventions.

Another important feasibility consideration is the cultural responsiveness of existing screening instruments, particularly when applied in non-Western or culturally diverse settings. Cultural responsiveness extends beyond simply translating existing instruments to different languages; it also requires sensitivity to culturally specific understandings of mental

health, distress, and help-seeking, as well as to the social meanings attached to mental health labels (Humphrey & Wigelsworth, 2016). When screening tools fail to align with local norms, values, and lived experiences, they risk misinterpreting distress or imposing frameworks that lack relevance for the populations being screened. While mental health screening is sometimes framed as a strategy to reduce stigma, Silvester et al. (2025) found that screening approaches perceived as culturally incongruent may, in fact, exacerbate stigma rather than alleviate it.

Concerns may also arise regarding the competencies and training of individuals responsible for administering, interpreting, and acting upon screening results (Kegelaers et al., 2026). Existing literature highlights considerable ambiguity regarding who should oversee mental health screening processes (Kroshus-Havril et al., 2025). Although many authors argue that screening should be conducted exclusively by licensed mental health professionals (Tomalski et al., 2019), this is not always the case in practice. In the NCAA, for example, screening is frequently administered and reviewed by athletic trainers (Drew et al., 2023), despite the fact that such professionals typically lack formal mental health training. Importantly, not all professionals who are sport psychologists are trained or licensed to assess or manage mental disorders. Thus, it can be argued that a distinction should be made between performance-focused sport psychology practitioners and clinically trained professionals (e.g., clinical [sport] psychologists) with expertise in mental health assessment and care. Moving screening away from a designated mental health professional may also lead to broader concerns about role conflict in high-performance environments. Athletic trainers, team doctors, sport psychologists, and other staff may simultaneously hold responsibilities related to care, performance optimisation, and selection. When these roles overlap, dual loyalties can undermine ethical integrity and make true confidentiality difficult to guarantee (Henriksen et al., 2024).

Finally, mental health screening raises substantial privacy and confidentiality concerns. Violations of privacy represent a distinct and well-documented risk (Levitt et al., 2007), particularly given that mental health data fall within the highest category of sensitive personal data. In this regard, it has been argued that screening data should be treated on the same level as medical data (Drew et al., 2023; Rancourt et al., 2020), raising important questions about who can access this information and for what purposes. Depending on the region, there are also strict legal regulations for the handling and storage of sensitive personal health data, such as the General Data Protection Regulation (GDPR) or the new European Health Data Space (EHDS) Regulations. Compliance with these frameworks requires sport organisations to invest and develop clear procedures for data governance, security, and accountability (Kegelaers et al., 2024b; Mountjoy et al., 2023b).

Taken together, these issues illustrate that mental health screening requires the development of a complex and resource-intensive system of governance, expertise, and follow-up care. Given this complexity, the question becomes: does screening actually work? In the following section, we will explore the available evidence on the effectiveness of mental health screening programmes.

4.3 Effectiveness of mental health screening

The ultimate criteria for a screening programme should be its capacity to improve outcomes and prognosis for the individuals involved (Andermann et al., 2008). In other words, mental health screening programmes should be able to demonstrate long-term improvements in relevant outcomes, such as improved well-being, reductions in the prevalence or severity of mental health symptoms or disorders, increased help-seeking behaviours, and improved treatment engagement or effectiveness. Moreover, screening programmes should be cost-effective, meaning that any long-term benefits are achieved more efficiently and at lower cost than alternative models of care or support. To date, however,

evidence addressing these criteria in sport remains extremely limited. Some studies have examined patterns of service uptake following the implementation of screening programmes among athletes (Anderson et al., 2025b; Higgins et al., 2023). For example, Higgins et al. (2023) found that pre-season screening did not predict the use of mental health services during the subsequent season, calling into question the effectiveness of such one-off screening approaches. However, to the best of our knowledge, no studies have directly evaluated the effectiveness of mental health screening programmes in sport by examining long-term outcomes or comparing screened and non-screened groups. As a result, there is currently little empirical basis on which to judge this primary criterion for screening programmes in sport contexts.

