

Liebling A. Tettey, Derek Lang, Katja Umla-Runge*

Mental Health Decline of Prematurely Retired Professional Rugby Players Requires Improved Psychological Support: A Qualitative Study of Lived Experiences

Cardiff University, School of Medicine, Cardiff, UK.

*email: umla-runge@cardiff.ac.uk

Received: 2025-02-26; Accepted: 2025-04-26

DOI: 10.52095/gpa.2025.7565.1102

Abstract

Background: The mental health of professional athletes can be unstable from the start to the end of their careers, especially when the latter comes prematurely. Injured athletes require equal physical and mental health support, which must be tailored to individual needs. There is a paucity of studies on mental health challenges and support for prematurely retired professional rugby players (PRPRP). We hypothesised that their mental health support remains inadequate.

Methods: A phenomenological approach was used to investigate changes in the subjective lived experiences of PRPRP. We devised a semi-structured questionnaire to help participants focus on any perceived decline in their mental health, including suicidality (thoughts, feelings and behaviour related to suicide). Additional open-ended questions enabled participants to highlight perceived deficits in care and offer suggestions for improvement. Invites were sent through the e-zine of the Rugby Players Association (RPA), with an embedded questionnaire. Responding to the invite implied that people were opting into the survey and giving consent. Data was collected from participants' anonymised responses and interpreted by descriptive statistics and thematic analysis.

Results: The main cause of premature retirement was traumatic injury with a consequential decline in mental health. Participants reported suicidality, following premature retirement and confirmed the lack of holistic support. They suggested strategies for improvement in care that are identical to those in existing literature, and reiterated the need to equalise their mental and physical health support.

Conclusions: Shortcomings in psychological support remain significant with a major gap between it and support for physical health. Other existing literature also suggests abolishing the gap between theoretical findings and practical provision of support, but that remains unaccomplished. We propose introducing mandatory legislation for sports clubs to implement support measures, and recommend involving all main stakeholders in future research.

Keywords

Mental Health, Elite, Professional, Athletes, Rugby, Premature, Retired

INTRODUCTION

Mental health in athletes

The World Health Organization (WHO) defines mental health as “a state of well-being in which an individual realises his or her abilities, can cope with the normal stresses of life, can work productively and can contribute to his or her community” (World Health Organization: WHO, 2022). A deviation from that could imply a mental disorder that can affect mood, thinking and behaviour.

Adoption of the WHO charter for a comprehensive mental health action plan for 2013-2020 (Patel et al., 2016) demonstrates the level of importance attached to global deficits in mental health provision. The causes of mental ill-health should be addressed at the root level, with the implementation of tools for prevention, particularly if they are induced or worsened by work. This should keep it in line with support measures for maintaining physical fitness in athletes. Subsequently, the WHO sets plans to prevent mental health deterioration in those at risk. A Lancet editorial (2017) noted that parity between mental and physical health

care remains too large a task to be achieved by medical professionals alone and identified the requirement for initiatives that include strong mental health care components, to accomplish this.

Notably, the prevalence of mental health problems in athletes was found to equal or exceed that of the general population, with even higher rates of depression and anxiety in injured athletes, for whom mental health support should be prioritised (Gulliver et al., 2015). Thereafter, Rice et al. (2016) appraised the evidence base for mental wellbeing/illness of elite athletes and suggested equal rates of prevalence of common mental disorders (CMD) in elite athletes and the general population, but likely to be more in the former, given their additional pressures and vulnerability to mental illness.

Elite athletes cope with mental disorders, for example, depression, by using various strategies including talking, seeking professional help and social support. However, they may not transfer learned skills and strategies to other aspects of their lives when necessary (Lebrun et al., 2018). Moreover, mental disorders in professional athletes remain obscured by the idea that stress is an integral part of elite sports and that athletes have the advantage of physical fitness. However, by experiencing various dimensions of high-level stress (physical, mental and social), athletes are not protected from either primary or sports-associated mental disorders. Indeed, their unique risk factors, including injury and involuntary career termination, put them at greater risk (Markser, 2011). Reardon et al. (2019) identified a need to establish effective early warning systems and engage sports mental health professionals with conventional/routine physical health specialists. Injured athletes are also more likely to retire prematurely with likely consequential long-lasting depression (Wolanin et al., 2015) and its associated suicide risk. The peak age of this risk coincides with that of premature retirement in elite sportsmen, at age 15 to 24 years (Smith & Milliner, 1994).

Specific challenges and support needs during premature retirement

Forced retirement can induce unrecognised symptoms of mental illness (Smith, 1996). Affected individuals

could experience high levels of negative emotions which may lead to mental disorders, particularly depression with its strongly associated risk of suicide (Chesney et al., 2014, Favril et al., 2022).

Regardless of the risk factors, discussions about mental health remain taboo in sports. The WHO and International Labour Organisations called for “the protection, promotion, surveillance and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations, long after they enter their retirement years”. These are deemed fundamental human rights that should be facilitated by social partners and stakeholders (International Social Security Association, 2009). However, attention remains primarily focused on athletes’ physical health needs.

Acceptably, retirement can be challenging for anyone, including elite athletes for whom it is a major life transition. Retirement transition can be normative (anticipated) or non-normative (unexpected/forced). The latter is frequently associated with career-ending injuries (Anderson, Goodman, & Schlossberg, 2011). Consequently, they need “support structures” and “longitudinal monitoring” (Brown et al., 2017) and will need to redefine their future life projects, identities and find alternative means of financial sustainability (Gouttebauge & Aoki, 2014).

An extensive body of literature has identified the difficulties associated with retirement, for example, Park et al. (2013). They elicited limitations in knowledge about transition experiences of retiring/retired athletes and the quality of their adaptation to life after sport. They suggested practical solutions like the provision of proactive support and examination of athletes’ retirement decision-making process in future research. Alfermann & Stambulova (2012) have critically analysed career research and assistance around the world and proposed a framework of guidelines on how to plan interventions in career transition, in the context of individual athletic and non-athletic abilities/factors. These included career planning, training in life skills, development of identity, coping with crisis, and managing lifestyles with educational and clinical interventions.

Bernes et al. (2009) previously examined the literature

with a focus on career retirement and transferable skills. They recommended interventions that are tailored to individual needs, for athletes' transition out of sport. These included psycho-educational and cognitive behavioural interventions that focus on athletes' emotions and emphasised the need for development of transferable skills. Additionally, guidance from the key outcomes of the *Thriving at Work Guide*, (Mind 2023) pointed to the absence of a one-size-fits-all solution to addressing mental health problems in the different sports groups and the need for the proactive support of sportsmen and women at key transitional points of their professional careers. It should begin at the point of signing their first contract through to retirement. Subsequent recommendations were aimed at facilitating changes at a club level, so they could understand the value of athletes' mental wellbeing and actively offer them holistic support, the same as for their physical health.

Importance of collaborative work

It is important to work collaboratively as excluding individuals from decision-making processes can leave them feeling stigmatised and undervalued, so undermining hope that impedes recovery. Two of the three key principles of effective collaboration, that prevent a slowdown in support and change, are transparency in communication and establishment of internal accountability (CoachMePlus, 2023). This study promoted idea sharing by collaboratively seeking views from all stakeholders, especially survey participants.

Rationale for choice of participants

Rugby falls within the category of traumatic occupations (Brooks & Kemp, 2008), as a high-intensity contact sport with one of the highest incidences of injury among all professional team sports, and a consequential risk of premature career termination (Fuller, 2008).

In 2019, Kruyt and Grobbelaar identified how elite rugby players outlined their needs for post-career preparation. These requirements included shared responsibility among all stakeholders, financial guidance throughout and after their careers, alternative career guidance, further education with

sponsorship, and networking opportunities.

Consequently, the purposeful selection of current participants enabled us to focus on a specific group of PRPRPs and explore their opinions and expectations. This helps us highlight areas of support that require tailored improvement. It is essential that previous research findings are translated from theory into practice (Wylleman et al., 2004).

