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Mental health risk and protective factors in Australian cricket

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ABSTRACT

Women's participation in cricket has accelerated within Australia. Despite this trend, there is little research into the mental health risk and protective factors of elite women cricketers. The purpose of this study was to examine elite women cricketers' perceptions of sport-based mental health risk and protective factors. Twelve women cricketers took part in individual interviews in which they discussed the mental health risk and protective factors they perceived to influence their experience. The interviews resulted in the development of 26 unique codes, from which five themes were generated: (a) resilience; (b) social support; (c) team processes; (d) mental health systems; and (e) health and body image. These results articulate the mental health risk and protective factors of elite women cricketers, and the processes, mechanisms, and settings that influence them. Considerations for protecting and treating the mental health and wellbeing of elite women athletes, specifically women cricketers, are discussed.

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Mental illnesses are one of the leading causes of burden of disease worldwide (Vigo et al., 2016). Wellbeing exists at the opposite end of the mental health continuum and is an important component of mental health (Keyes, 2002). For example, mental health is defined as "a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community." (World Health Organization, 2022, para. 1). While amateur sport involvement may benefit the mental health of participants, elite sport participation may involve unique pressures for athletes that could present challenges to their mental health such as public expectations and performance pressure (Hodge & Smith, 2014). Researchers have called for contextualised understandings of mental health among elite athletic environments to offer appropriate and responsive mental health support to athletes (Vella et al., 2021a).

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However, as participation in women's¹ sport grows globally, research in sport psychology generally has failed to appropriately represent women's experiences through research (Walton et al., 2022). The present study aimed to address these issues by examining elite (i.e., Swann et al., 2015) women cricketers' mental health risk and protective factors.

Athletes experience similar rates of mental illness to the general population (Rice et al., 2016), and elite athletes may face different pressures than recreational athletes that can contribute to poor mental health outcomes. In a review of mental health protective and risk factors among elite athletes, Küttel and Larsen (2021) identified four main categories: (a) individual risk factors (e.g., adverse life events, negative social relationships, and low social support); (b) individual protective factors (e.g., protective behaviours, positive social relationships, and support); (c) sport-environment risk factors (e.g., sport-specific stressors, stigma towards help-seeking); and (d) sport-environment protective factors (e.g., mental health literacy and support, trusting sport climate). Less than 38 percent of participants from studies included in Küttel and Larsen's (2021) review were women or female athletes and only 3 of the 43 studies focused on females or women exclusively (compared to 12 focused exclusively on males/men), which is a common trend in mental-health-and-sport research (Rice et al., 2016; Walton et al., 2022).

Research among women athletes has demonstrated that there may be unique risk and protective factors to sport participation, or that risk and protective factors may be experienced uniquely among women athletes. For example, in two of the three studies included by Küttel and Larsen (2021), researchers found that playing at a lower tier of elite sport (e.g., second league), poor general health, conflicts with coaches and management, and a lack of support were among the risk factors associated with worse mental health outcomes among elite women athletes (Junge & Prinz, 2019; Prinz et al., 2016). Adolescent women athletes may be at particular risk of mental health challenges, as they are more likely to be bullied when compared to their male counterparts (Slater & Tiggemann, 2011). Likewise, research has shown collegiate women athletes report greater self-esteem, physical competencies, and a more favourable body image than women non-athletes (Richman & Shaffer, 2000). Other research with collegiate women athletes found that maintaining social support and a sport-life balance during the competitive season were important for promoting (not just protecting) athletes' mental health (Pankow et al., 2021). Evidently, more evidence is needed to understand how elite sport participation can influence women athletes' mental health.

Mapping the uncharted: women's cricket

Specific to cricket, an exploration of professional male cricketers' mental health and support experiences has recently been published (Ogden et al., 2022). The study found that overall, the elite cricket experience was a mental health roller coaster that could contribute to both enhanced well-being and a higher likelihood of mental health challenges. The participants reported that coaches played a key role in supporting their mental health by communicating clearly. Mental health support was found to be stigmatised and reactive, meaning players felt uncomfortable accessing support proactively and were unlikely to disclose problems. One issue with cricket-specific research is that most of the mental health research in the sport has been undertaken using entirely – or largely – male/men samples (McCabe et al., 2021). Although these studies have added important knowledge to the field, there is now a substantial need for research that will enable an

understanding of the experiences of females and women within competitive sport, and cricket in particular.

Currently, women's participation in cricket accounts for 12% of the total number of players aged 15 and over in Australia (Sport Australia, 2019). Women's participation during the 2019–2020 cricket season grew by 11.4% compared to the 2018–2019 season (Cricket Australia, 2020). Given this substantial growth in women's participation, there is an increased need for support services that cater specifically to women athletes at a competitive level. In fact, there are meaningful differences in the way men and women experience mental health problems, including the prevalence rates of major disorders, experience and expression of symptomology, and help-seeking behaviours (Afifi, 2007). These differences, accompanied by a lack of research exploring women athletes' experiences of mental health, highlight that support, guidelines, and recommendations for improving athlete mental health in sport (see Vella et al., 2021b for a review) are likely to have been developed in the absence of adequate data regarding the needs of women athletes. A greater understanding of women's mental health risk and protective factors in the context of sport is needed to provide relevant and evidence-based mental health support to elite women athletes.

The present study

Mental illness and mental health challenges are an increasingly salient topic in sport. Sport settings often advertise the benefits of participation, but evidence suggests that sport participation can present unique mental health challenges to athletes especially at the elite level. Further, there is little research examining the experiences of elite women athletes to inform the development and provision of mental health support tailored to their needs. Research generating knowledge to improve our understanding of mental health risk and protective factors among elite women's sporting contexts can help to inform the design and delivery of sport programmes, support systems, and sport psychology practice to optimise the mental health benefits of sport participation for women athletes. Therefore, the purpose of this study was to examine elite women cricketers' perceptions of sport-based mental health risk and protective factors. The specific research questions guiding our work were: (1) What factors do participants recognise as impacting their mental health in [elite/competitive/high-performance] women's cricket in Australia?, and (2) Do these factors appear to present a risk to or be protective of women cricketers' mental health?