In the absence of comprehensive effectiveness studies within sport, the strongest available evidence comes from adjacent fields, where the effectiveness of mental health screening has been examined more systematically. For example, a recent systematic review and meta-analysis examined the effectiveness of universal mental health screening in the workplace (Strudwick et al., 2023). The authors found no evidence that mental health screening followed by general advice or signposting to support services improved mental health outcomes. A small but statistically significant effect was observed only when screening was directly linked to immediate access to mental health care; however, the certainty of this evidence was rated as low. Based on these findings the authors argue that “given the limited research available, screening should not be used as a primary or stand-alone approach to mental health” (Strudwick et al., 2023, p.469). Notably, this position was also adopted by the WHO in their guidelines on mental health at work (World Health Organization, 2022). Based on a Grading of Recommendations Assessment, Development, and Evaluation (GRADE) of the available evidence, the WHO explicitly does not endorse mental health screening given the lack of available supporting evidence.

Similar conclusions have been drawn in educational contexts. A systematic review examining the effectiveness of mental health screening in school settings identified substantial heterogeneity in study designs, a lack of randomised controlled trials, and generally poor outcome reporting (Anderson et al., 2019). Based on these findings, the authors concluded that the supporting evidence for mental health screening in schools was weak and tentative at best. Importantly, this review also highlighted the limited evaluation of cost-effectiveness, noting that few studies compared screening programmes with alternative forms of care or support (e.g., universal prevention, mental health literacy promotion, addressing structural risk factors, embedded clinical care). Even in cases where screening appeared to produce small or negligible effects, future research is needed to examine whether the potential benefits of screening justify its financial, organisational, and human costs (Anderson et al., 2019).

As long as direct evidence on the effectiveness of mental health screening in sport remains absent, insights from adjacent fields suggest that a cautious and sceptical stance toward the effectiveness of screening programmes in sport is warranted. The limited and ambivalent findings from workplace and educational settings indicate that screening alone is unlikely to produce meaningful improvements in mental health outcomes, particularly when not embedded within well-resourced systems of care. Accordingly, more carefully designed research is needed to evaluate the effectiveness of mental health screening in sport-specific contexts, including studies that examine long-term outcomes and compare screened and non-screened groups. Importantly, any evaluation of effectiveness should also take into account the relative costs of implementing screening programmes and maintaining the necessary follow-up and referral structures, to determine whether screening represents an efficient and proportionate use of limited resources within high-performance sport systems.

If mental health screening demonstrates limited effectiveness, potentially due to several feasibility issues, another important consideration is the risk for unintended consequences or actual harm. In the following section, we will, therefore, take a closer look at the potential for harm due to mental health screening in sport.

4.4 Harms and unintended consequences

Mental health screening is underpinned by a fundamental ethical requirement: it should do more good than harm (Andermann et al., 2008). The proposed benefits of screening, such as early identification, timely intervention, and improved mental health outcomes, are often intuitive and widely accepted. However, screening inevitably also entails risks of harm, yet this harm often remains less obvious and less frequently scrutinised (Dans et al., 2011). This asymmetry is particularly relevant as the benefits of screening at the population level are relatively modest at best. As a result, even small individual-level harms may be sufficient to tip the overall balance away from net benefit (Dans et al., 2011; Juth & Munthe, 2012). Nevertheless, despite the growing presence of mental health screening in sport, the potential harms associated with such practices remain largely underexamined.

One potential source of harm relates to the consequences of screening positive. Receiving a label suggestive of being "ill" may negatively affect well-being and encourage the adoption of a sick role, even in the absence of clinically meaningful impairment (Dans et al., 2011; Levitt et al., 2007). The act of being labelled in itself may generate additional stress, particularly when screening results are perceived as carrying implications beyond health. These risks are especially salient in cases of false positive results, which, as discussed earlier, may be relatively common depending on the specificity of the screening instrument used. In elite sport contexts, the stress associated with a positive screen may be compounded by fears regarding potential consequences for selection, playing time, or career prospects. Such concerns may also influence athletes' willingness to respond honestly to screening

instruments. Athletes may have multiple reasons to underreport symptoms or strategically manage their responses, particularly in environments characterised by performance pressures and power asymmetries (Rancourt et al., 2020). These dynamics are especially pronounced when mental health screening is conducted at sensitive moments, such as preparticipation or preselection, as proposed in early NCAA guidelines (NCAA Sport Science Institute, 2016). In turn, distorted reporting undermines the validity of screening outcomes and compromises the effectiveness of screening programmes as a whole (Kroshus-Havril et al., 2025).