Moreover, effective leadership by sports organisations is necessary to enhance a positive culture in the sports environment for the benefit of athletes' mental wellbeing (Mountjoy et al. (2016). The International Olympic Committee (IOC) consensus working group made recommendations for this (Reardon et. al., 2019).

AIMS AND OBJECTIVES

The primary aim of this study was to assess the lived experiences of PRPRPs with a focus on existing psychological support and self-perceived deficits. Their expectations and suggestions for addressing any shortfalls were also explored. The study objectives were to identify:

- how helpful PRPRP perceive existing support and what additional assistance they desire
- self-reported symptoms that may suggest mental disorders at various stages of participants' professional careers, including retirement
- any associated suicidality in participants and the likelihood of its disclosure

METHODS

Qualitative approach

The authors' primary objective was to directly explore the meaning and significance of participants' lived experiences, and investigate and understand those self-perceived conscious experiences, through a qualitative study (Bhandari, 2023). This allowed study authors and participants to describe what the experiences meant to them, free from preconceptions and presuppositions. Participants have specific support needs that must be understood to address them effectively. Qualitative research can explore

complex phenomena and generate new ideas or evaluate programmes or policies, characteristics that were beneficial in this study. The ultimate choice of this study approach was informed by the theory of phenomenology, the philosophical study of subjective experiences, which enabled us to understand and learn from the experiences of participants' premature retirement (Neubauer et al., 2019). The phenomenon under study here was considered sensitive enough to require anonymity to enable/ensure truthful and open expression of experiences. As such, we chose a survey approach with an online questionnaire.

Study questionnaire

The survey was generated by the authors using an online tool for creating, distributing and analysing surveys (Jisc online survey 2019). The questionnaire, which contained open-ended questions, was incorporated into it. Questions were semi-structured to help focus participants' attention on aspects of their mental health. They were independently scrutinised by all authors.

The study questionnaire (Table 1) was designed to seek participants' accounts of subjective experience and not a subjective account of their experiences. The overriding goals for the choice of questions were to keep them simple enough for participants to answer and that would also generate set data to meet the study objectives (Bhandari, 2023). An original set of six questions with sub-questions was automatically converted by the online survey system to 21 final questions. The first seven of these were aimed at getting a clearer understanding of participants' demographic details, to better understand the reason(s) for their premature retirement. The last 14 questions aimed to directly elicit participants' experiences and suggestions. Participants' answers enabled the study authors to better understand the causes of their premature retirement, any consequential mental health difficulties, and self-perceived deficits and strengths in available support. Emphasis was placed on participants' current psychological support and their expectations.

Participants

Active members of the Rugby Players Association

(RPA) were purposively sampled. To ensure total anonymity, a URL link for the survey with an access password was sent to participants through an invite in the RPA monthly e-zine. Potential participants were all former professional rugby players from various clubs and numbered 300; 290 males and 10 females. The proportion of prematurely retired members remained unknown because no distinction was made at their point of entry into the RPA (About Us, no date). Nevertheless, only those who prematurely retired from competitive rugby careers participated in the study through self-opt-in, via two incorporated inclusion criteria:

- prematurely retired for any reason and
- transition into an alternative career

The main exclusion criterion was voluntary retirement.

A total of 16 responses were received and two were unsuitable: one as a duplicate and the other completed by a voluntary retiree. Consequently, 14 responses were used as a dataset. The intended aim was to compare male and female experiences, but no female RPA members participated in the survey.

Ethical considerations

A favourable ethical opinion was obtained from the Cardiff University School of Medicine Research Ethics Committee. The RPA gave verbal approval to conduct the study with its members. Contact numbers were provided to participants, to seek further support in case of consequential distress, especially regarding questions about suicidality.

Data collection

The all-in-one online survey integrated an introductory letter with a pre-brief about the study and included details of support services for mental health, a consent form, the questionnaire (Table 1) and a two-step debrief. Informed consent was automatically obtained when participants opted into the study by self-selection, through affirmation of the incorporated inclusion criteria.

Table 1. Questions used to generate responses for the dataset and the rationale for each question

Question	Sub-question	Survey-generated question number	Question rationale
1. Demographics	What is your gender?	1	Enable differentiation of male and female responses to help identify any gender-specific themes in the analysis of the result.
	How old are you?	2	Onset and types of mental health problems differ by age (Kesler et al., 2005; Solmi et al., 2021).
	To which ethnic group do you belong?	3	The prevalence of common mental health problems differs significantly by ethnicity in women but not men (McManus et al., 2016).
2. Your professional life	At what age did you start playing rugby professionally?	4	Age at the start of a professional career and its duration could help determine any correlation between the duration of a professional career and the nature of experiences (Park et al., 2013).
	How long did you play professional rugby before this retirement?	5	Life span and age-related issues could correlate with the quality of career transitions and could guide practitioners toward tailoring support to individual requirements (Park et al., 2013).
	What happened to necessitate the termination of your professional rugby career?	6	Rugby is a high-intensity contact sport with associated high incidences of injury and consequential risk of premature career termination (Fuller, 2008).
	At what age did you intend to retire, originally?	7	The most important factor that restricted the quality of career transition in elite players was found to be the decreasing duration of a career with no corresponding proactive planning toward career termination (Carapinha et al., 2018).
3. Your current situation	How would you interpret and describe your experience of premature retirement?	8	Study objective.
	How would you describe the network of people who give/gave you practical or emotional support?	9	Study objective.
	Do you miss playing professional Rugby? If so, what do you miss the most? If not, please give your reasons.	10	Transitioning after retirement from sport has been identified as a high-risk period for psychological distress in athletes and circumstances surrounding it are critical for the transition into life thereafter (Boardman, 2022).
	Describe the psychological support you received or are currently receiving. Please include, where it was/is being given, when and how it was introduced, particularly the timing of physical rehabilitation.	11	Study objective.
4. Your attitude(s) towards psychological support	Describe any changes you would like to make to the current psychological support you may be receiving.	12	Study objective.
5. Your mental health	What do you think good mental health is?	13	To identify participants understanding of normal mental health which would guide them to elicit any changes.
	Describe your mental health before the start of your professional rugby career.	14	Participants could have started professional life in young adulthood which is considered a peak period for major depressive disorder (National Institute of Mental Health, 2023).
	Describe your mental health during your professional rugby career.	15	Elite competition sports could be regarded as the brain's biggest challenge with multiple stressors (Arnold and Fletcher, 2012).
	How do you consider your mental health currently, as you transition into an alternative lifestyle or career?	16	Exploration of baseline mental health status and changes at various stages of participants' careers would help to elicit genuine common mental disorders (CMD) symptoms.
	Describe any unusual or distressing thoughts that you have now/have had.	17	CMD is likely to be more prevalent in elite athletes, than the general population, given their additional pressures and vulnerability to mental illness (Rice et al., 2016). Premature retirement is associated with increased psychological distress, anxiety and depression (Furie et al., 2023).
	Have you had any suicidal thoughts? If so, please describe them.	18	Suicide mortality risk is substantially higher in athletes, compared to the general population (Chesney et al. 2014), despite similar rates of mental disorders in athletes and their non-athlete counterparts (Wolanin et al. 2015).
	Would you/did you volunteer any of your suicidal thoughts to anyone? If so, who was it or who would it be? (Please do not name the person. Instead, you can give the relation or capacity in which you know the person). Please give your reasons.	19	Some elite athletes are unlikely to seek help for their mental health problems for fear of being "found out" (Gulliver et al. 2012).

Question	Sub-question	Survey-generated question number	Question rationale
6. Your current and desired support	What do you consider as resources available to support you now and which additional ones would you wish for?	20	Study objective.
	Please use the space below to specify any other thoughts or suggestions you wish to share on how best you think your mental health needs could be met, during your transition period.	21	Any additional thoughts and suggestions would ensure that participants did not feel restricted by the semi-structured nature of the questions (Freeman & Tyrer, 2006).

