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SPORT AND EXERCISE PSYCHOLOGY

# Beyond the podium: A Delphi approach aimed at empowering coaches with practical strategies to identify and support athlete mental health

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## ABSTRACT

This study aimed to establish expert consensus on approaches to assist coaches in both identifying mental health symptoms and facilitating appropriate referral of athletes to mental health professionals. A modified Delphi approach was adopted using three rounds of expert consultation through individual and anonymous survey responses, thereby reducing potential influences or biases from group opinions. An interdisciplinary expert panel of coaches ($n = 15$), athletes ($n = 9$), psychologists ($n = 16$), and performance support staff ($n = 26$) was recruited through Australian sports networks, inclusive of sport science, medicine, and coaching to participate. Iterative surveys involved open-ended and multiple-choice questions (Survey 1), as well as statement agreement ratings (Surveys 2 and 3). The threshold for agreement was set at 80%. Fifty-three items achieved consensus across four main domains, including the coach role and responsibilities, the referral process, athlete mental health plans, and mental health training and upskilling. Consensus outcomes highlighted the nuanced and dynamic approach required to effectively support athlete mental health. The strategies and guiding principles outlined can be used to inform the development of resources that can build the confidence, skills, and knowledge of coaches in identifying, supporting, and referring athletes who require mental health assistance.

## Introduction

Participation in organised sport is known to be associated with improved mental wellbeing (Eime et al., 2013); however, high-performance athletes are at increased risk of sport-specific stressors (e.g., co-morbid injuries, maladaptive behaviours) (Castaldelli-Maia et al., 2019; Reardon et al., 2019). These stressors may in turn leave athletes more vulnerable to mental health issues up to, and post-retirement, potentially affecting their performance trajectory and wellbeing in, and beyond, high-performance sport (Brockett et al., 2024; Henriksen et al., 2019). Due to the nature of the coach-athlete relationship, coaches are ideally placed to observe their athletes (Sebbens et al., 2016) and to further identify and refer athletes to relevant mental health professionals (Biggin et al., 2017; Purcell et al., 2022). This role positions the coach within an ecological system where their athlete interactions contribute to, and are influenced by, broader organisational and cultural factors impacting mental health support (Purcell et al., 2019). As such,

coaches exist in a microsystem around the athlete (along with parents and friends) and play a key role in shaping the immediate training environment (Purcell et al., 2019). Coaches are also in a position to mediate the influence of the exosystem (i.e., individual sport policies) and macrosystem (i.e., overarching sporting systems), for example through promoting help-seeking behaviours (Purcell et al., 2019).

A positive motivational climate (i.e., a task-oriented climate promoting self-motivation, commitment, and self-belief through a focus on mastery) (Duda & Balaguer, 2007) has also been associated with improved athlete mental wellbeing (Castro-Sanchez et al., 2019; Hodge et al., 2014). Coaches as central drivers of this environment are able to foster dimensions of positive mental health (e.g., encouraging athlete autonomy), whilst also helping to mitigate mental ill-health (e.g., normalising mistakes in the learning process) (Bissett et al., 2020; Pensgaard & Roberts, 2002). This distinction between the presence of mental health and the absence of mental ill-health (Keyes,

2009), offers a structure for conceptualising the coach's role in identifying possible mental health issues and embedding a positive motivational climate within the athlete's microsystem while shaping the influence of broader organisational systems.

Once an athlete is receiving the appropriate help, coaches have also been identified as key persons of continued support, particularly in encouraging treatment adherence (Bissett et al., 2020; Purcell et al., 2019). However, agreed guiding principles for coaches are yet to be broadly adopted, relying on coach discretion to dictate methods of assistance for athletes struggling with their mental health (Bissett et al., 2020; Purcell et al., 2022). This may also be a significant issue for sporting organisations as Australian state governments work to strengthen laws around workplace health and safety, to more effectively counter risks to psychological health in the workplace (Biggin et al., 2017).

While there are general resources and support networks in place within the Australian Institute of Sport (AIS) for coach (e.g., Coach Wellbeing Hub) (Australian Institute of Sport, 2024b) and athlete wellbeing (e.g., Athlete Wellbeing and Engagement) (Australian Institute of Sport, 2024a), formal mental health training is not universally mandatory nor systematically offered for Australian coaches (Purcell et al., 2022; Reardon et al., 2019; Sebbens et al., 2016). Moreover, coaches in numerous studies have emphasised the need for greater resources and specific strategies for managing athlete mental health and wellbeing (Castro-Sanchez et al., 2019; Purcell et al., 2022; Sankey et al., 2023). There is evidence that methods such as active observation, in conjunction with a knowledge of signs and symptoms, may encourage coaches to take early or preventative measures for their athletes' mental health (Gorczynski et al., 2020). To further support coaches in monitoring athlete mental health and to confidently refer to appropriate professionals, input from interdisciplinary experts (e.g., coaches, psychologists, performance support staff) is required to formulate comprehensive and realistic guidelines specific to Australian sport. Enabling coaches to engage and assist athletes in managing their mental health can consequently help athletes maintain the peak mental performance level required to perform successfully in high-performance sport and additionally ensure that athletes with existing mental health challenges are appropriately managed.