Method

Philosophical and methodological approach

We adopted a pragmatic philosophical approach to this study. Pragmatism as a philosophy centres on a matrix of action-consequence-reflection called inquiry, through which warranted assertions about the human experience can be made (Dewey, 1920). Dewey's pragmatism is inherently concerned with creating actionable outcomes from research to enhance peoples' wellbeing (Seigfried, 2002), making it particularly well-suited for our purpose. Pragmatism can be considered to eschew ontological and epistemological debates about the nature of reality, representing a new paradigmatic

approach centred on the nature of human experience (Morgan, 2014). Pragmatic research is concerned with how the process of inquiry (i.e., research) was conducted, as different methods will lead to different assertions about the topic at hand (Morgan, 2014). In our study, we both engaged in a process of inquiry and were concerned with how participants engaged in processes of inquiry through their interactions within the cricket environment to generate warranted assertions about mental health risk and protective factors in elite women's cricket.

We drew from a qualitative descriptive methodological approach to inform this study (Sandelowski, 2000; 2010). Qualitative descriptive approaches are a residual category of qualitative research and can be described as approaches that produce data-near results, useful for studies aimed at reporting participants' descriptions of phenomena and identifying practical problems and solutions (Neergard et al., 2009; Sandelowski, 2010). In line with our pragmatic philosophy, researchers engaging in qualitative descriptive approaches acknowledge that participants' descriptions of the case will always include some inference on both the part of the participant and the researcher (Sandelowski, 2000; 2010). A qualitative descriptive approach and subsequent methodological decisions were appropriate for our purpose because it allowed us to present a low-inference account of participants' perceptions of mental health risk and protective factors in elite women's cricket, while allowing for new risk and protective factors to be considered that may not have been included in largely quantitative and men/male-dominated work to date (see Küttel & Larsen, 2021).

Positionality

Given that both pragmatism and qualitative description recognise the social influence in inquiry, it is important to disclose relevant positionalities of the authorship team to give context to our inferences and subsequent assertions about the data. The third author (DC) conducted the interviews and initial analysis for her undergraduate honours year programme. She had previously played 10 years of elite women's cricket in Australia. She was responsible for the collection and initial interpretations of the data given her insider status, which allowed her to make note of some nuances that may have been lost to those without cricket expertise (e.g., understanding the interpersonal dynamics of women's cricket and potential for stigma). The last author was the main supervisor and has been a participant in and researcher of elite sport environments. His experiences have been largely limited to men's sports, which shaped our inquiry by his analytic questions about differences in the social and sport environments between men's and women's cricket contexts. The remaining authors were postdoctoral fellows and faculty members with experience in mental health in sport and health psychology research. One of the authors had previously conducted research in mental health with high-performance women athletes (in different sports and a different national context), which influenced his interpretations of the nuance occurring within broad classifications of factors as either risk or protective.

Participants and recruitment

University ethics board approval was received from the last authors' institution prior to commencing recruitment. A total of 12 women participants aged 16–44 ($M = 21.27$; SD

= 8.04) years were recruited, all of whom were Australian. All participants played cricket competitively with varying levels of experience, from senior regional elite level ($n = 3$) to national level ($n = 1$). One participant in this study was categorised as “successful elite”, seven were “competitive elite”, and four were “semi-elite” (Swann et al., 2015). Semi-elite players often played at senior regional competitive level or had the fewest years’ experience. Competitive elite players were in development programmes or state squads, while the successful elite athlete played at a national level. The participant sample was drawn from four different clubs in the greater Sydney and Illawarra region of Australia, with seven participants playing on more than one team (i.e., played at a club and a representative level). The majority of participants ($n = 8$), however, only played one game of cricket per week and three participants trained once per week (maximum = 6 sessions per week, $n = 1$). The median number of training sessions was three times per week ($M = 2.91$; $SD = 1.70$).

Criterion and snowball sampling techniques were used (Patton, 2014). One participant did not provide demographic data. Criterion to participate in the study were (a) individuals had to be aged 16 years or over, as this age marks the beginning of peak competitive years where investment in a single sport is appropriate (Wall & Côté, 2007); (b) currently playing cricket or (for those who participated in the off-season) planned to continue playing cricket in the upcoming season (2019/20), with the intention of attending a minimum of one training session and one cricket match per week; (c) identified as women; and (d) were playing in women’s elite competitions, were considered for participation in the study. This is in line with Cricket Australia’s recent policy which outlines the inclusion of transgender and gender-diverse players in elite cricket (Cricket Australia, 2019). Participants were recruited by: (a) contacting cricket clubs; (b) personal contacts of the research team; (c) posters and social media advertising; and (d) asking participants to nominate teammates that may be interested and met recruitment criteria (i.e., snowball sampling). If an individual expressed interest in the study, they provided researchers with contact information and organised a time to take part in an individual semi-structured interview.

Data generation

We generated data via semi-structured interviews to allow for an open discussion around mental health risk and protective factors in elite female cricket. DC carried out a pilot interview with a retired woman cricketer who played at a semi-elite level prior to data collection. Pilot interview data were not used in the study. The pilot interview provided the research team with valuable insights into the mental health risk and protective factors of women cricketers that had not been considered previously, including perceptions of men being viewed as assets over women in club settings, the potential for intra-team conflict, and favouritism. The interview schedule was amended to include these concepts as probes within the data collection process.