Data was collected between March and April 2020 and stored on a secure Cardiff University server. Not all questions were answered by each participant: 13 of 14 answered question 17 (presence of any distressing thoughts), 12 answered questions 19 and 20 (suicidal thoughts and availability of support resources) while nine shared ideas for question 21 (miscellaneous thoughts and suggestions). The survey was closed after eight weeks when 14 responses were received and considered adequate for accurate manual analysis of qualitative data, as it takes 13 interviews to reach saturation (Coenen et al., 2011), in other words, the point at which new incoming data produces little or no new information. Responses to the 21 automatically generated questions were used for analysis (Table 1).

Data analysis

The small sample size allowed for manual analysis using a ‘theme and explore’ method, following Braun and Clarke’s six-step process: familiarising, coding, generating themes, reviewing, defining and naming themes, and writing up findings (2022). Codes were generated by tabulating each participant’s phrases and sentences on an Excel sheet and highlighting the common ones. Contents were described with labels, aka codes. These were reviewed, to identify patterns, and turned into themes which were illustrated with key quotations from participants’ responses. Changes like splitting, combination, discarding and creation of new themes were made to ensure that themes were more representative of set data.

Responses to all 21 questions were used as the study dataset. The responses were initially sorted by their similarity. Descriptive statistics were used to analyse responses to the first questions and subsequently report participant demographic information and transition characteristics, based on age, ethnic

group, and stage of professional rugby career. As our main interest was in participants’ stated opinions, themes were extracted from the last 14 responses using semantic and inductive approaches (Braun and Clarke, 2022), for thematic analysis.

Data was revisited and reviewed many times during the analytic process which gradually moved from a descriptive to an interpretative level. Familiarisation was completed by a thorough review of all the dataset and sample semantic context was highlighted and retained. The themes were interpreted with a focus on relationships between the different parts of data in each category, to draw descriptive and/or explanatory conclusions that clustered around identified themes (Caulfield, 2023). The meaning and significance of extracted data were carefully considered among all three co-authors, to minimise bias and maximise rigour.

RESULTS

Demographics

All 14 respondents were male and white with an average age of 37 years. The sole reason for premature retirement was injury. Twelve participants had predominantly fractures, one participant had a disc degeneration in his neck and another had experienced a series of concussions. They commenced their professional careers between ages 18 and 24 years and for most premature retirement occurred relatively early, between the ages 19.5 to 37 years. Their intended/voluntary retirement ages ranged from 32 to 40 years while the time between premature retirement and survey completion varied from zero to 22 years. Table 2 summarises the age range, mean and standard deviation (SD) of their ages at various career stages and ages at the time of completing the survey.

Table 2. Age ranges, the mean and SD of participants' ages at key points in their professional life

Measure (in years)	Range (in years)	Mean (in years)	SD (in years)
Age at the start of career	18 – 24	19.36	1.91
Age at time of completing the questionnaire	26 – 49	37.43	7.08
Age at premature retirement	19.5 – 37	30.05	4.57
Intended retirement age	32 – 40	38.5	3.1
Time between premature retirement and completion of questionnaire	0 – 22	7.38	6.75

Thematic analysis

Overall, participants reported deficits in formal psychological support that was available and accessible during active professional and post-retirement life. They relied mostly on informal support from family, friends and ex-teammates.

They suggested that elite sports stakeholders should recognise athletes' mental health concerns and ensure timely management by skilled professionals.

Also, participants expressed the need for support to be offered earlier in their careers, so they feel prepared for any unexpected affliction.

The pattern of responses was analysed, in relevance to the various categories of questions, to identify and generate themes which were further refined through connections made between participants' answers. Four final themes were considered important within the context of the research topic as they led to a better insight into the outstanding support needs for PRPRP. These final themes were generated from codes identified from corresponding responses to the last 14 questions (Table 3).

In the following, we present amalgamated data about the identified themes without including participant numbers to avoid any incidental identification of participants by interconnecting their responses.

Theme 1: Experience of premature retirement

Participants reported a variety of premature retirement experiences. The spectrum of reported experiences ranged from mostly negative to a couple of positive ones (Table 3). Twelve out of 14 respondents reported how they missed their profession and expressed their experiences from different welfare points of view, including mental

and financial ones. Seven participants described their experiences as “tough” with one realising that he was “not indestructible”. Others found the experience challenging with feelings of loss and consequential identity crisis. However, two of them perceived the premature retirement as a relief. One described it as “temporary” while another found it as a “complete” relief. Nine out of 14 respondents said they missed the sport for various reasons: attachment to the profession, comradeship, and sense of purpose in life albeit with disappointment at unpreparedness for life after rugby, summed up as, “the professional sport environment makes it so that you become very dysfunctional in the real world. It's a harsh workplace and your weaknesses are exploited by even your teammates (whether that is physical or emotional vulnerability). I repress emotion all the time and half the time I don't even know what I'm feeling. I also used it to vent anger. Without that physical release, I am struggling to deal with my anger issues. The world also seems tame compared to the competitive arena. You get addicted to the rush of adrenaline which, again, can't be replicated in the real world. I feel unbelievably unfit for normal life.” Another participant expressed how time heals as he had adjusted more than 20 years into his retirement and no longer missed playing, “... not so much now but I missed it for several years post-retirement. I missed belonging to a tight-knit group, the sense of athletic endeavour and the buzz of competing and winning”. One missed only some aspects of his profession saying, “I don't miss certain elements i.e. the pressures involved, but I miss having the goal to work towards as it gave me a large amount of satisfaction and purpose.” Despite finding the experiences hard, one participant recognised that, “with a good support system the experience was easier”. Table 3 demonstrates a random selection of the most significant verbatim responses.

Table 3. Verbatim account of the range of experiences by some participants.

negative
→
 positive

"...was like a bereavement. I lost my identity, purpose, and way for at least two years of my life."	"Tough and unexpected. Bit depressing really." "Really sad. I never got to accomplish what I wanted to accomplish in my rugby career".	"...shock to the system, unprepared in terms next job." "Hard from a financial and career perspective."	"...I hadn't really thought about what I would do next. I thought I would be financially secure enough to take my time and maybe buy into a business. Wasn't the case."	"...unfinished business... my future had been taken out of my hands... Really miss the life.... it's hard not only not doing what you know anymore but not doing your dream job anymore."	"At the time it was completely necessary, ... but, after some time out of the game, it's difficult not to feel a sense of loss that hasn't resolved."	"Tough but it turned into one of the best things that's happened to me. It was quite liberating."
------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------

Theme 2: Changes in mental health and its consequences

Twelve out of 14 respondents reported their mental health as “good”, “excellent”, and “stable” before starting their professional career. However, one self-reported baseline shyness and anxiety while another noted himself as “an angry child who found a perfect release through rugby”. One participant described how he felt “more anxious especially when I got injured/knew it likely meant I wouldn’t get another contract”.

Respondents seemed in tune with the WHO definition of mental health and perceived contentment, stability and resilience as factors for good mental health. They ascribed positive characteristics to their mental health, before the start of professional life, which took a toll on most of them. They described changes like fragile mental health, influenced by factors like injuries and performance pressure. Five of the 12 who had good baseline mental health reported continuing good/stable mental health, although that fluctuated, depending on their performance levels, selection for matches, and subsequent uncertainties about contracts.

Five of the 14 respondents perceived their mental health during the transition to an alternative lifestyle as sub-optimal but for variable reasons. Some reported distressing thoughts, consequential to financial struggles/insecurity, career uncertainty, regrets and dissatisfaction with life. Others reported various negative emotions about life after rugby, for example, motivation “without the same level of drive

for life”. One participant, with a good baseline mood, developed “a more catastrophic way of thinking”. Another one implied direct proportionality between “successful transition” and the likelihood of being mentally stable “in a good place”. Yet another one described the decline in his mental health as challenging with effortful attempt to “find meaning to new life”.