Therefore, the present study aimed to: examine factors contributing to the motivational climate for optimised mental health and wellbeing within the Australian sports system; and to develop consensus from relevant experts (i.e., athletes, coaches, psychologists, support staff) on practical approaches to assist coaches with identifying mental health issues in their athletes and determine when and how to refer athletes to the most relevant health professional (e.g., clinical or performance psychologist, doctor and/or psychiatrist).

## Materials and methods

A modified Delphi approach was adopted using three rounds of expert consultation through survey response. Responses were individually completed and anonymous, thereby reducing potential influences or biases from group opinions (Diamond et al., 2014). This technique has been used widely across numerous disciplines, including sport and exercise sciences, to inform athlete profiling and monitoring (Rogers et al., 2022), health promotion in sport settings, and mental health literacy for athletes, coaches, and support staff (Biggin et al., 2017; Bissett et al., 2020; S. Johnson et al., 2020). The development and reporting of this Delphi was in line with the Conducting and Reporting Delphi Studies (CREDES) checklist (see online supplemental file 1) (Junger et al., 2017). Ethical approval was obtained by the University of Technology Sydney Human Research Ethics Committee (ETH23-7983) and the research was pre-registered at Open Science Framework (OSF registration osf.io/qve4r).

Experts from key sub-groups were recruited: (1) coaches (i.e., member of the AIS National Coach Network for at least three years), (2) athletes (i.e., current categorised athlete as per National Athlete Categorisation Framework for at least three years), (3) psychologists (i.e., registered AIS Mental Health Referral Network clinician), (4) other current performance support staff (e.g., Athlete Wellbeing and Engagement Managers, Strength and Conditioning providers from the National Institute Network or a National Sport Organisation). These sub-groups were included as they each play a distinct role in the high-performance sporting environment and interact regularly with both coaches and athletes, therefore, providing unique but complimentary perspectives. Many are also directly involved in athlete mental health support (e.g., through Athlete Wellbeing and Engagement roles), making their insights particularly relevant.

Sub-group experts were invited to participate through email invitation. Purposive sampling was used to ensure the views of those best able to provide in-depth, expert knowledge around athlete wellbeing were included (J. L. Johnson et al., 2020). This was complemented with snowball sampling, where experts and relevant contacts of the research team were asked to forward the invitation to other experts within the high-performance sport network (J. L. Johnson et al., 2020).

A total of 191 individuals were invited to participate, of which 114 responded (59.7%). For all surveys, reminder emails were sent at two-week intervals after the initial survey invitation. No response after the third reminder email was considered a decision to not participate and/ or drop out. No financial benefits or compensation for participation were provided. Informed consent from participants was indicated through a tick box at the start of the survey as well as the survey submission. This consent was then renewed prior to the start of each survey.

While the public was not directly involved in the design or conduct of the present study, two research team members who are industry experts with relevant expertise (i.e., high-performance coach, sport psychologist) contributed as research advisors.

### Delphi round 1: Establishing initial themes and brainstorming new ideas

Previous research literature was examined to synthesise current information concerning the approaches, strategies, and resources for managing athlete mental health, in addition to creating a motivational climate specific to high-performance sport. An overview was then presented to the interdisciplinary research team, at which time Survey 1 questions were developed. Multiple-choice questions were used, in addition to open-ended items, to provide participants with the opportunity to expand their responses and to discern greater nuances between those responses. Survey 1 was then distributed using the online platform Qualtrics (Qualtrics, Provo, UT, USA; see online supplemental file 2).

### Delphi round 2: Clarifying responses

Items were then revised, and additional items added, based on the qualitative analysis in Round 1 to form Survey 2. Participants were asked to rate items on a 5-point Likert scale from 1 ('strongly disagree') to 5 ('strongly agree') (see online supplemental file 3). This survey was only distributed to participants who had completed Survey 1; consistent with previous research (Biggin et al., 2017; Strachan et al., 2023). Also, via Qualtrics (Qualtrics, Provo, UT, USA). Similar to previous Delphi processes (Diamond et al., 2014; Stewart et al., 2017), consensus was considered reached if ≥80% of participants provided a score of 1 to 2 (i.e., 'strongly disagree', 'disagree') or 4 to 5 (i.e., 'agree', 'strongly agree') on each survey item. These items were not carried over to the final round. Statements that reached near consensus within the range of 60–79.9% were revised and re-rated for Survey 3. Several of these items were also expanded and/or absorbed into

separate item dimensions for added depth and nuance, reflected in Table 2. Finally, items with < 60% agreement rates were considered as 'non-consensus' and were excluded from Survey 3 (Figure 1). Participants also received a summary of their Survey 2 responses in context with the average scores for each item (see online supplemental file 4).