Following the pilot, DC conducted interviews with participants in person or via Skype. DC informed participants they could skip any questions they did not want to answer or end the interview at any time, and DC was prepared to halt the interview at visible signs of emotional distress and ask the participant if they wished to stop. DC began the interviews with a rapport-building conversation using questions such as: “Why did

you decide to play cricket?" were utilised as a way of opening the dialogue, building rapport, and identifying initial points of inquiry. DC then asked participants open-ended questions about their sporting and mental health risk and protective factors. The interview had six areas of inquiry: (a) context of sporting experience; (b) mental health risk and protective factors; (c) personal engagement in activities; (d) interpersonal aspects; (e) contextual considerations; and (f), potential pathways between sport and mental health. DC encouraged participants to discuss any topic, experience, process, or element of sport that they perceived to influence their mental health. DC used follow-up questions, such as "is mental health discussed at your club?" to address these insights. Additionally, interview questions were revised throughout the process. This iterative process allowed the interviews to address insights that were interpreted from the previous interviews. For example, on review of the first three interviews, reflections and questions surrounding the concept of resilience were addressed more frequently (e.g., "You sound like you're a very resilient person, what do you think helps you with that?"). The interviews ranged from 54 to 76 min in length ($M = 63.64$ min; $SD = 6.47$). All interviews were audio recorded with the consent of the participants and transcribed verbatim by DC.

The concept of information power guided our iterative data generation and recruitment processes (Malterud et al., 2016). Information power specifies that the larger information a sample holds, the lower sample size of which is needed, and vice versa. To determine information power, it is essential to consider the: aims of the study; sample specificity; use of theory; quality of dialogue; and data analysis approach. Specifically, whilst we adopted a qualitative content analysis (see below), which may increase the sample size required, the use of a specific sample (i.e., elite women cricketers) and a strong quality of dialogue throughout the interviews contributed to reducing the required sample size. Following ongoing discussion amongst the research team surrounding these different factors, we believed an appropriate number of participants had been included in the study to adequately generate new knowledge.

Data analysis

Following Sandelowski's (2000) recommendations, we performed a qualitative content analysis. DC began the analysis by conducting and transcribing all the interviews. Following the transcription of an interview, she made initial notes on the transcript. Then, she used transcripts and initial notes to generate codes, which largely focused on her descriptions of the participants' responses to questions. DC then applied the initial codes to subsequent interviews and new codes were developed and re-applied to previously analysed interviews. Throughout analysis and data generation, DC reviewed codes with MS, SV, and LR who discussed the organisation of the coded data. Following coding, DC, MS, LR, and SV met to discuss relationships between codes to generate themes. Once DC, MS, LR, and SV had generated themes, the remaining authors (KP, JS, and CL) joined to help re-review the coded data and collaboratively identify protective or risk factors. Our classification of protective and risk factors was largely informed by our familiarity of the work of Küttel and Larsen (2021), which shaped the presentation of our data and process of inquiry. Examples of these stages from our work are presented in Supplementary Table 1. Final participant quotations were selected to represent each risk or protective factor through a comparative process between the authorship team, where DC initially selected

quotes she believed best represented each risk and protective factor. Then, the team discussed their low-inference interpretations of the quotations, and whether the chosen quotations succinctly represented the patterns noted across the data set.

Rigour

Sandelowski (2000) did not prescribe criteria for rigour in the qualitative description. We, therefore, followed general recommendations (Mayan, 2009) for rigour in qualitative research that helped us to critically reflect on and navigate our own process of pragmatic inquiry. Namely, we focused on strategies that demonstrated researcher responsiveness (i.e., an ability to think critically about data and techniques to ensure the data are being best represented; Mayan, 2009). First, two co-authors acted as critical friends, who encouraged the third author to reflect upon their interpretation of the data, the construction of the codes and themes, as well as exploring alternative explanations (Smith & McGannon, 2018). One example involved data around athletes removing themselves from the centrality of competition. We originally thought of this as an avoidant coping mechanism, but after reflecting on our inquiry as setting out to identify risk and protective factors, seemed like a more positive decision for their wellbeing (i.e., displaying signs of resilience). Additionally, a process of peer debriefing was undertaken with assistance from the last author, further demonstrating researcher responsiveness. Peer debriefing included providing regular feedback on decisions related to the data collection (e.g., considerations of information power), methods, and results to fully develop the process of pragmatic inquiry in the study through focused reflection. Collectively, these strategies, along with our explanations of our paradigmatic and methodological approaches, positionalities, and data generation and analysis demonstrate a methodological coherence (Mayan, 2009) throughout our work.

Results

The results are presented in five themes, which include a total of 22 mental health risk and protective factors. The main themes were: (a) resilience; (b) social support; (c) team processes; (d) mental health systems; and (e) health and body image. An overview of the themes, factors, and designations as a risk or protective factor are presented in [Table 1](#).

Resilience

This theme included factors which may add to or detract from one's capabilities to cope with the demands of their sports environment, and thereby maintain good mental health. Within this theme, we identified four protective and one risk factor that were specifically related to athlete mental health. Protective factors included (a) motivational factors underpinning resilience; (b) importance of sport-life balance; (c) protective effects of in-season competition; and (d) positive reframing. The risk factor was a reported lack of sport-life balance.

Motivation

Participants made statements that we believe reflected their intrinsic motivation to participate. For example, participant 11 explained:

Table 1 . Overview of themes, factors, and risk or protective designations.

Theme	Risk or protective	Factors
Resilience	Protective	Motivation Sport-life balance In-season competition Positive reframing
Social support	Protective	Personal and social support networks Perceived belonging within the group Feeling understood by others
Team processes	Risk	Lack of sport-life balance
	Protective	Making a valuable contribution to the team Recognising athlete skill and effort Coach support
Mental health systems	Risk	Lack of recognition Punitive coach behaviours Perceived pressure Team conflict
	Protective	Access to formal mental health support
Health and body image	Risk	Lack of mental health awareness Lack of formal mental health support Barriers to seeking mental health support
	Protective	Physical activity Physical demands Body image concerns Common sport practices

I'm still there to enjoy [playing cricket], and like I said playing the game is the payment, and the good stuff that happens. We focus on the negatives a lot but when the good stuff happens that's the payment, that's the reward. (Participant 11)

The intrinsic motivation to participate appeared to stem from her enjoyment of the game and appreciating how, despite potential challenges, playing the game was still rewarding.