Sample reasons given for poor transitional adjustment included dissatisfaction with aspects of their new job, ruminations and regrets about career-ending injuries. These gave some participants mixed feelings and stalled smooth transition into life after premature retirement. Two, out of 13 participants reported worries about future uncertainties and finances while another two reported feelings of mood disorder, for example, being in a “dark place” with “distressing thoughts around life not being where” they had expected. Others reported episodes of “feeling upset” and being at “low points”.

Consequently, different levels of suicidality were expressed by six respondents. Although seven out of the 13 respondents clearly stated that they never contemplated suicide, one reported suicidal thoughts when life had “become hard, due to financial and family issues”. Another one had “very mild” thoughts but felt protected by his children. One respondent implied passive suicidal thoughts of “what’s the point”, in other words, of being alive although he never actually contemplated suicide. However, one respondent expressed active suicidal thoughts with concrete plans, frequently during the breakup of his marriage. This was irrespective of his relatively longer

professional life of over 10 years. One participant could not seek direct help and described his suicidal thoughts as “quasi” and a cry for help, more so when “binge drinking”.

One participant identified continuing physical fitness as an effective protective factor for maintaining good mental health, post premature retirement. Another one implied how the passage of time lessened the impact of premature retirement, on his mental health, as he felt “OK” after seven years of retirement.

Theme 3: Existing support system

Most respondents relied on family and friends for support, described by one respondent as “sporadic” and not lasting long enough to help him “transition well”. Formal support varied from “non-existent” to “temporary”. One participant reported beneficial support from previous retirees.

The majority, nine of 14 respondents, clearly stated that there was no formal support in place. So they turned to their families and friends as their main support system, with one participant reporting his perception that other people would not understand his predicament and so would have no sympathy but expect him to “get a proper job”. Additionally, two participants relied on ex-teammates for support, but none mentioned an aspiration to support others. One participant highlighted the “poor” support received from his club. His perception was that athletes only meant “something to their clubs” during their active playing careers. Two other participants described the limitation in available support as a feeling of isolation as they were just left to “get on with it”, “pretty much on our own”.

Nevertheless, two participants knew about available support through their club psychologist, the Headspace App, RPA, and Cognacity. Regardless, the availability of support and awareness of these differed as two more participants declared their lack of awareness about any of these available formal support systems.

One participant implied that support improved over the years as there was no significant psychological support at the time of his retirement, more than 15

years earlier, when they were “basically turfed out and expected to survive”. One participant reported how he received “counselling and integrative therapy” for his “anger issues”, upon retirement. This complemented the report by another participant, who received “little direct support” before establishment of the RPA, and acknowledged how effective it was when he “eventually received” it.

Notably, one participant commented on the discrepancy between support offered for physical and emotional needs, upon retirement. He had ongoing physical rehabilitation without any accompanying psychological support. Another participant expressed dissatisfaction and disappointment at the lack of support from his former club who “couldn’t wait to do their six months physiotherapy and get rid of” him and how they did not communicate with him, even though he lived close by.

Theme 4: Desired additional support system

There were 12 responders to the semi-open question regarding suggestions for improvement in the current level of support. They all clearly expressed a desire for more holistic and accessible support services, including ones for psychological wellbeing, better management of their financial affairs and transition into an alternative future life. Their suggestions included:

- the setting up of “a proper support group for current players”
- provision of “far more support from unions and clubs, the same access as if you were still playing” especially as “medical teams wouldn’t look at you as soon as you hang up your boots”
- offer of “real help with career, business, finance and tax” as such skills were not acquired

Nine of the 14 participants put forward other specific suggestions in the open-ended section of the questionnaire, including:

- setting up a group to enable them to talk about or gain advice on the next step in life, such as, “financial

and anger issues”

- allocation of a transitional manager to see them through approximately five years of their post-retirement life and “look into things” they need, instead of needing to go to the RPA with “a cap in hand”
- putting more pressure on clubs to make sure players are prepared for transition and well beyond that, including long-term psychological support or life coaching to deal with any associated difficulties
- more support for the younger players that get injured/don't get contracts renewed between the ages of 18-22 years, as “often all they've done/dreamed of is rugby and when it's taken away, they have nothing and no independent support”
- “help to find the next step” in life after rugby, seen by one participant as his “biggest need”.
- free and available holistic support with parity between mental and physical health, for example, “medical teams for retired players covering mental and physical problems that are paid for by club unions etc”

Some participants advocated for the support to be pre-emptive, in other words, “to start before you realise you need to retire, be treated well while you are playing or injured so that when a decision to stop playing is made then it's not a hard one”. Others suggested active engagement of athletes in solution-focused activities including “reading materials, while playing and specific advice/workshop on how to future proof mental health/signpost strategies as to what problems are likely to occur and how one might attempt to work through periods of crisis/low mood”. One participant expressed the wish that clubs could maintain some interest in their post-professional welfare and called for “the odd check phone call from a familiar face from the club wouldn't go a miss, just to make you feel like you were important (even if you weren't) to the club that you gave everything”.

Another participant expressed recognition and acceptance of mental instability in athletes by his suggestion that “discussing the issue of mental health

with former and current players can definitely open up space and create more acceptance that it's OK to not be OK etc” and his appreciation that research such as this is of “significant value”.

DISCUSSION

Mental health needs of PRPRP and current support

Analysing the subjective experiences of our participants allowed us to discern how premature retirement affects some professional rugby players. It is evident that most participants understand the meaning of good mental health and express the need to have holistic support from the onset of their career through to retirement and beyond to safeguard it. There was some evidence of improvement in the provision of psychological support over the years, albeit slow. However, progress remains well short of participants' expectations.

The results capture the variety of positive and negative experiences reported by participants after their premature retirement and the consequential impact on their lives. It highlights the outstanding necessity to improve holistic support for this group of athletes but also the need to put previously identified support needs into practice. It contributes to a better understanding of the experiences of this cohort of 14 PRPRPs and their expectations for improvement in support offered to them at very crucial periods of their profession.

In line with the aim of this study, participants unreservedly express their lived experiences and identify diverse psychological support needs with numerous suggestions for optimising them. Further clarification, interpretation, and in-depth and comparative analysis of our final four inter-categorical themes confirm our hypothesis that there are deficits in the psychological support of participants in this study.

Injury is the sole cause of premature retirement (Anderson, Goodman, & Schlossberg, 2011) and remains in consonance with the high incidence of injury in Rugby Union players (Smith, 1996). This could force athletes into premature retirement and induce mental illness, with a predisposition to

depression (Gouttebarga et al., 2015). The common association between premature retirement, due to musculoskeletal injury, and increased psychological distress, anxiety and depression is re-demonstrated (Furie et al., 2023). Compounding this is the young age of participants at the onset of their profession. This puts them at risk of suicide (Smith & Milliner, 1994; Reardon & Factor, 2010).

Most participants commenced their professional life at a stage that coincides with the stresses of the formative late teenage years when there are usually profound shifts in normative areas of transition, for example, from sports academies to professional life. This compounds the challenge of coping with injury-associated problems at that age (Finn & McKenna, 2010). The many concussions in one current participant, together with the injuries of his co-participants were reflective of previous findings of an association between such injuries and psychological distress in retired athletes with consequential increased risk of depressive symptoms and substance misuse (Mannes et al., 2019). These could be further complicated by the shortening of their desired professional career which left them with little time to transition into retirement. The combination of these factors could predispose them to CMD (Wolanin et al., 2015), which is not an unusual outcome for most athletes in that position (Carapinha et al., 2018). Moreover, such a combination of factors can increase their risk of suicide (Sood, 2018).