Another potential for harm relates to what mental health screening in sport is designed to detect. Current screening approaches largely focus on common disorders, such as anxiety and depression (e.g., SMHAT-1), which tend to carry relatively low levels of social stigma (Hazell et al., 2022). There is a clear rationale underpinning this focus, as these conditions are the most prevalent in both general and athlete populations. However, less visible, more complex, and more stigmatised conditions, asuch as psychosis, bipolar disorder, or obsessive–compulsive disorder, are far less explicitly represented in existing screening tools (although there are exceptions; see Taylor et al., 2023). This selective focus may inadvertently reinforce stigma by normalising attention to certain conditions while rendering others invisible (Hazell et al., 2022). Athletes living with more stigmatised or less visible disorders may consequently feel invalidated, marginalised, or discouraged from seeking support. More broadly, this raises questions about the readiness of sport systems and sport research to engage with mental health in a broad and holistic manner.

A further ethical concern relates to the tension between individual autonomy and the public health logic underpinning screening (Juth & Munthe, 2012). Respect for autonomy and informed choice is a cornerstone of ethical screening practice (Andermann et al., 2008). Yet, in many programmes, participation may be either mandatory (Drew et al., 2023; Moesch et al., 2018) or nominally voluntary but embedded within institutional expectations of

compliance, for example, when it is integrated within global health screening (Spörri et al., 2025). From a bioethical perspective, institutionalised health screening is often viewed as inherently oppositional to individual autonomy, as it creates pressure that exceeds acceptable levels of concerned persuasion (Juth & Munthe, 2012). As screening becomes increasingly normalised, individuals may experience diminishing practical freedom to opt out, regardless of whether screening is formally described as voluntary. These autonomy-thwarting pressures are closely intertwined with issues of well-being. A common justification for mental health screening is the assumption that knowing about potential problems is preferable to remaining unaware. However, bioethicists argue that this assumption holds primarily when individuals already suspect a problem and voluntarily seek assessment (Juth & Munthe, 2012). In cases where individuals perceive themselves as well and undergo involuntary or pressured screening, being informed of a potential mental health problem may generate more harm than benefit, particularly when no effective or accessible follow-up care is available. In such circumstances, screening may reduce rather than enhance well-being.

Finally, mental health screening may serve institutional interests as much as, or more than, the interests of athletes themselves. Screening programmes often align with organisational incentives, such as proving professional legitimacy, reputational protection, or demonstrations of due diligence (Juth & Munthe, 2012). While such alignment does not inherently invalidate screening, it can shape how screening is justified, prioritised, and sustained, even when individual-level benefits remain uncertain. One consequence may be the diversion of resources. As demonstrated, comprehensive screening programmes require substantial investments in staff training, data management, and follow-up capacity. In resource-limited contexts, prioritising screening may therefore displace funding from more targeted, evidence-based interventions that could offer greater direct benefit to individual athletes, coaches, or entourage members. Another potential downside is the individualisation

of responsibility. Screening may place the onus on individuals to act on the results of the screening and actively seek support for their detected mental health problems (Strudwick et al., 2023). At the same time it neglects the potential influence of the wider environment or system around the individual (Purcell et al., 2022). Structural barriers, such as excessive training loads, harmful coaching practices, or insecure career transitions, are all known to affect athletes' mental health (Kegelaers et al., 2024a; Kuettel & Larsen, 2020), yet remain unaddressed within screening practices. In this sense, screening may function as a form of institutional self-protection, providing visible evidence of action rather than prompting substantive organisational change. When this occurs, screening becomes a symbolic intervention that satisfies governance and reputational demands without fundamentally improving mental health.

5. Is there a future for mental health screening in sport?

This paper offered a critical review of the current evidence base underpinning mental health screening in sport. In sum, the available evidence does not currently support screening as a necessary or default intervention, particularly not with the level of enthusiasm with which it has recently been promoted. This position should not be interpreted as discouraging screening per se. Rather, it emphasises the need to prioritise interventions with clearer evidence of effectiveness and more feasible implementation pathways. In the absence of stronger evidence demonstrating effectiveness, sport organisations should carefully weigh the resource demands and potential harms of screening against alternative approaches that may offer greater and more direct benefits for protecting and promoting the mental health of athletes, coaches, and broader entourage members.