Perceived sport-life balance

Another perceived contributor to resilience was the participants' ability compartmentalise different aspects of their lives (e.g., cricket, personal life). Participant 6 succinctly illustrated this notion when she said it was helpful for her mental health to be able to "live a normal social life as a cricketer ... to have that break, to be able to go home and understand what it's like to be a normal teenager." Taking a break and being a normal teenager reflected the notion of a perceived sport-life balance.

In-Season competition

It was noted by some athletes that their mental health was better during the cricket season. Participant 1 explained:

I do find that over summer, over the cricket season, my overall mental health is a lot better than it is at other times of the year, and before I joined the cricket club. I find over summer that it's a lot harder to touch me in a negative way, things don't bother me as much.

We interpreted this to mean that being in the competitive season provided an enjoyable outlet for participants, which allowed them to be more resilient overall and protect their mental health.

Positive reframing

Participants reported experiencing events or interactions that seemed to have a negative impact on their wellbeing (e.g., non-selection, injury, etc.). Participant 3 described a challenge she had faced with perceived favouritism, and said:

I think it's [favouritism] also been a positive learning curve because it pushed me to work harder. Because then if they're not working that hard and they're still getting the opportunities well then they will fall back in the end. They haven't trained as hard; they won't be as strong and as skilful.

Framing her potentially adverse experience as an opportunity to learn and improve appeared to contribute to participant 3's resilience and be protective for her mental health.

Social support

This theme relates to the various ways in which interpersonal relationships and interactions within or surrounding the sport environment influenced the mental health of participants. The mechanisms underlying social support demonstrate the benefit of access to supportive environments on and off the cricket field and include (a) personal and social support networks; (b) perceived belonging within the group; and (c) feeling understood by others. A lack of sport-life balance appeared to be a risk factor for mental health related to social support.

Personal and social support networks

Perceived access to social support networks appeared to be an important asset to women cricketers' mental health. Participant 9 recounted how:

Having the older people [teammates] you always know that there's someone to look out for you, on and off the field. If I went up to them and told them about something that wasn't cricket related they would still be there. It's not like, "You can only come and talk to me about cricket." I think it's really good knowing that there's someone there.

This appeared to indicate that the athletes valued the informal support and safe environment provided by teammates when they experienced challenges.

Perceived belonging within the group

Participants reported that being part of an inclusive group was a positive aspect of their sport experience. For example, participant 3 reflected that:

Gaining friendships has really helped throughout my years of playing sport. I do play soccer as well and in both, especially cricket, I've made some very good friendships that will last forever. And I think it's been a positive impact to my mental health.

It seemed that being a part of a socially inclusive group where participants felt connection and friendship fostered a sense of belonging, which we interpreted as protective of mental health.

Feeling understood by others

Participants felt it was important that they were understood by individuals within the group:

He [private coach] is through [sports association] and he always just wants to help me be better and would, if I did well in grade he'll send me a message like "how are we going to get better this week?" And he picked up when I was struggling a little bit and helped get me back on track. Especially mentally he's been the coach that's really helped my mental health with cricket. (Participant 4)

We interpreted the resultant validation and relatedness from feeling understood by others to support the athletes' mental health.

Lack of sport-life balance

We interpreted some experiences as reflecting a lack of sport-life balance. In particular, athletes reported difficulty maintaining important relationships due to their commitments to sport. Participant 8 explained:

I lose connections with people quite often, not meaning to. I think from a social point of view you miss a lot too; I nearly missed my brothers 21st [birthday] which would have been devastating. You know weddings you miss out on, important life events that sometimes come second to the sport and I think sometimes that's tricky to handle.

Missing these important life events and connections with others appeared to be a mental health risk factor, as it tied the athletes' social networks closer to their sport.

Team processes

This theme outlines how we perceived that the interactions and interpersonal processes of participants with specific regard to the team environment influenced athlete mental health. The team processes that appeared to be protective of the athletes' mental health were (a) making a valuable contribution to the team; (b) recognising athlete skill and effort; and (c) coach support. Factors that seemed to present risks to the participants' mental health were (d) punitive coach behaviours; (e) perceived pressure; and (f) team conflict.

Making a valuable contribution to the team

Several participants reported that being a part of a competitive cricket team helped them feel valued. Participant 1 reflected the importance of contributing when she said, "If you're playing your best, you have that reinforcement over and over again that what you're doing is worthwhile and that you're a worthwhile person. Valued, valued, it's all about being valued." Making a valuable contribution to their team in turn appeared to have a protective effect on their mental health and validated their hard work and sacrifice.

Recognising athlete skill and effort

Distinct from feeling valued, athletes in this study expressed that feeling recognised by others generated positive affective states, the athletes particularly appreciated recognition from the public:

I remember our first game we had like 180 people turn up, and it was the most exciting thing I've ever played in front of. Then to being in a final this year against the [opposition] and having upwards of 5000 people at [the venue] and it sell out was absolutely incredible. We've seen TV games come into play, the spectators are more interested. (Participant 8)

To us, recognition of skill and effort was a protective factor for mental health because it validated the work that the participants had put into their sport.

Lack of recognition

Many athletes felt that their efforts and accomplishments were largely unrecognised by the public, with comparisons often being made to the recognition the men's clubs would receive:

It's disappointing to see there's a lack in recognition. But like I said it has improved and that has been more positive to the club. But it's still frustrating knowing that even though the men didn't do as good they still get most of the recognition, it's just frustrating. (Participant 3)

This lack of recognition created frustration we identified as a mental health risk factor.