### Delphi round 3: Generating consensus

Survey 3 (see online supplementary file 5) was then redistributed through Qualtrics (Qualtrics, Provo, UT, USA) to participants who had completed Survey 2. Similar to Survey 2, participants rated items on a 5-point Likert scale from 'strongly disagree' to 'strongly agree' and consensus was set at ≥80% agreement. See Figure 1 for an overview of the Delphi process.

## Results

A total of 66 participated in Survey 1, of which 56 (85%) participated in all 3 rounds. Support staff were the most represented role (n = 26, 41%), while athletes were the least (n = 9, 15%). Participants were 52% male (n = 34) and averaged 11 years of experience in high-performance sport (SD = 7.8). Over a third of participants had not received any kind of formal mental health training (n = 26, 39%), of which 96% (n = 25) reported that mental health training had not been offered to them. Further demographic characteristics of participants are detailed in Table 1.

### Initial themes and emerging statistics

Survey 1 utilised multiple-choice questions in addition to open-ended items in order to discern greater nuances in participant responses. Responses revealed that 97% of participants agreed that 'coaches working within the Australian network should have a role and responsibility to support athlete mental health'. However, 83% felt neutral or disagreed that they were 'confident coaches working within the Australian network have the capability to support athlete mental health'. Within each participant sub-group, coaches indicated that athlete mental health should be monitored via online systems (73%), direct observation (94%), and conversations with the athlete's family (67%). Additionally, 67% felt any mental health training or upskilling should be bespoke to each coach. Athletes highlighted that the main referral process enacted by coaches in a non-urgent mental health situation should follow a passive referral process (i.e., the athlete is given the details of the mental health
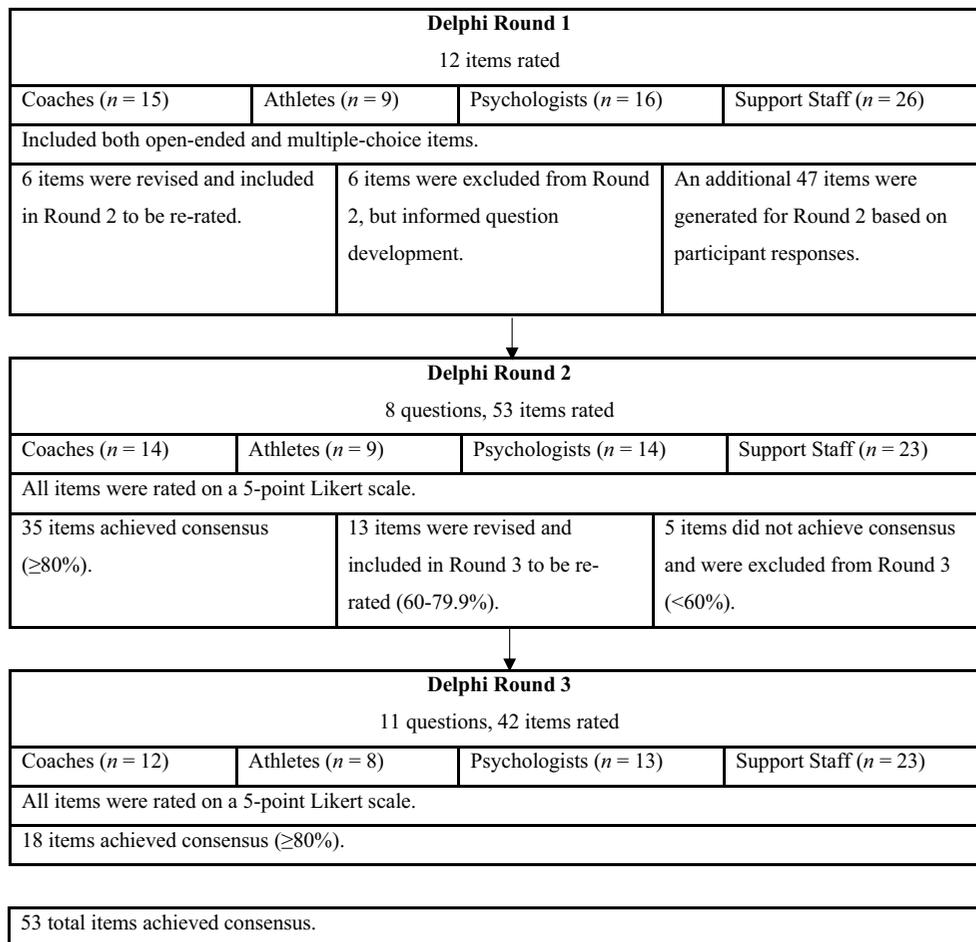
| **Delphi Round 1** | | | |
| --- | --- | --- | --- |
| 12 items rated | | | |
| Coaches (*n* = 15) | Athletes (*n* = 9) | Psychologists (*n* = 16) | Support Staff (*n* = 26) |
| Included both open-ended and multiple-choice items. | | | |
| 6 items were revised and included in Round 2 to be re-rated. | 6 items were excluded from Round 2, but informed question development. | | An additional 47 items were generated for Round 2 based on participant responses. |