Consequences of forced/early retirement

The expression of predominantly negative experiences during premature retirement and transition, with a decline in mental health, related to athletes who defined their identity through their profession (Park et al., 2013). Loss of identity puts them at high risk of mental instability (Hughes & Leavey, 2012). Likewise, the loss of their comradeship doubled up as a support system for some, a requirement for stable mental health (Carapinha et al., 2018). Also, their loss of income, upon retirement, resulted in financial uncertainty and mental distress (Carapinha et al., 2018) and culminated in their wish for help with future career, business, finance and tax. They reported a willingness to engage in any proposals for

such support. All the support deficits pose a risk to mental instability, with consequential development of suicidal thoughts. The need for earlier preparation towards retirement was demonstrated by participants who highlighted support needs despite retiring two to three years short of their planned retirement ages.

Regardless of the above factors, current participants faced challenges during active professional life, for example, anxiety about being selected for and winning matches, which could put significant strain on their mental health (Markser, 2011). Current study participants also reported a challenging nature to their competitive sporting environment, for example, the behaviour of team-mates and poor relationships with coaches which could intensify transition difficulties (Park et al., 2013). Brown et al. (2017) reported how players who are forced into retirement from professional rugby may develop associated distress which are notable risk factors for mental disorders like anxiety, depression and alcohol misuse. In consonance with that, current participants reported mostly robust mental health during active professional life, compared to their post-retirement period of negative experiences, for example, loss of identity, feeling of bereavement, and binge drinking. Alcohol misuse is a risk factor for depression with associated/consequential suicidality (Madden, 1993, Hawton et al., 2013).

Despite the predominantly negative effects of participants' premature retirement, some found it primarily liberating. This could be based on self-reported negative reflections (Voorheis et al., 2023). Positive modification of transitional experience is enhanced by appropriate in-career or post-career planning and/or intervention with professional support. Otherwise, the natural variability in the phases of voluntary retirement is lost when retirement is forced (Brady, 1988). Consequently, there could be significant difficulties, including a decline in life satisfaction and health-related quality of life (Filbay et al., 2019). Survey participants, unsurprisingly, reported lower self-esteem and feeling shocked, having fewer coping abilities for usual daily stressors and being unprepared for the future (Arvinen-Barrow et al., 2017).

Comparison with findings in other athletes

Current findings could guide the provision of tailored holistic support to prematurely retired rugby players. Their suggested support needs do not seem to differ from those of other athletes studied previously (Park et al., 2013, Kruyt and Grobbelaar 2019). Current study participants highlighted the complexity of challenges posed to professional rugby players at various stages of their careers, including the post-retirement period. They re-iterated the essential need to equalise physical and mental health support in such a physically challenging sport (Reardon et al., 2019).

Our descriptive statistics highlighted the lack of female respondents; confirmation of the relatively late entry of women into professional rugby (The Evolution of Women's Rugby | Champions Rugby, n.d.), and suggests a need for purposive sampling of females in future research.

Adapting to post-retirement life

Most of the current participants reported difficulties with adapting to their premature post-retirement life, due to their perceived loss of identity, negative emotions, and social exclusion (Park et al., 2013). One current participant felt unprepared for his next job, a reverberation that some athletes do not feel ready to leave professional sports when it ends (Park et al., 2013; Voorheis et al., 2023). This is likely related to his strong athletic identity which negatively influences the quality of an athlete's retirement and transition process (Gilmore, 2008).

Irrespective of the negatives, the positive beneficial effect of continuing physical activity was demonstrated by one current participant's intentional indulgence in such activities (Mammen & Faulkner, 2013; Mannes et al., 2019).

Nevertheless, a good support system with effective earlier retirement, including financial, planning is more likely to improve the quality of athletes' transitional experience (Carapinha et al., 2018), by enhancing their coping abilities (Arvinen-Barrow et al., 2019). Current participants' reliance, mostly, on informal support from family and friends with their

perception that others are unlikely to understand their unique challenges, together with their sense of loss was previously highlighted by Hong et al. (2013). Also, athletes must partake in joint decision-making processes on their retirement, following injury, otherwise the transition process is more difficult for them (Arden et al., 2016), perceived as a loss of control that can be mitigated, backed by multi-disciplinary educational measures (Voorheis et al., 2023). The lack of adherence to that demonstrated a persistent level of club officials' authority and justified our recommendation to introduce regulatory measures to safeguard the interests of athletes.

Also included in current participants' complaints was the lack of action on some previously identified strategies that improve retirement experiences, such as the need for essential social support, e.g., from their clubs, for a good retirement transition (Arvinen-Barrow et al., 2017).

In line with previously identified support measures, current participants suggested various ways to improve post-retirement experiences. These included proactive offers of social support, as a matter of priority for clubs, at the onset of any injuries that may turn out to be career-ending in nature (Arvinen-Barrow et al., 2017). This should enhance transitional experiences (Arvinen-Barrow et al., 2017; Park et al., 2013). More so, because the perceived availability of quality support can improve athletes' retirement experience (Arvinen-Barrow et al., 2017; Mannes et al., 2019; Park et al., 2013). These also fall in line with recommendations by the IOC consensus statement (Reardon et al., 2019). For that matter, strategic planning should individualise athletes' needs with a requirement for clubs to make every effort to promote awareness of available support to the athletes, especially as engagement with it can vary, depending on their financial considerations (Carapinha et al., 2018).

Opportunities for support of PRPRP

Education and career planning

Current participants reiterated the need for various educational activities to be incorporated into a wider programme of career planning, which are more likely

to be successfully achieved through engagement processes with all key stakeholders (Arvinen-Barrow et al., 2019). There should be specific means of maintaining financial security which could avert major stresses for them (Arvinen-Barrow et al., 2019) and explain the direct correlation between post-retirement financial insecurity/instability and psychological distress (Mannes et al., 2019). Such distress may hinder employability, a risk factor for depression and anxiety symptoms (Zuelke et al., 2018).

Who should provide support and where should it come from?

Overall, the duty of care should fall on various sports and affiliated organisations, as mentioned by survey participants. However, clarity is required to determine who should carry the ultimate responsibility for each role. Policymakers are best placed to demarcate specific responsibilities with an established transparent transitional process that could ease any burden and associated dissatisfaction and promote more positive experiences during transitional periods and well beyond. Current study participants were clear that pre-planning and earlier preparation for retirement with proactive support measures should enhance retirement experiences, whenever that time comes for them.

Surprisingly, although one participant reported benefit from the support offered by senior retired teammates, none mentioned an aspiration to support others as a means of redefining their sense of self and post-retirement growth (Brown et al., 2018). This may be an indication of a prolonged adjustment period for them.

Summary

Our discovery includes how participants continue to perceive deficits, not only in available support but their knowledge of it. They recognised and emphasised the need for clubs to prepare them for retirement right from the onset of their career, regardless of evident reluctance among athletes to seek support (Gulliver et al., 2012). The notion that “it is OK not to be OK” can be achieved through improved awareness and enhanced destigmatisation

of mental health issues (Patel et al., 2016). This, coupled with the provision of holistic support systems and planning for retirement, can positively affect transitional experiences and requires sports clubs/managers and athlete support services to optimise transitional experiences (Knights et al., 2019). We suggest they formulate baseline standardised supportive measures which could then be adapted to suit retirees from specific sports, be it voluntary or forced.

Overall, our results suggest that the support needs identified by current participants remain similar to those of other professional athletes and that previous calls to transfer theoretical knowledge into practice should be implemented to enhance effective support for professional athletes (Purcell et al., 2022). As such, we suggest that policymakers should collaborate with other stakeholders to implement recommendations, put forward by the IOC consensus working group (Reardon et al., 2019). Future studies should actively involve athletes, a reaffirmation of action research in which participants not only perceive change but are willing to actively engage in processes that could lead to change (Pope & Mays, 2006). Consequentially, transitional and retirement experiences could be more positive with personalised interventions.

CONCLUSION

The results of this study highlight the outstanding need for improvement in holistic support, including psychological needs for PRPRPs. This could be achieved through the amendment of self-regulation by sports authorities and mandatory legislation for clubs to offer psychological support that equates to physical health. We expect such action could compel sporting organisations and policymakers to prioritise the overdue need to put previous research findings into practice, with the consequential easing of the distress associated with premature retirement. We suggest proactive interventions, for example, assistance with career transition, including resources for financial planning.