Supportive coach behaviours

Coach behaviour had an impact on the team environment, and in turn, athlete mental health, and could either be a mental health protective or risk factor depending on the behaviours. Participant 2 explained how in her experience, her coach was supportive of the whole team, not only specific athletes:

It's more like belief in us, he's [Coach] not looking at us as individuals it's more like as a collective group. So, he won't just believe in a couple of people he'll believe in the whole team like "you all can do this". It's not just a couple of people.

We interpreted this to mean that coaches could be protective of athlete mental health when they were able to successfully connect with athletes and foster support with athletes.

Punitive coach behaviours

Coaches were not always supportive of all athletes, and several athletes reported coaches engaging in punitive behaviours. For example, participant 5 shared:

You will get abused in front of the whole team if you stuff up. Like you do something wrong with a shot the whole team does 10 push ups except for you, so you have to witness the whole team doing push ups.

Singling out athletes for making mistakes and subsequently punishing the rest of the team appeared to be a punitive coach behaviour that presented a mental health risk factor.

Perceived pressure

Many participants felt external performance pressure from others within the team presented a risk to their mental health. External pressures most often came from teammates and coaches, which were often internalised:

The way they were treating me and the pressure, and I think also once you've copped it a couple of times you start to put the pressure on yourself without them having to do anything about it. (Participant 7)

Similarly, the Participant 12 described the negative emotions that arise when she did not meet her performance goals, saying, "Depends if I make runs or not, I feel like the shittest

person in the world and like I haven't achieved anything if I don't make runs. If I make runs I feel like I'm a superhero." The perception of pressure to perform in this case appeared detrimental to the participants' mental health because it invalidated their accomplishments if the participants felt as though they hadn't hit all of their perceived important metrics.

Team conflict

Whilst many athletes in this study remarked that they had not seen or been part of explicit team conflict, there were nonetheless discussions of more subtle conflicts occurring that we believe presented a risk for the athletes' mental health. A commonly reported conflict among participants was teammates negatively commenting on each other's mistakes:

At the end of the over [teammates] would run past you and say something to you or they'd say comments to each other that you could hear. So, I remember one day when I dropped a catch and I can remember comments being said. Say I was like at mid-on and comments were coming from point to the keeper where they were, and they would have a little go; "How did she do that?" and "That's not on." There was no, "Aw that was unlucky, you'll get the next one." (Participant 7)

These conflicts appeared to negatively impact participants' mental health because their teammates actions in these cases diminished the participants' feelings of support.

Mental health systems

Systemic mental health services are those provided by national, state, and club-level organisations to support athlete mental health care. As such, this theme related to the athletes' experiences with these services and the athletes' understanding of how the systems impacted athlete mental health.

Lack of mental health awareness

Creating a climate where individuals can openly discuss mental health concerns is important. However, many athletes noted that this was not normalised within their club, which was a risk factor for poor mental health:

Nobody really talks about it [mental health]. But we did have a talk a few years ago at [State Club] about mental health and dealing with people who have mental health issues and need help, that sort of thing. Clubs don't have a mention of it at all, that was the first time in cricket had someone talked about it. (Participant 11)

It seemed to us that participants felt that there was a stigma around mental health in women's cricket at the club level, reflecting a lack of mental health awareness in the sport.

Lack of formal mental health support

Many participants felt that adequate mental health support was required to protect their wellbeing. However, participants noted that few formal services were available to them, particularly at a regional level. For example, one participant explained that they did not have adequate access to a sport psychologist through their club:

I feel like there's not a psychologist at the club, there's one at [state club] but I don't have access, like I'm supposed to have access to him, but I don't know what he looks like, I just know his name. (Participant 5)

This lack of perceived access presented a barrier to seeking mental health support likely creating a risk factor for participants' mental health.

Access to formal mental health support

In contrast to those at lower levels who reported a lack of mental health support, athletes competing at a higher level reported more efficient access to formal mental health services which could be protective of mental health:

Yeah, we've got a sport psychologist and they're always accessible to me, so I can literally ring him up whenever I want. It's always open for anyone in that U/18's bracket. They're always free, they're always up for a chat, you go in and you get seen. (Participant 6)

Unlike those who perceived a lack of access to mental health support, perceived access seemed to promote positive feelings towards services, thus providing a protective effect for athletes' mental health.

Barriers to seeking mental health support

We identified several barriers that participants reported prevented from seeking mental health support from formal services which we interpreted as risk factors. One reported barrier was the gender of the service provider:

Personally, and I think the group feels the same, I think for a female athlete it's a lot easier to open up to a female sports psych. So I know a few of us don't go or find it hard to open up to a male. (Participant 8)

Participant 12 reflected that when they experienced a mental health challenge, they were unable to "get much support at the time ... mental health was a bit of a taboo subject that no one wanted to talk about ... I felt weak, I felt like it was weak to speak at that time for sure." Collectively, these quotes were interpreted to reflect the stigma associated with accessing mental health services.

Health and body image

The perceived impact cricket had on the athletes' physical health and body image was noted across the interviews as having both protective and risk elements. As such, this theme reports on the ways that we perceived that health behaviours (such as physical activity), physical demands of the sport, body image concerns, and common sport practices influenced the mental health of participants. This included the way participants' physical and mental health was judged by themselves and others, and the effect this had on the athlete's overall mental health.

Physical activity

The benefits of physical activity associated with playing cricket seemed to be a mental health protective factor for the participants. For example, participants reported that playing at a competitive regional level had a positive impact on mental health:

It's been very, very positive. Suddenly I find myself getting exercise, which I wasn't before, I just played video games for 20 years, seriously. I got some thumb exercise, but no actual aerobic exercise or running around. From a mental point of view that's so important, to actually get exercise. (Participant 1)

Cricket therefore appeared to provide an opportunity for participants to be physically active more frequently which participants seemed to think was positive for their mental health.