| **Delphi Round 2** | | | |
| --- | --- | --- | --- |
| 8 questions, 53 items rated | | | |
| Coaches (*n* = 14) | Athletes (*n* = 9) | Psychologists (*n* = 14) | Support Staff (*n* = 23) |
| All items were rated on a 5-point Likert scale. | | | |
| 35 items achieved consensus (≥80%). | 13 items were revised and included in Round 3 to be re-rated (60-79.9%). | | 5 items did not achieve consensus and were excluded from Round 3 (<60%). |

| **Delphi Round 3** | | | |
| --- | --- | --- | --- |
| 11 questions, 42 items rated | | | |
| Coaches (*n* = 12) | Athletes (*n* = 8) | Psychologists (*n* = 13) | Support Staff (*n* = 23) |
| All items were rated on a 5-point Likert scale. | | | |
| 18 items achieved consensus (≥80%). | | | |

| 53 total items achieved consensus. |
| --- |

**Figure 1.** An overview of survey stages and item consensuses.

service to make their own appointment; 67%). Both athletes (78%) and support staff (65%) also highlighted that mental health training or upskilling of coaches should be delivered by a sport or clinical psychologist. Finally, 94% of psychologists raised that athlete mental health should be monitored using daily records and observations.

### Consensus items

Table 2 presents the 53 items included across Rounds 2 and 3 of the study and their levels of agreement (≥80% agreement threshold). These items fell within 4 domains: (1) the coach role and responsibilities; (2) the referral process; (3) athlete mental health plans; and (4) mental health training and upskilling. Of the 34 items included in the first domain, 15 achieved consensus. Two of the three items in the second domain and seven of the nine items in the third domain reached consensus. Finally, of the 44 items in the fourth domain, 29 reached consensus, four of which reached 100% agreement.

## Discussion

This study examined the role of the coach in identifying and supporting athlete mental health to determine an evidence base for practical approaches that can assist coaches in that role. Informed by the extant literature and the views of expert sub-group participants, factors that contribute to a positive motivational climate and the coach role in fostering athlete mental health were identified (Survey 1). These factors were further refined/nuanced through the proceeding iterations of the Delphi (Surveys 2 and 3), culminating in 53 consensus items that described practical approaches to assist coaches with identifying mental health issues in their athletes, and determining when and how to refer athletes to the most relevant health specialist. These items align with an ecological model of mental health, situating the coach within a broader context of individual, interpersonal, and organisational influences (Purcell et al., 2019); underscoring the need for multi-level support. Through this conceptual lens, these strategies can be viewed not only as tools for early identification and referral but also as mechanisms for actively cultivating a positive motivational climate.

**Table 1.** Demographic characteristics of participants collected in Round 1 (*n* = 66).

| | n(%) | | | |
|---|---|---|---|---|
| Characteristic | Coach (*n* = 15) | Athlete (*n* = 9) | Psychologist (*n* = 16) | Support Staff (*n* = 26) |
| **Age (years)**[a] | | | | |
| >25 | – | 1(11) | – | 1(4) |
| 25–34 | 1(7) | 7(78) | 4(25) | 10(38) |
| 35–44 | 5(33) | 1(11) | 2(13) | 10(38) |
| 45–54 | 4(29) | – | 6(38) | 4(15) |
| 55–64 | 3(20) | – | 1(6) | 1(4) |
| 65 | 1(7) | – | 2(13) | – |
| **Gender** | | | | |
| Female | 6(40) | 5(56) | 9(56) | 12(46) |
| Male | 9(60) | 4(44) | 7(44) | 14(54) |
| **Time in HP sport (years)** | | | | |
| >5 | – | – | 6(38) | 7(27) |
| 5–10 | 6(40) | 8(89) | 6(38) | 8(31) |
| 11–15 | 5(33) | 1(11) | – | 5(19) |
| 16–20 | 2(13) | – | 2(13) | 4(15) |
| 21–25 | – | – | 1(6) | 2(8) |
| >25 | 2(13) | – | 1(6) | – |
| **Formal MHT completed?** | | | | |
| Yes | 8(53) | 2(22) | 13(81) | 17(65) |
| No | 7(47) | 7(78) | 3(19) | 9(35) |
| *Types of MHT courses completed*[b] | | | | |
| MHFA | 5(63) | 1(50) | 6(38) | 11(65) |
| AIS | 3(38) | – | – | 6(35) |
| Tertiary Course(s) | – | – | 8(50) | 1(6) |
| Black Dog Institute[c] | – | – | 1(6) | 1(6) |
| Other(s) | 1(13) | 1(50) | 6(38) | 4(24) |
| *Did this training increase confidence to assist others?* | | | | |
| Yes | 7(88) | 2(100) | 13(100) | 16(94) |
| No | 1(14) | – | – | 1(6) |
| *Where MHT not completed, was MHT offered?* | | | | |
| Yes | – | – | – | 1(11) |
| No | 7(100) | 7(100) | 3(100) | 8(89) |
| **Aware of a MHEAP in the organisation?** | | | | |
| Yes | 5(33) | 1(11) | 4(25) | 8(31) |
| No | 10(67) | 7(78) | 12(75) | 18(69) |
| **Aware of, or ever used, a tool or checklist to assess athlete MH?** | | | | |
| Yes | 6(40) | 3(33) | 15(94) | 10(38) |
| No | 9(60) | 6(67) | 1(6) | 16(62) |
| **Retention rate across surveys** | 80% | 89% | 81% | 88% |