We found some consistency in our results with those of existing literature. However, the consensus among participants is that there remains room for significant improvement in formal psychological support and

that it should commence at the start of careers and last well beyond retirement.

Strengths and limitations

The use of qualitative methodology assured anonymity and enabled participants to express their most intimate thoughts while the use of an inductive approach for thematic analysis of results allowed consideration of all data details. Purposive sampling tied the results specifically to PRPRPs.

However, our study limitations include self-selection bias, but our scrutiny mitigated that as demonstrated by the elimination of the two inappropriate responses. Furthermore, the lead researcher's (LT) perspective on participants' responses and lack of opportunity to seek further clarification could have influenced data interpretation but the generation of themes from the dataset mitigated that.

Our descriptive statistics highlighted the lack of female respondents; confirmation of the relatively late entry of women into professional rugby (The Evolution of Women's Rugby|Champions Rugby (no date), and suggests a need for purposive sampling of females in future research.

PROPOSAL

Based on the current findings, and in line with considerations of the consensus working group of the IOC (Reardon et al., 2019), we put forward a proposal for all stakeholders in professional rugby to begin roundtable talks to move research results from theory into practice. This should enhance premature retirement transitional experiences which remain modifiable by appropriate and readily available in- and post-career support. By so doing, the sports fraternity could commence equalisation of mental and physical health support, with minimisation of mental disorders in athletes.

Also, it would be beneficial for policymakers to mandate sports clubs to safeguard their players during all stages of their careers, against long-term sport-associated mental disorders and also provide financial assistance to premature retirees, justified by the income generated from players' active

professional careers.

Recommendations

Recognition of mental health concerns in professional athletes' communities, opening up of mental health-related discussions, and provision of tailored support services by rugby organisations to enhance athletes' resilience towards any eventualities, should be promoted. This builds on a previous call for improved access to professional psychological support and endorsement of open communication to facilitate the total well-being of athletes (Gulliver et. al., 2012).

Based on the findings of this study, we first recommend that future research studies target female PRPRP directly through purposive selection and increase sample size by extending invites to independent retirees, individual clubs, and other trade unions, aiming to validate results for the establishment of evidence-based guidelines/protocols and enable standardised care provision.

Secondly, for the following sports-specific stakeholders we recommend:

a) Professional rugby clubs to

- continue active engagement with athletes to enhance holistic support throughout and beyond their professional journey
- encourage retirees to include their main associates (family members and/or close friends) in all major career-based/transition discussions
- invest in sports sub-specialist psychiatrists who are better equipped to assess, monitor and appropriately manage mental disorders at any career stage, enabling the transfer of care needs to appropriate organisations

b) PRPRP and other prematurely retired elite athletes to

- remain vigilant, actively seeking or seizing every opportunity to partake in research aimed at improving athlete welfare

- unify and form voluntary support/peer groups that would amplify their voices towards improvement of their support needs

- proactively seek help when needed

c) RPA to improve communication of membership benefits

DECLARATIONS

We confirm that we have read and understood the relevant information on your website including the Editorial Instructions, Publication Ethics, and Publication Malpractice Statement, and permit you to use copyrighted material including online content.

Authors' contribution: the three authors contributed equally to the editing, thorough review and approval of this manuscript.

Ethical approval: ethical approval reference number 19/112 was gained from the School of Medicine Ethics Committee, Cardiff University.

Disclosure statement: the authors have no conflicts of interest to declare.

Funding: the study has been registered with Cardiff University and has not received any external fund.

Informed consent: consent was explicitly stated as implied by participation in the research, in response to the invite sent through participants' monthly club e-zine.

REFERENCES

About us (no date), The RPA. Available at: <https://therpa.co.uk/about-us> (Accessed: 11 May 2024).

Alfermann, D. and Stambulova, N.B. (2012) 'Career transitions and career termination', *APA PsycNet*. Available at: <https://doi.org/10.1002/9781118270011.ch32>. (Accessed: 11 May 2024).

Analysing qualitative data for evaluation. (no date). NCVO. Available at: <https://www.ncvo.org.uk/help-and-guidance/strategy-and-impact/impact-evaluation/evaluation-and-impact-reporting/how-to-analyse-qualitative-data-for-evaluation/#think-critically-about-your-data> (Accessed: 11 May 2024).

Anderson, M. L., Goodman, J. and Schlossberg, N. K. (2011)

'Counseling adults in transition: linking Schlossberg's theory with practice in a diverse world', Available at: <https://ci.nii.ac.jp/ncid/BB17211952> (Accessed: 11 May 2025).

Ardern, C.L., Glasgow, P., Schneiders, A., Witvrouw, E., Clarsen, B., Cools, A., Gojanovic, B. et al. (2016) 'Consensus statement on return to sport from the First World Congress in sports physical therapy, Bern'. *British Journal of Sports Medicine*, 50(14), pp853–864. Available at: <https://doi.org/10.1136/bjsports-2016-096278>.

Arnold, R. and Fletcher, D. (2012) 'A research synthesis and taxonomic classification of the organizational stressors encountered by sport performers'. *Journal of Sport & Exercise Psychology*, 34(3), pp397–429. <https://doi.org/10.1123/jsep.34.3.397>.

Arvinen-Barrow, M. (2017) 'Transitioning out of professional sport: the psychosocial impact of career-ending injuries among elite Irish rugby football union players', *Journal of Clinical Sport Psychology*. Available at: <https://journals.humankinetics.com/view/journals/jcsp/11/1/article-p67.xml>.

Arvinen-Barrow M, DeGrave K, Pack S, Hemmings B. (2019) 'Transitioning out of professional sport: the psychosocial impact of career-ending non-musculoskeletal injuries among male cricketers from England and Wales', *J Clin Sport Psychol*. 13(4):629-644. doi: 10.1123/jcsp.2017-0040.

Bernes, K.B., McKnight, K.M., Gunn, T.M., Chorney, D., Orr, D.T. and Bardick, A.D. (2009) 'Life after sport: athletic career transition and transferable skills', *Journal of Excellence*. Available at: https://opus.uleth.ca/bitstream/10133/1175/1/Life_After_Sport.pdf.

Bhandari, P., (2023) 'What is qualitative research?| methods & examples', Scribbr, 30 Jan. Available at: <https://www.scribbr.com/methodology/qualitative-research/>.

Bhandari, P., (2023) 'Questionnaire design|methods, question types & examples', Scribbr, 22 June. Available at: <https://www.scribbr.com/methodology/questionnaire/>.

Boardman, N. (2022) 'Athlete transitions into retirement: experiences in elite sport and options for effective support', *Sports Coaching Review*, 1–4. Available at: <https://doi.org/10.1080/21640629.2022.2117517>.

Brady, E.M., ed., (1988) 'Retirement: the challenge of change', Portland, ME: University of Southern Maine. Available at: [ED313587.pdf](https://doi.org/10.1080/21640629.2022.2117517)

Braun, V. and Clarke, V. (2022) 'Conceptual and design thinking for thematic analysis', *Qualitative Psychology*, 9(1), pp3–26. Available at: <https://doi.org/10.1037/qpq0000196>.

Brooks, J.H. and Kemp, S.P. (2008) 'Recent trends in Rugby Union injuries', *Clinics in Sports Medicine*, 27(1), pp51–viii. Available at: <https://doi.org/10.1016/j.csm.2007.09.001>.