Physical demands

In contrast to physical activity benefits, the physical demands and psychological pressures associated with being an elite athlete were reported as a risk factor that could lead to poor physical health:

I made it through to be the [elite squad] captain and I got really sick, they thought I was having [health complication] but they actually weren't, they were caused by performance pressure, so I was pretty buckled for a few years ... it was actually [psychologically induced health complication], they're full blown [severe health complication] where you black out, and they're caused by stress. (Participant 12)

For participant 12, the cricket exacerbated some physical health issues due to the performance demands and pressures of pushing through physically challenging periods.

Body image concerns

Due to the competitive nature of cricket, many participants felt pressure regarding their weight and physical health. These demands were a clear risk factor for the athletes' mental health. Participant 10 highlighted the comparative element of body image to others when she said, "You never want to be the odd girl out that's always heavier than everyone else. I can see that happening, especially when we run and do fitness, no one ever wants to be last." Many of the athletes were aware that this kind of behaviour was not healthy but felt that it was a normal part of the sport, and being an elite athlete more generally, captured by Participant 8 who said, "We're getting paid to get fit."

Further, it appeared as though athletes' self-esteem was closely tied to body image concerns which were a mental health risk factor for the participants. When asked about how she feels regarding pressure related to body image, one participant replied:

You have the pressures as a teenage girl to look good. And when you're playing a sport, especially with the exercises we do, you're building muscle. So, everyone's like "OMG she's strong, what's going on?" And there's other stereotypes associated with that, and I guess you're different, when you're playing it's very different to when you're dressed up. There's just pressures to look good, you know because we're teenage girls and there's pressure to look good and be skinny. (Participant 11)

It seemed to us that Participant 11 struggled with normative beauty standards that conflicted with the physique that typically is associated with elite performance in women's cricket, a conflict that created a mental health risk factor.

Common sport practices

As part of their typical training processes, participants often had to take part in skin fold measurements and weight measurements in front of the team:

I just don't feel like it's necessary for other people to know where I'm at in my athletic journey, the reason they do it is to drive the team to get better. But, it feels like blackmail, putting a number up and saying, "Oh that's quite a shocking number you might want to beat that cause everyone's looking at it." (Participant 8)

Normalised practices around weight often led to athletes feeling vulnerable and uncomfortable (i.e., a risk factor), which seemed further exacerbated by the presence of men on staff watching or facilitating the process.

Discussion

The purpose of this study was to examine elite women cricketers' perceptions of sport-based mental health risk and protective factors. Overall, the results showed five themes (i.e., resilience, social support, team processes, mental health systems, and health and body image) that contained a mix of mental health risk and protective factors. By exploring thematic connections between risk and protective factors, we have generated a novel pattern of how similar sport experiences (e.g., experiences of team processes) can act as both protective or risk factors for elite women cricketers, moving a step beyond Küttel and Larsen's (2021) work in identifying lower-order risk and protective factors. From an applied perspective, these themes suggest that elite women cricketers experience different risk and protective factors than their men counterparts (i.e., Ogden et al., 2022), meaning unique approaches are likely needed to adequately support this growing group of athletes.

Compared to the work by Küttel and Larsen's (2021), many of our protective and risk factors overlap, suggesting the risk and protective factors experienced by elite athletes may be similar across genders. However, some differences were noted. An important example found in our study also noted in other work with elite women athletes (i.e., Pankow et al., 2021) was that of sport-life balance as a mental health protective factor. Sport-life balance was not noted as a factor in Küttel and Larsen's (2021) review, suggesting balance may be perceived as more important for elite women athletes than elite men athletes. However, balance has also been reported as an important mental health protective factor among elite men coaches (e.g., Pankow et al., 2022), indicating more work may be needed to conceptualise balance as a protective factor in sport. When compared to more recent research among elite male cricketers, many of our findings were either not noted by the elite male cricketers (e.g., issues with body image, accessibility of mental health services, and informal social networks), or were experienced differently (e.g., participants in our study reported clubs did not have a good formal mental health climate whereas elite UK male cricketers felt their clubs were open about supporting mental health) by the women in our study. It is unclear if these differences are cultural (e.g., UK compared to Australia) or relate to the gender difference in the focus of our study and Ogden et al.'s (2022) work. More work is needed to better understand the diverse range of mental health risk and protective factors in sport to offer further understanding about these differences and nuances.

We interpreted that developing and maintaining resilience was an important protective factor for the participants' mental health. This theme highlighted the salience of athlete motivation to foster resilience. This perceived relationship between motivation and resilience is supported by Sarkar and Fletcher (2014), whereby motivation provided

athletes with a buffer for stressful situations, and in turn, more resilience. Furthermore, participants discussed the importance of being adaptable to maintain resilience. In fact, elite athletes are often presented with unique challenges that abruptly change their plans and goals (e.g., injury, deselection), and thus the capability to learn and adapt from such situations appears to meaningfully influence women athletes' wellbeing. This includes their attributional style, which is related to athletes' ability to bounce back from a negative event such as a loss (Gordon, 2008) and may underpin the development of greater resilience in the face of adversity among competitive athletes (Parkes & Mallett, 2011). Taken together, efforts to facilitate intrinsic motivation and optimistic attributional styles among elite women cricketers may be particularly beneficial in promoting resilience, which in turn can provide robust protection against mental health detriments (Davydov et al., 2010).

Participants expressed that social support was an overall protective factor for their mental health. This finding is consistent with the work of Rees and Hardy (2000) in which perceived emotional and tangible support were noted as important variables when considering athlete mental health. Similarly, participant reports of perceived belonging to the group (i.e., social identity) also appeared to be protective of their mental health. The interplay between social support, social identity, and mental health has been explored in previous research (e.g., Haslam et al., 2005), and appears to also be important for elite women cricketers. Considered alongside work by Pankow et al. (2021) exploring mental health risk and protective factors among Canadian women athletes, we suggest that social support might move beyond solely protective and be a promotional factor for mental health (i.e., social support does more than prevent mental illness or low wellbeing but promotes mental wellbeing). Such nuance may be important for developing programmes aimed at improving athlete mental health overall given that mental health promotion may be more effective at preventing mental illness than traditional prevention strategies (e.g., Conley et al., 2013), and more research into the delineation of mental health promotional versus protective factors remains important. Speculatively, efforts to increase women athletes' strength of group membership may in turn increase perceptions of social support, and ultimately protect and promote mental health. One may look to current social identity and social support research to further develop this line of enquiry with elite women athletes (Bruner et al., 2021).