Abbreviations: AIS = Australian Institute of Sport; HP = high-performance; MH = mental health; MHEAP = mental health emergency action plan; MHFA = Mental Health First Aid; MHT = mental health training.
[a]Three participants declined to provide their age.
[b]Numerous participants completed multiple forms of MHT.
[c]An Australian mental health research institute.

While studies have consistently reported on the central role of the coach in creating a positive motivational environment for athletes to flourish (Lebrun et al., 2020; Mountjoy et al., 2016), principles to guide coach support of athlete mental health were lacking. Our findings have addressed this knowledge gap by identifying key roles and responsibilities of the coach, including encouraging athlete autonomy and agency as part of a positive motivational climate; being an accessible confidant for athletes to safely disclose; being willing to take action to address negative reported behaviours; and for supporting athletes to maintain a healthy sport-life balance. Outcomes from this study also revealed key recommended practices for coaches to monitor athlete mental health. These included: active observation and regular 'check-ins' with athletes; engaging in regular interdisciplinary meetings with performance support staff (although the regularity of these meetings did not reach consensus); using an indicator checklist to monitor for changes in individual athletes' mental health, their sleep and wellbeing; as well as their interaction with the broader team or squad regarding conflict and peer support. These responsibilities also serve as a foundation to delineate boundaries for coach engagement in athlete mental health, thereby addressing previous reports of unclear role responsibilities; particularly regarding the referral process (Lebrun et al., 2020; Sankey et al., 2023).

## The referral process

Monitoring athletes' mental health is considered to be an important aspect of the coach's role (Bissett et al.,