- Brown, C.J., Webb, T.L., Robinson, M.A. and Cotgreave, R. (2018) 'Athletes' experiences of social support in their transition out of elite sport: an interpretive phenomenological analysis', *Psychology of Sport and Exercise*, 36, pp71–80. Available at: <https://doi.org/10.1016/j.psychsport.2018.01.003>.
- Brown, J.C., Kerkhoffs, G., Lambert, M.I. and Goutteborge, V. (2017) 'Forced retirement from professional Rugby Union is associated with symptoms of distress', *International Journal of Sports Medicine*, 38(8), pp582–587. Available at: <https://doi.org/10.1055/s-0043-103959>.
- Carapinha, A., Torregrossa, M., Mendes, P., Carvalho, P.G. and Travassos, B.F.R., (2018) 'A retrospective analysis of career termination of football players in Portugal', *Motricidade*, 14(4), pp74–85. Available at: <https://doi.org/10.6063/motricidade.14982>.
- Caulfield, J. (2023) 'How to do thematic analysis|step-by-step guide & examples', *Simply Psychology*. Available at: <https://www.scribbr.com/methodology/thematic-analysis> (Accessed 11 March).
- Champions Rugby (no date) 'The evolution of women's rugby'. Available at: <https://rugbyspeakersuk.com/news/evolution-womens-rugby> (Accessed: 11 April 2023).
- Chesney, E., Goodwin, G.M., & Fazel, S. (2014) 'Risks of all-cause and suicide mortality in mental disorders: a meta-review', *World Psychiatry*, vol. 13, no. 2, pp153–160. Available at: <https://doi.org/10.1002/wps.20128>.
- CoachMePlus (2023) 'Key principles of effective collaboration in sport', *CoachMePlus*, 17 February. Available at: <https://coachmeplus.com/principles-team-staff-collaboration-sport/>.
- Coenen, M., Stamm, T., Stucki, G., & Cieza, A. (2011) 'Individual interviews and focus groups in patients with rheumatoid arthritis: a comparison of two qualitative methods', *Quality of Life Research*, vol. 21, no. 2, pp359–370. Available at: <https://doi.org/10.1007/s11136-011-9943-2>.
- Favril, L., Yu, R., Uyar, A., Sharpe, M., & Fazel, S. (2022) 'Risk factors for suicide in adults: systematic review and meta-analysis of psychological autopsy studies', *Evidence-based Mental Health*, vol. 25, no. 4, pp148–155. Available at: <https://doi.org/10.1136/ebmental-2022-300549>.
- Filbay, S., Pandya, T., Thomas, B., McKay, C., Adams, J., & Arden, N. (2019) 'Quality of life and life satisfaction in former athletes: a systematic review and meta-analysis', *Sports Medicine*, vol. 49, no. 11, pp1723–1738. Available at: <https://doi.org/10.1007/s40279-019-01163-0>.
- Finn, J. & McKenna, J. (2010) 'Coping with academy-to-first-team transitions in elite English male team sports: the coaches' perspective', *International Journal of Sports Science & Coaching*, vol. 5, no. 2, pp257–279. Available at: <https://doi.org/10.1260/1747-9541.5.2.257>.
- Freeman, C. and Tyrer, P. (2006). *Research Methods in Psychiatry*. 3rd edn. Cambridge University Press.
- Fuller, C.W. (2008) 'Catastrophic injury in Rugby Union: is the level of risk acceptable?', *Sports Medicine (Auckland, N.Z.)*, vol. 38, no. 12, pp975–986. Available at: <https://doi.org/10.2165/00007256-200838120-00002>.
- Furie, K., Park, A.L., & Wong, S.E. (2023) 'Mental health and involuntary retirement from sports post-musculoskeletal injury in adult athletes: a systematic review', *Current Reviews in Musculoskeletal Medicine*, vol. 16, no. 5, pp211–219. Available at: <https://doi.org/10.1007/s12178-023-09830-6>.
- Gilmore, O. (2008) 'Leaving competitive sport: Scottish female athletes' experiences of sport career transitions', (Unpublished doctoral dissertation), University of Stirling. Available from: [STORRE: Stirling Online Research Repository](https://www.stirling.ac.uk/storre/).
- Goutteborge, V. & Aoki, H. (2014) 'Lifespan perspective of professional footballers' health', *Asian Journal of Sports Medicine*, vol. 5, no. 4, e23813. Available at: <https://doi.org/10.5812/asjms.23813>.
- Goutteborge, V., Kerkhoffs, G.M.M.J., & Lambert, M. (2015) 'Prevalence and determinants of symptoms of common mental disorders in retired professional Rugby Union players', *European Journal of Sport Science*, vol. 16, no. 5, pp595–602. Available at: <https://doi.org/10.1080/17461391.2015.1086819>.
- Gulliver, A., Griffiths, K.M., & Christensen, H. (2012) 'Barriers and facilitators to mental health help-seeking for young elite athletes: a qualitative study', *BMC Psychiatry*, vol. 12, p. 157. Available at: <https://doi.org/10.1186/1471-244X-12-157>.
- Gulliver, A., Griffiths, K.M., Mackinnon, A., Batterham, P.J., & Stanimirovic, R. (2015) 'The mental health of Australian elite athletes', *Journal of Science and Medicine in Sport*, vol. 18, no. 3, pp255–261. Available at: <https://doi.org/10.1016/j.jsams.2014.04.006>.
- Hawton, K., Casañas I Comabella, C., Haw, C., & Saunders, K. (2013) 'Risk factors for suicide in individuals with depression: a systematic review', *Journal of Affective Disorders*, vol. 147, nos. 1-3, pp17–28. Available at: <https://doi.org/10.1016/j.jad.2013.01.004>.
- Hong, H.J. & Fraser, I. (2023) 'High-performance athletes' transition out of sport: developing corporate social responsibility', *International Journal of Sport Policy and Politics*, vol. 15, no. 4, pp725–741. Available at: <https://doi.org/10.1080/19406940.2023.2242877>.
- Hughes, L. & Leavey, G. (2012) 'Setting the bar: athletes and vulnerability to mental illness', *The British Journal of Psychiatry*. Available at: <https://doi.org/10.1192/bjp.bp.111.095976>.
- International Social Security Association (2009) 'Health and life at work: a basic human right', 28 April. Available at: <https://www.issa.int/>.

ilo.org/safework/info/publications/WCMS_108686/lang--en/index.htm.

Kessler, R.C., Berglund, P., Demler, O., Jin, R., Merikangas, K.R., & Walters, E.E. (2005) 'Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication', *Archives of General Psychiatry*, vol. 62, no. 6, pp593–602. Available at: <https://doi.org/10.1001/archpsyc.62.6.593>.

Klein, A.S., Cooke, R.A., & Wallis, J. (2013) 'The impact of leadership styles on organizational culture and firm effectiveness: an empirical study', *Journal of Management & Organization*, vol. 19, pp241–254. Available at: <https://doi.org/10.1017/jmo.2013.34>.

Knights, S., Sherry, E., Ruddock-Hudson, M., & O'Halloran, P. (2019) 'The end of a professional sport career: ensuring a positive transition', *Journal of Sport Management*, vol. 33, no. 6, pp518–529. Available at: <https://doi.org/10.1123/jsm.2019-0023>.

Kruyt, N. & Grobbelaar, H. (2019) 'Psychological demands of international Rugby Sevens and well-being needs of elite South African players', *Frontiers in Psychology*, vol. 10, p676. Available at: <https://doi.org/10.3389/fpsyg.2019.00676>

Lancet (2017) 'Improving mental health in the workplace', *The Lancet*, vol. 390, no. 10107, p2015. Available at: [https://doi.org/10.1016/s0140-6736\(17\)32807-6](https://doi.org/10.1016/s0140-6736(17)32807-6).

Lebrun, F., MacNamara, A., Rodgers, S., & Collins, D. (2018) 'Learning from elite athletes' experience of depression', *Frontiers in Psychology*, vol. 9, p2062, 26 October. Available at: <https://doi.org/10.3389/fpsyg.2018.02062>

Madden, J.S. (1993) 'Alcohol and depression', *British Journal of Hospital Medicine*, vol. 50, no. 5, pp261–264. Available at: [Alcohol and depression - PubMed](https://pubmed.ncbi.nlm.nih.gov/10166666/).