Importantly, if an organisation decides not to adopt mental health screening, this should not be conflated with inaction. Rather, organisations should consider alternative strategies, which may, in many contexts, offer a more efficient and practically actionable

means of supporting mental health. For example, organisations can prioritise universal prevention and mental health promotion initiatives (e.g., based on cognitive-behavioural therapy, mindfulness, or positive psychology) that build resources and strengthen overall well-being and reduce the risk of onset of psychological symptoms (Wang et al., 2025). In practice, such approaches may be delivered through structured workshops or brief intervention modules embedded within training environments, often combining group-based psychoeducation, skills training (e.g., coping, emotion regulation), and reflection (Wang et al., 2025). Similarly, investing in mental health literacy training for athletes, staff, and entourage members may help reduce stigma and improve individuals' capacity to recognise and signal early signs of mental health problems in themselves or others (Breslin et al., 2022; Gorczynski et al., 2021). Such efforts can support continued awareness about mental health within teams, without requiring the formal structure of screening (Kegelaers et al., 2024b; Silvester et al., 2025). Importantly, universal prevention or mental health literacy interventions still require careful consideration of athletes' autonomy, engagement, and the specific organisational context in which they are implemented. At the same time, organisations should address structural contributors to mental distress and train coaches and support staff to foster psychologically safe and autonomy-supportive environments that promote mental health across the entire sport system (Purcell et al., 2022; Walton et al., 2024).

Equally important is ensuring easy, affordable, and confidential access to specialised mental health care. Access to mental health care should not be conceptualised merely as a downstream requirement following screening, but rather as a core component of organisational mental health systems in its own right (Purcell et al., 2019, 2022). Direct access to qualified clinicians (e.g., clinical psychologists and/or psychiatrists) enables comprehensive functional analysis that integrates symptom presentation with sensitivity to

contextual, developmental, individual, and sport-specific factors (Thrower et al., 2024). Such functional analytic approaches are particularly important, given that similar symptom profiles may reflect very different underlying processes and care needs, consistent with process-based and contextual perspectives in contemporary clinical science (Hayes et al., 2020). Strengthening embedded clinical expertise and well-connected referral networks may, therefore, represent a more scalable and ethically robust strategy than increasing screening frequency in settings where clinical capacity is limited (Pilkington et al., 2025; Purcell et al., 2019).

Altogether, this raises the broader question of whether mental health screening has any role within sport organisations at all. The present critique does not suggest that screening should be abandoned wholesale. Rather, there may be limited circumstances in which screening can be justified, particularly when embedded within a well-developed, clearly governed, and adequately resourced support system. Even in such contexts, organisations must carefully evaluate whether screening is proportionate, feasible, and aligned with available care capacity. Drawing on general health screening principles and the considerations discussed throughout this review, we therefore formulate a set of tentative recommendations for mental health screening in the context of high-performance sport. These recommendations should be interpreted as aspirational targets to guide decision-making, rather than as absolute criteria that must be fully met in all contexts. They are intended to support organisations in critically evaluating their readiness for screening, while recognising that partial or stepwise implementation may sometimes be more realistic in practice.

1. Screening should be integrated within a comprehensive mental health strategy, including preventive interventions, staff training, and systematic attention to contextual risk factors.

2. Only well-validated, culturally appropriate, screening instruments with demonstrated predictive validity in comparable athlete populations should be considered.
3. Screening should only be administered, interpreted, and communicated by qualified mental health professionals, with strict adherence to professional confidentiality standards.
4. Participation in screening should be fully voluntary, supported by informed consent and free from explicit or implicit institutional coercion.
5. There should be clear and transparent communication regarding the purpose of screening, how data will be used, and who will have access to the results.
6. Screening should be explicitly decoupled from performance-related decisions, such as selection, contracts, or playing time, and independence between screening personnel and performance decision-makers should be ensured.
7. Mental health data obtained through screening should be handled and stored according to medical confidentiality standards and in compliance with applicable legal regulations.
8. Direct access to timely follow-up assessment and appropriate mental health care should be ensured for *all* individuals who screen positive.
9. Screening should be limited to appropriate contexts, prioritising help-seeking or indicated situations in which individuals express concerns and actively request assessment, and avoiding universal screening unless strong supporting evidence, sufficient resources, and robust governance structures are demonstrably in place.
10. Ongoing monitoring and evaluation should be embedded within screening programmes, including systematic assessment of effectiveness, feasibility, and potential harms or unintended consequences.