**Table 2.** Descriptive statistics and agreement ratings on a 5-point Likert scale from rounds 2 and 3.

| | Round 2 Mean ± SD | Agreement rating | Round 3 Mean ± SD | Agreement rating |
|---|---|---|---|---|
| **The coach role and responsibilities** | | | | |
| Supporting athletes to maintain a healthy balance between sport performance and other life domains should be the responsibility of the coach. | 3.52 ± 1.04 | 57% | | |
| Supporting athletes to maintain a healthy balance between sport performance and other life domains should be the responsibility of all staff working with the athlete. | 4.57 ± .62 | 93% | | |
| Supporting athlete autonomy (i.e., the athlete having control of their own actions and decisions) is an important aspect of a positive motivational climate. | 4.48 ± .67 | 93% | | |
| Coaches should encourage athlete agency (i.e., capacity to self-determine) and support their choices with regard to the management of their own MH and training processes. | 4.40 ± .58 | 95% | | |
| It is the responsibility of coaches to ensure a safe space for athletes to speak freely without threat of consequence (e.g., affect funding, lose position on team). | 4.62 ± .55 | 97% | | |
| The coach's role includes addressing negative behaviors of other individuals around the athlete. This may be with regard to other athletes, support staff, organisational staff, sponsors, etc. | 4.25 ± .70 | 92% | | |
| Coaches should address MH issues with athletes privately, in a space away from others and where the athlete feels safe and comfortable to disclose. | 4.73 ± .48 | 98% | | |
| *To monitor athlete MH, coaches should:* | | | | |
| Employ a method of regular direct observation (e.g., observing behavior, 'checking in' with athlete). | 4.48 ± .72 | 95% | | |
| Use a coach diary (or similar) to track/keep a record of observations on athletes' MH. | 3.63 ± .91 | 57% | | |
| Co-develop (coach-athlete) an individualised MH plan with the athlete. | 3.70 ± 1.12 | 67% | | |
| Have regular meetings with a sport or clinical psychologist. | 3.95 ± .67 | 78% | | |
| Have regular interdisciplinary meetings with performance support staff (e.g., wellbeing and enhancement managers, strength and conditioning coaches, physiotherapists) regarding athlete MH. *These meetings should occur every:* | 4.45 ± .67 | 93% | | |
| 3 months. | | | 3.96 ± .97 | 68% |
| 6 months. | | | 3.72 ± 1.14 | 66% |
| 9 months. | | | 2.75 ± 1.13 | 45% |
| 12 months. | | | 2.79 ± 1.45 | 54% |
| Use a checklist of key indicators specific to individual athlete MH. *This checklist should include:* | 3.85 ± .89 | 72% | | |
| Changes in attendance (e.g., training, other related appointments). | | | 4.27 ± .81 | 89% |
| Changes in emotional state (e.g., mood, anxiousness, frustration, higher or lower levels of energy). | | | 4.38 ± .81 | 91% |
| Changes in outward behavior (e.g., aggression, withdrawal). | | | 4.44 ± .68 | 93% |
| Use a checklist of key indicators specific to the MH of the team or squad. *This team checklist should include:* | 3.73 ± .85 | 67% | | |
| Team cohesiveness (i.e., degree of closeness within a team). | | | 4.05 ± .80 | 77% |
| Team member conflict (i.e., disagreements within a team). | | | 4.04 ± .84 | 80% |
| Team member socialisation (i.e., the process by which the team adjusts to new members and their acceptance within the team). | | | 3.95 ± .85 | 75% |
| Team member peer support (i.e., within-team encouragement and assistance). | | | 4.05 ± .76 | 80% |
| Use athlete-reported measures. *These measures should include:* | 4.00 ± .88 | 77% | | |
| Wellbeing (e.g., physical, emotional). | | | 4.14 ± .93 | 80% |
| Sleep. | | | 4.09 ± .92 | 82% |
| Perceived levels of mental effort. | | | 3.98 ± .95 | 79% |
| Perceived social support. | | | 3.95 ± .94 | 77% |
| *To best support athlete MH, coaches should consider results from:* | | | | |
| Physiological indicators (e.g., hormonal responses). | 3.40 ± .91 | 47% | | |
| General psychometric questionnaires. *These questionnaires should include:* | 3.58 ± .94 | 65% | | |
| The Sport Mental Health Assessment Tool-1. | | | 3.33 ± 1.05 | 46% |
| The Profile of Mood States (POMS). | | | 3.18 ± .98 | 33% |
| **When referring an athlete to a MH professional or service, the following should be considered:** | | | | |
| In non-urgent situations, the coach should give the athlete the details of the MH service for the athlete to make their own appointment (i.e., passive referral). | 4.02 ± .76 | 82% | | |
| If an athlete discloses a MH issue to the coach, the coach should refer the athlete to the relevant wellbeing and engagement staff within the sport organisation. | 4.25 ± .87 | 90% | | |
| If an athlete discloses a MH issue to the coach, the coach should make an appointment with a psychologist or medical professional on their behalf (with the athlete's consent). | 3.08 ± .95 | 35% | | |
| **An athlete's mental health plan should:** | | | | |
| Be developed at the start of their scholarship. | 3.92 ± .94 | 70% | 3.87 ± .85 | 82% |
| Be developed prior to the start of their scholarship. | | | 3.33 ± 1.01 | 39% |
| Be developed with active input from the athlete. | | | 4.68 ± .57 | 98% |
| Be continuous throughout their scholarship. | | | 4.16 ± .77 | 93% |
| Be regularly reviewed. | 4.33 ± .65 | 90% | | |
| Be dependent on the level of categorisation (e.g., emerging, developing). | 2.32 ± 1.12 | 66% | 2.35 ± 1.02 | 66% |
| Be dependent on chronological age. | 2.5 ± 1.10 | 60% | 3.16 ± 1.14 | 43% |
| Be developed with staff with MH expertise (e.g., wellbeing manager, sport/clinical psychologist). | 4.58 ± .56 | 97% | | |
| Be considered for all athletes. | 4.37 ± .75 | 90% | | |
| Only be considered for athletes with an identified MH challenge. | 2.00 ± .91 | 80% | | |