Team processes were evenly split between protective and risk factors. More specifically, participants discussed how positive interactions within the group led to recognition, validation, and support. Oppositely, team processes presented risk factors for women cricketers' mental health when coaches acted punitively, the team created feelings of pressure, and there was conflict within individuals on the team. In line with self-determination theory (Ryan & Deci, 2000) feeling as though their efforts were recognised allowed participants to fulfil their need for competence, and thus improve their wellbeing (Blanchard et al., 2009; Ntoumanis, 2001). By understanding the mechanisms and factors that motivate and instil feelings of competence in elite women cricketers we can design programmes that highlight and encourage this. Moreover, the role of the coach should be highlighted as participants felt that feedback provided by coaches, and the culture they created in their team had a significant impact on their wellbeing. This is consistent with a process map proposed by Pankow et al. (2023), wherein the coach and athlete both

experienced mental health benefits when they were able to work together towards shared goals and recognise athlete growth in an environment that includes supportive relationships between and across coaches and teammates. As such, it may be beneficial for cricket organisations to recognise the impact coaches have on athletes and assess whether their coaching style is having a positive effect on the team environment. Autonomy-supportive approaches to coaching may be particularly beneficial, as may be a more general focus on fulfilling athlete's needs for autonomy, competence, and relatedness to enhance mental health and wellbeing (Deci & Ryan, 2000).

The athletes in this study had mixed reports regarding the formal mental health services available to them, with the theme of mental health systems largely reflecting risk factors. Access to a sport psychologist appeared to be a protective factor when available. Interestingly, some athletes on the same team did not report access to a sport psychologist during their interview while others did. On the surface, this highlights an alarming reality – that athletes from the same team may have different perceptions regarding the support available to them. Additionally, in cases where athletes did acknowledge access to psychological services, some were reluctant to access them. Fears of appearing weak, only having access to men psychologists, and selection pressures were reported as barriers to help-seeking. This is a common finding (e.g., Blow et al., 2008; Gulliver, Griffiths, and Christensen, 2012a; Rice et al., 2016) along with the stigma of mental health issues that exist in sporting contexts (Gulliver, Griffiths, Christensen, Mackinnon, et al., 2012b; López & Levy, 2013). These issues persist within elite cricket and need to be addressed expeditiously (McCabe et al., 2021; Ogden et al., 2022), alongside the development, implementation, and evaluation of mental health literacy and resilience programmes designed with and for women athletes.

Athletes in this study highlighted issues concerning social comparison, body image, and feelings of vulnerability and discomfort in relation to their mental health which presented risk factors. Some athletes noted that the benefits of cricket on their physical health through providing an opportunity for regular physical activity, which acted as a protective factor for their mental health. Previous studies have found that body dissatisfaction may be highly prevalent amongst women athletes (Varnes et al., 2013). Notably, dissatisfaction with body image is more prevalent in higher-performing athletes (Varnes et al., 2013) with recent research finding that 36% of elite female soccer players in England reported symptoms of disordered eating (Perry et al., 2022). Interestingly, some of the body image concerns were induced by coaches or cricket clubs' policies. As such, it is possible that these behaviours are normalised and perceived as non-problematic by coaches and/or athletes (Buchholz et al., 2008). In addition to body image concerns, several athletes expressed feeling discomfort when having fitness measures taken by male staff members, particularly when their results were publicly displayed. Participants reported that both these circumstances negatively affected their wellbeing. Other evidence suggests that in fitness-based environments, women prefer to access women trainers and fitness experts (Drummond et al., 2007; Melton et al., 2011). It would be beneficial to explore if mental health support resources and preferences differ based on the identities of sport participants, as this could mean that current one-size-fits-all approaches to guidelines or best practices for mental health in sport may need to be revisited.

Limitations and future research

This study is limited to one sport and country – women’s cricket in Australia. Furthermore, there was a variety in the level of elite competition among the athletes who participated in our study, meaning that while we were able to generate broadly relevant themes, we were largely unable to attribute particular mental health experiences to factors at any one elite level. Several interviews were conducted via video conferencing due to location differences between the research team and participants. Although video and phone interviews may limit the rapport between interviewer and participants thus limiting the richness of the data (Johnson et al., 2021), the third author’s insider status as a cricketer likely reduced the impact of these approaches on the data (Weller, 2017). It is also important to consider the results in the context of the participants’ sport experiences. Though the participants at a minimum participated in a semi-elite level of sport as defined by Swann et al. (2015), the training load for some of these athletes was relatively low. This means that risk factors like high training load and overtraining were unlikely to be experienced, but other systemic issues may have been more prevalent (e.g., lack of resources). Further consideration of what is meant by the term “elite” is likely warranted. We encourage readers to consider the naturalistic generalisability (Smith, 2018) of our results and how these results might help readers make sense of mental health risk, protective, and promotional factors in their own sporting contexts. Research examining mental health experiences considering diverse ethnicities and gender identities, as well as broader intersectionality, should be a priority for future research. Further, research explaining interactions between themes and explaining mechanisms through which different risk and protective factors are thought to impact athlete mental health would make a valuable theoretical contribution.