Mammen, G. & Faulkner, G. (2013) 'Physical activity and the prevention of depression: a systematic review of prospective studies', *American Journal of Preventive Medicine*, vol. 45, no. 5, pp649–657. Available at: <https://doi.org/10.1016/j.amepre.2013.08.001>.

Mannes, Z.L., Waxenberg, L.B., Cottler, L.B., Perlstein, W.M., Burrell, L.E., Ferguson, E.G., Edwards, M.E., & Ennis, N. (2019) 'Prevalence and correlates of psychological distress among retired elite athletes: a systematic review', *International Review of Sport and Exercise Psychology*, vol. 12, no. 1, pp265–294. Available at: <https://doi.org/10.1080/1750984X.2018.1469162>.

Markser, V.Z. (2011) 'Sport psychiatry and psychotherapy. Mental strains and disorders in professional sports. Challenge and answer to societal changes', *European Archives of Psychiatry and Clinical Neuroscience*, vol. 261, Suppl. 2, ppS182–S185. Available at: <https://doi.org/10.1007/s00406-011-0239-x>.

McAuley, A., Baker, J., & Kelly, A.L. (2021) 'Defining "elite" status

in sport: from chaos to clarity', *German Journal of Exercise and Sport Research*, vol. 52, no. 1, pp193–197. Available at: <https://doi.org/10.1007/s12662-021-00737-3>.

McManus, S., Bebbington, P., Jenkins, R., & Brugha, T. (2016) *Mental health and wellbeing in England: adult psychiatric morbidity survey 2014*. NHS Digital. Available at: [adult psychiatric morbidity survey](https://www.nhs.uk/mentalhealth/mh-survey-2014/).

Mind (no date) 'Thriving at Work guide'. Available at: <https://www.mind.org.uk/about-us/our-policy-work/sport-physical-activity-and-mental-health/thriving-at-work-guide> (Accessed: 13 April 2023).

Mountjoy, M., Brackenridge, C., Arrington, M., Blauwet, C., Carska-Sheppard, A., Fasting, K., Kirby, S., (2016) 'The IOC consensus statement: harassment and abuse (non-accidental violence) in sport', *British Journal of Sports Medicine*, vol. 50, no. 17, pp1019–1029. Available at: <https://doi.org/10.1136/bjsports-2016-096121>.

National Institute of Mental Health (NIMH) (2023) 'Major depression'. Available at: <https://www.nimh.nih.gov/health/statistics/major-depression>. (Accessed: 1 June 2024).

Neubauer, B.E., Witkop, C.T., & Varpio, L. (2019) 'How phenomenology can help us learn from the experiences of others', *Perspectives on Medical Education*, vol. 8, no. 2, pp90–97. Available at: <https://doi.org/10.1007/s40037-019-0509-2>.

Online-surveys (2019) *The online survey tool designed for academic research, education and public sector organisations*. Bristol: Jisc. Available at: <https://www.jisc.ac.uk/online-surveys> (Accessed: 20 November 2019).

Park, S., Lavalley, D., & Tod, D. (2013) 'Athletes' career transition out of sport: a systematic review', *International Review of Sport and Exercise Psychology*, vol. 6, no. 1, pp22–53. Available at: <https://doi.org/10.1080/1750984X.2012.687053>.

Patel, V., Saxena, S., Frankish, H., & Boyce, N. (2016) 'Sustainable development and global mental health—a Lancet Commission', *The Lancet*, vol. 387, no. 10024, pp1143–1145. Available at: [https://doi.org/10.1016/s0140-6736\(16\)00208-7](https://doi.org/10.1016/s0140-6736(16)00208-7).

Pope, C. & Mays, N. (eds.) (2006) 'Qualitative research in health care', 3rd edn. Blackwell Publishing; BMJ Books. Available at: <https://doi.org/10.1002/9780470750841>.

Purcell, R., Pilkington, V., Carberry, S., Reid, D., Gwyther, K., Hall, K. (2022) 'An evidence-informed framework to promote mental wellbeing in elite sport', *Frontiers in Psychology*, vol. 13, p780359. Available at: <https://doi.org/10.3389/fpsyg.2022.780359>.

Reardon, C.L. & Factor, R.M. (2010) 'Sport psychiatry', *Sports Medicine*, vol. 40, no. 11, pp961–980. Available at: <https://doi.org/10.2165/11536580-000000000-00000>.

Reardon, C.L., Hainline, B., Aron, C.M., Baron, D., Baum, A.L.,

- Bindra, A., Budgett, R., et al. (2019) 'Mental health in elite athletes: International Olympic Committee consensus statement (2019)', *British Journal of Sports Medicine*, vol. 53, no. 11, pp667–699. Available at: <https://doi.org/10.1136/bjsports-2019-100715>.
- Rice, S., Purcell, R., De Silva, S., Mawren, D., McGorry, P.D., & Parker, A.G. (2016) 'The mental health of elite athletes: a narrative systematic review', *Sports Medicine*, vol. 46, no. 9, pp1333–1353. Available at: <https://doi.org/10.1007/s40279-016-0492-2>.
- Smith, A.M. (1996) 'Psychological impact of injuries in athletes', *Sports Medicine*, vol. 22, no. 6, pp391–405. Available at: <https://doi.org/10.2165/00007256-199622060-00006>.
- Smith, A.M. & Milliner, E.K. (1994) 'Injured athletes and the risk of suicide', *Journal of Athletic Training*, vol. 29, no. 4, pp337–341. Available at: <https://pubmed.ncbi.nlm.nih.gov/16558297/>.
- Solmi, M., Radua, J., Olivola, M., Croce, E., Soardo, L., de Pablo, G.S., Il Shin, J., et al. (2021) 'Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies', *Molecular Psychiatry*, vol. 27, no. 1, pp281–295. Available at: <https://doi.org/10.1038/s41380-021-01161-7>.
- Sood, A.B. (2018) '2.4 suicidal behaviors and prevention of suicide in TAY', *Journal of the American Academy of Child & Adolescent Psychiatry*, vol. 57, no. 10, p S4. Available at: <https://doi.org/10.1016/j.jaac.2018.07.018>.
- Stoltenburg, A.L., Kamphoff, C.S., & Lindstrom Bremer, K. (2011) 'Transitioning out of sport: the psychosocial effects of college athletes' career-ending injuries', *Athletic Insight*, vol. 3, pp115–133.
- Voorheis, P., Silver, M., & Consonni, J. (2023) 'Adaptation to life after sport for retired athletes: a scoping review of existing reviews and programs', *PLOS ONE*, vol. 18, no. 9, Article e0291683. Available at: <https://doi.org/10.1371/journal.pone.0291683>.
- Williams, A., Day, S., Stebbings, G., & Erskine, R. (2017) 'What does "elite" mean in sport and why does it matter?', *The Sport and Exercise Scientist*, no. 51, pp10–11. Available at: <https://www.researchgate.net/publication/315720117>.
- Wolanin, A., Gross, M., & Hong, E. (2015) 'Depression in athletes: prevalence and risk factors', *Current Sports Medicine Reports*, vol. 14, no. 1, pp56–60. Available at: <https://doi.org/10.1249/JSR.0000000000000123>.
- World Health Organization: WHO (2022) 'Mental health'. Available at: <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response%23SnippetTab> (Accessed: 18 September 2022).
- Wylleman, P., Alfermann, D., & Lavallee, D. (2004) 'Career transitions in sport: European perspectives', *Psychology of Sport and Exercise*, vol. 5, no. 1, pp7–20. Available at: [https://doi.org/10.1016/s1469-0292\(02\)00049-3](https://doi.org/10.1016/s1469-0292(02)00049-3).
- Zuelke, A.E., Luck, T., Schroeter, M.L., Witte, A.V., Hinz, A., Engel, C., Enzenbach, C., (2018) 'The association between unemployment and depression—results from the population-based LIFE-adult-study', *Journal of Affective Disorders*, vol. 235, pp399–406. Available at: <https://doi.org/10.1016/j.jad.2018.04.073>