**Table 2.** (Continued).

| | Round 2 Mean ± SD | Agreement rating | Round 3 Mean ± SD | Agreement rating |
|---|---|---|---|---|
| **MHT and upskilling:** | | | | |
| All coaches should undertake mandatory sport-specific MHT or upskilling. | 4.37 ± .66 | 83% | | |
| All performance support staff working with athletes should undertake mandatory sport-specific MHT or upskilling. | 4.35 ± .74 | 82% | | |
| *MHT should:* | | | | |
| Be based on the structure of MHFA (or a recognised mental health educator e.g., Lifeline, St. John's Ambulance, Black Dog Institute). | 3.88 ± .90 | 73% | 3.67 ± .82 | 68% |
| Be delivered by a psychologist or other recognised MH educator. | 4.52 ± .45 | 97% | | |
| Be integrated into existing coach development training. | 4.35 ± .77 | 90% | | |
| Include bespoke components specific to the sport and daily training environment (e.g., sport-specific scenarios, role-playing). | 4.43 ± .81 | 95% | | |
| Include a range of options/delivery methods. | 4.15 ± .79 | 88% | | |
| Include 'reverse mentoring', where a coach is paired with an athlete to better understand the environment, culture, and ways for supporting athlete MH from the athlete's perspective. | 3.52 ± 1.21 | 57% | | |
| Have dates provided well in advance so that coaches can plan around it. | 4.6 ± .55 | 95% | | |
| *Delivery should primarily be:* | | | | |
| Online. | | | 3.11 ± 1.04 | 39% |
| In-person. | | | 4.21 ± .74 | 80% |
| Hybrid (combination of online and in-person). | | | 3.96 ± .74 | 77% |
| *Include peer-based training and mentoring from coaches already trained in athlete MH.* | 3.92 ± .96 | 72% | | |
| Included in in-person delivery. | | | 4.13 ± .80 | 84% |
| Included in online delivery. | | | 3.95 ± .91 | 75% |
| Included in hybrid delivery. | | | 4.11 ± .84 | 84% |
| *Be 'bite-sized'.* | 4.00 ± .83 | 75% | | |
| Included in in-person delivery. | | | 3.61 ± .84 | 59% |
| Included in online delivery. | | | 4.09 ± .69 | 84% |
| Included in hybrid delivery. | | | 4.00 ± .78 | 82% |
| *Occur on a continuous basis throughout the year.* | | | | |
| Included in in-person delivery. | | | 3.88 ± .78 | 70% |
| Included in online delivery. | | | 3.88 ± .71 | 75% |
| Included in hybrid delivery. | | | 3.95 ± .72 | 79% |
| *Occur on a flexible basis.* | | | | |
| Included in in-person delivery. | | | 4.07 ± .72 | 91% |
| Included in online delivery. | | | 4.05 ± .89 | 82% |
| Included in hybrid delivery. | | | 4.09 ± .82 | 84% |
| *There should be a MHT 'refresher' course that coaches are required to take each year.* | 4.10 ± .93 | 72% | | |
| Included in in-person delivery. | | | 4.04 ± .93 | 73% |
| Included in online delivery. | | | 3.93 ± .94 | 73% |
| Included in hybrid delivery. | | | 4.04 ± .90 | 79% |
| *MHT should also include information on topics such as:* | | | | |
| How to respectfully open a conversation with athletes about MH. | 4.70 ± .28 | 100% | | |
| How to respectfully open a conversation with the families of athletes about MH. | 4.37 ± .65 | 92% | | |
| How to identify and address urgent vs. non-urgent MH situations. | 4.70 ± .26 | 100% | | |
| How to adjust training when/where necessary to accommodate for athlete needs. | 4.47 ± .61 | 95% | | |
| How to support athletes to achieve a healthy perspective about sport-related stressors, and maintain wellbeing in their sport and other life domains. | 4.55 ± .50 | 98% | | |
| What a positive motivational climate looks like. | 4.45 ± .59 | 92% | | |
| How a positive motivational climate can be created. | 4.50 ± .65 | 95% | | |
| Biopsychological education (i.e., stress chemicals/hormonal changes and how this influences mental state during different stages of performance). | 4.13 ± .93 | 83% | | |
| How to know role limits and when to refer athletes to the relevant MH professional. | 4.65 ± .31 | 100% | | |
| The most appropriate professional to refer an athlete to, based on their athlete categorisation (e.g., emerging, developing). | 4.20 ± .87 | 85% | | |
| How to refer MH professionals. | 4.55 ± .48 | 98% | | |
| How to find/source other resources which can support athlete MH. | 4.30 ± .73 | 92% | | |
| Coaches' own MH and how this may impact their coaching and athletes. | 4.85 ± .22 | 100% | | |
| Information on different coaching styles (e.g., autonomy-supportive, transformational leadership) and their impact on athlete MH. | 4.35 ± .89 | 87% | | |

Abbreviations: MH = mental health; MHFA = Mental Health Fist Aid; MHT = mental health training.

2020; Purcell et al., 2019). Previous research has suggested that coaches who engage in regular, active observation of their athletes' mental health, may be more inclined to take early or preventative measures to support indications of athlete mental ill-health (Lebrun et al., 2020; Sebbens et al., 2016). The results from our multidiscipline expert participants support this view, with consensus agreement that if an athlete discloses a mental health issue to the coach, there is an expectation that the coach refers the athlete to the relevant wellbeing and engagement staff with the sporting organisation. Furthermore, in non-urgent situations, the

coach should give the athlete the details of the mental health service for the athlete to make their own appointment (i.e., passive referral). Within an athlete's microsystem (e.g., coaches, parents), passive referral reinforces autonomy supportive practice by providing athletes information and choice around mental health services (Purcell et al., 2022). At a broader level, passive referral ensures that athletes are connected to resources without bypassing athletes' agency (Purcell et al., 2022). Several tools have been developed to assist coaches in the referral process, including the Sport Mental Health Recognition Tool (Gouttebarge et al., 2021) and the AIS Mental Health Referral Network, which coaches may also use to contact if they are concerned about an athlete's wellbeing (Australian Institute of Sport, 2024c). However, these resources exist largely for the referral itself, providing very limited assistance in supporting athlete wellbeing prior to the actual act of referral.