Finally, further coordinated research efforts and cross-sectoral collaborations are needed to further strengthen the evidence-base to support mental health screening in sport. First, future research should continue to evaluate the psychometric quality of candidate screening instruments, with particular emphasis on establishing predictive validity using robust criterion measures, such as clinical follow-up interviews, specifically within elite athlete populations. Second, further qualitative and quantitative research is needed to evaluate real-world screening programmes, including examining downstream referral pathways, implementation feasibility, cost-efficiency, and whether screening leads to meaningful improvements in mental health outcomes. Particular attention should be paid to systematically investigating potential harms, unintended consequences, and ethical trade-offs associated with screening in sport. Finally, universities, professional psychology organisations, and governing bodies, collectively, have an important role to play in strengthening training standards, professional competencies, and evidence-based protocols for mental health screening, thereby supporting more evidence-based practice within applied sport organisations.

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Table 1.

Predictive validity of proposed screening instruments in athlete populations

Instrument	Reference	Sample	Criterion measure	SE	SP	PPV	NPV
ASPQ	Anderson et al. (2023)	1066 Olympic and Paralympic Team USA athletes	SMHAT-1 stage 2 measures	33.33%-95.24%	32.31%-97.41%	4.20%-76.22%,	35.06%-100%
APSQ	Anderson et al. (2025a)	862 Olympic and Paralympic Team USA athletes	SMHAT-1 stage 2 measures	32.78%-100%	75.38%-80.48%	4.65%-39.07%	72.31%-100%
PSTS PSCS	Donohue et al. (2019)	289 US student-athletes	SCL-90-R	60% 68%	75%, 72%	71% 71%	65% 69%
MHDSIA	Donohue et al. (2023)	259 US student-athletes	SCL-90-R	80%	80%	64%	90%
CES-D* PHQ-9*	Keenan et al. (2023)	290 US Division II student-athletes	MINI diagnostic interview	83% 78%	78% 75%	19.7% 17.3%	98.6% 98.1%
ASPQ	Ojio et al. (2025)	220 Japanese elite rugby players	SMHAT-1 stage 2 measures	66.67%-100%	35.71%-44.26%	1.91%-92.68%	59.81%-99.87%
APSQ**	Rice et al. (2020a)	1007 male Australian team sport athletes	K10	93.50%	79.20%	Not reported	
APSQ	Rice et al. (2020b)	1007 male Australian team sport athletes (same as Rice et al. [2020a]) and 84 female elite athletes	K10	93.40%	79.20%	Not reported	
APSQ***	Shannon et al. (2025)	605 Northern Irish amateur athletes	PHQ-8 GAD-7	79% 78%	79% 73%	Not reported Not reported	
APSQ	Waleriańczyk et al. (2024)	1121 Polish elite athletes	SMHAT-1 stage 2 measures Any positive SMHAT-1 stage 2 screening	82.0%-98.9% 82.3%	28.4%-30.04% 38.1%	4.1%-58.1% 58.1%	86.1%-99.7% 67.4%

			Clinical intake – any follow-up action	89.6%	35.7%	39.3%	88.1%
			Clinical intake – referral to mental health professional	97.2%	30.3%	12.8%	99.0%
APSQ	Whelan et al. (2025)	2758 US Division I student-athletes	SMHAT-1 stage 2 measures	46%-90%	79%-84%,	6%-43%	91%-99%

APSQ: Athlete Psychological Strain Questionnaire; CES-D: Center for Epidemiologic Studies Depression Scale; GAD-7: General Anxiety Disorder-7; K10: Kessler Psychological Distress Scale; MHDSIA: Mental Health Disorders Screening Instrument for Athletes; PHQ-8: Patient Health Questionnaire-8; PHQ-9: Patient Health Questionnaire-9; PSCS: Problems in Sport Competition Scale; PSTS: Problems in Sport Training Scale; SCL-90-R: Symptom Checklist 90-revised; SE: Sensitivity; SP: Specificity; PPV: Positive predictive value; NPV: Negative predictive value

[*]Adopted revised cut-off scores of ≥15 for the CES-D and ≥6 for the PHQ-9

[**]Adopted a cut-off of ≥ 21, instead of the SMHAT-1 proposed cut-off of ≥ 17

[***]Adopted a cut-off of ≥ 23, instead of the SMHAT-1 proposed cut-off of ≥ 17