### Athlete mental health plans

Without agreed boundaries and guidelines for the role and responsibilities of the coach in supporting athlete mental health, such support from coaches remains at their discretion (Purcell et al., 2022). This has been identified as a potential liability for sporting organisations that have legal responsibilities for maintaining workplace psychological health (Biggin et al., 2017). Establishing athlete mental health plans was a key consensus result from this current study. To ensure athletes receive fit-for-purpose mental support, these plans should be – developed when the athlete commences their contract; developed with active input from the athlete and staff with mental health expertise; be regularly reviewed and adjusted throughout the athlete's tenure; and be considered for all athletes. The proposed co-creation and dynamic monitoring of the plan can help to provide timely and contextualised support, as well as adaptability over time (Purcell et al., 2019). Expert participants reached stable disagreement (i.e., disagreement consensus) that these plans should only be considered for athletes with previously identified mental health challenges. This is consistent with Keyes (2009) conceptualisation of mental wellbeing where both mental ill-health prevention and mental health promotion are recognised, not solely reserved for athletes already in distress. In ensuring nuanced care is afforded to athletes, previous research has also suggested that the development of mental health plans should be dynamic and consider multiple stakeholders, including support staff (Vella et al., 2021). Finally, establishing comprehensive plans is a crucial aspect of supporting athlete wellbeing, and so equipping coaches and staff with knowledge and understanding through mental health training can help them to create a supportive environment for these plans to be facilitated.

### Mental health training and upskilling

For coaches to have an effective and positive impact on athlete wellbeing and developing peak mental performance, they need to be supported with evidence-informed, fit-for-purpose mental health training (Liddelow et al., 2023; Sebbens et al., 2016). Education around mental health (e.g., for coaches, athletes, support staff) has also been identified as a core protective factor for mental health, serving to encourage both prevention, identification, and early intervention in mental health symptoms (Purcell et al., 2019). Our findings endorse mandatory sport-specific mental health training for all coaches, as well as support staff, given the interdisciplinary nature of the daily training environment in Australian sport. Sport-specific training has also been emphasised in previous research, in addition to cultural, developmental, and systemic considerations (Gorczynski et al., 2020; Purcell et al., 2022). To optimise coach engagement and learning, it is further recommended that mental health training be delivered by a psychologist or a mental health educator, be integrated into existing in-person coach development training, and include contextual elements and scenarios that relate to the specific sport.

Flexibility to choose from a number of prospective training dates, along with peer-based training and mentoring, was also identified as a valuable learning enabler for coaches to upskill their mental health literacy. Congruous with the existing AIS High-Performance Coach Mentorship Program which provides practical assistance for coach development and works to establish non-hierarchical relationships within the coaching space (Australian Institute of Sport, 2024b), peer-based training specific to mental health could be integrated into this structure or as a complimentary program.

### Strengths and limitations

Our Delphi approach has expanded the knowledge base of coach-supported athlete mental health with a group of interdisciplinary experts achieving consensus on the key role, responsibilities, and training requirements for coaches to be an effective support for athlete mental health. Subsequently, our findings underpinned practical recommendations for coach development that are

highly relevant and readily actionable for sporting organisations.

Despite low participant attrition over the three Delphi rounds, the purposive, self-nominating recruitment of participants may not be entirely representative, particularly in the comparatively lower numbers of coach and athlete participants. Likewise, there were other sports staff (e.g., managers, policy makers) who could have been consulted. Moreover, whilst the panel size aligned with accepted Delphi parameters (minimum 10–18, S. Johnson et al., 2020; Liddelow et al. 2024), the generalisability of findings may have been limited by the reduced panel size. Finally, the demographic question for participants around their undertaking of formal mental health training may have been misinterpreted by participants as to whether they had completed tertiary mental health training (e.g., as part of a psychology degree), general mental health training (e.g., Mental Health First Aid), or sport-specific mental health training. This may provide a possible explanation as to the non-uniform engagement in previous mental health training, especially for psychologists.

### Future research and practical implications

Future studies may benefit from a larger sample of both athletes and coaches to increase external validity. Moreover, examining the views of athletes' family members and/or significant others may also provide important information. Comparisons in the alignment and divergence of sub-group responses may also provide additional depth into participant perspectives, and therefore represent a worthwhile avenue for further research. Finally, continued exploration could investigate the experimental validation of the strategies highlighted in the current study through implementing sport or organisation-specific pilots as well as examining the training needs of support staff and athletes.

In sum, this study has addressed a key knowledge gap by reporting numerous consensus areas on practical approaches to assist coaches in identifying and referring athletes with mental health concerns. By involving an interdisciplinary expert panel, these consensus items emphasise the importance of not only coaches as facilitators of athlete mental health but also the support team around them. Specific recommendations have been made regarding the focus, education content, and mode of delivery of mental health training and upskilling of coaches. This is but a starting point.

Supporting all key persons involved in the athlete daily training environment with relevant resources and training would be highly beneficial to achieve optimal athlete health, wellbeing, and performance.

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## Data availability statement

Data and materials collected for this research are provided in the supplementary files provided.

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