Practical implications

The present study was the first to investigate the mental health risk and protective factors specific to elite women cricketers. From the findings, practical implications emerged with respect to the design and delivery of sport-based programmes. Specifically, cricket organisations may use the findings to inform the implementation of formal mental health support, normalise discussions around mental health, and increase the mental health literacy of women cricketers. Consistent with recent position statements (e.g., Henriksen et al., 2020; Schinke et al., 2018), mental health first aid and other mental health literacy programmes (e.g., Gulliver, Griffiths, Christensen, Mackinnon, et al., 2012b) could be recommended training for athletes and staff. Such a change could equip athletes with an understanding of their own mental health and allow them to identify concerns among their teammates. Such programmes should be designed with and for women athletes to address issues specific to their experiences and circumstances.

A further implication is the potential changes to engaging and treating women cricketers in sport psychology practice. Sport psychologists may benefit from the present study’s findings as it highlights potential triggers for mental health concerns in women cricketers. Mental health professionals in this area should be aware of the impact of bullying, team conflict, body dissatisfaction, and poor sport-life balance on a woman cricketer’s

mental health. Additionally, in light of the study's findings, sport psychologists may leverage the naturally occurring protective factors in women's cricket teams, such as fostering resilience and social support. There is some support here for the use of self-determination theory-based intervention at multiple levels of sport (e.g., athletes, coaches, organisations) in sport psychology practice. Finally, gender preferences should be considered when hiring psychologists for elite women athletes. Insights offered in this study highlight the need for cricket organisations to provide women athletes access to women psychologists where the preference is for women support staff. The result of such an effort would lend increased comfort and engagement in mental health care.

Conclusion

This study provided a novel gender-specific understanding of the mental health experiences of elite women cricketers. The findings can inform the design and delivery of sport-based programmes and sport psychology practices in the realm of elite women's sport. Indeed, the data from this study shine a light on the important considerations when protecting and treating elite women athletes' mental health and wellbeing. Furthermore, this study fills an important gap in the literature by examining the mental health experiences of a rapidly growing and under-resourced population (i.e., elite women's sport). In sum, we encourage future work to build upon the current findings and extend the current understanding of the subjective mental health experiences of women cricketers.

Note

1. Consistent with American Psychological Association (APA) guidelines (APA, 2022), we use "woman/women" to refer to our participants as we recruited athletes based on gender. When referring to the work of other authors, we used the term used by the authors (i.e., female, male, men, or women) to represent their work as accurately as possible.

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This research was reviewed for ethical compliance and approved by the University Human Research Ethics Committees (HREC:2019/142).

Disclosure statement

No potential conflict of interest was reported by the author(s).

Data availability

De-identified data may be available from the corresponding author upon reasonable request.

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References

- Affi, M. (2007). Gender differences in mental health. *Singapore Medical Journal*, 48, 385–391.
- American Psychological Association. (2022, July). Gender. *APA Style Blog*. <https://apastyle.apa.org/style-grammar-guidelines/bias-free-language/gender>
- Blanchard, C. M., Amiot, C. E., Perreault, S., Vallerand, R. J., & Provencher, P. (2009). Cohesiveness, coach's interpersonal style and psychological needs: Their effects on self-determination and athletes' subjective well-being. *Psychology of Sport and Exercise*, 10(5), 545–551. <https://doi.org/10.1016/j.psychsport.2009.02.005>
- Blow, A. J., Timm, T. M., & Cox, R. (2008). The role of the therapist in therapeutic change: Does therapist gender matter? *Journal of Feminist Family Therapy*, 20(1), 66–86. <https://doi.org/10.1080/0895280801907150>
- Bruner, M. W., McLaren, C., Swann, C., Schweickle, M. J., Miller, A., Benson, A., Gardner, L. A., Sutcliffe, J., & Vella, S. A. (2021). Exploring the relations between social support and social identity in adolescent male athletes. *Research Quarterly for Exercise and Sport*, 92(3), 566–572. <https://doi.org/10.1080/02701367.2020.1737629>
- Buchholz, A., Mack, H., McVey, G., Feder, S., & Barrowman, N. (2008). Bodysense: An evaluation of a positive body image intervention on sport climate for female athletes. *Eating Disorders*, 16(4), 308–321. <https://doi.org/10.1080/10640260802115910>
- Conley, C. S., Durlak, J. A., & Dickson, D. A. (2013). An evaluative review of outcome research on universal mental health promotion and prevention programs for higher education students. *Journal of American College Health*, 61(5), 286–301. <https://doi.org/10.1080/07448481.2013.802237>
- Cricket Australia. (2019). *Inclusion of transgender & gender diverse players in elite cricket*. <https://resources.cricket-australia.pulselive.com/cricket-australia/document/2023/09/08/a2d1323c-512a-46ae-b99d-895dbd5827a0/Inclusion-of-Transgender-Gender-Diverse-Players-in-Elite-Cricket-08082019.pdf>
- Cricket Australia. (2020). *2019–20 Australian cricket census released*. <https://read.e-brochures.com.au/cricketaustralia/annual-report-2019-2020/pdf.pdf>
- Davydov, D. M., Stewart, R., Ritchie, K., & Chaudieu, I. (2010). Resilience and mental health. *Clinical Psychology Review*, 30(5), 479–495. <https://doi.org/10.1016/j.cpr.2010.03.003>
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Dewey, J. (1920). *Reconstruction in philosophy*. Henry Holt and Company. <https://archive.org/details/reconstructionin00deweuoft/>
- Drummond, J. L., Hostetter, K., Laguna, P. L., Gillentine, A., & del Rossi, G. (2007). Self-reported comfort of collegiate athletes with injury and condition care by same-sex and opposite-sex athletic trainers. *Journal of Athletic Training*, 42, 106–112.
- Gordon, R. A. (2008). Attributional style and athletic performance: Strategic optimism and defensive pessimism. *Psychology of Sport and Exercise*, 9(3), 336–350. <https://doi.org/10.1016/j.psychsport.2007.04.007>
- Gulliver, A., Griffiths, K. M., & Christensen, H. (2012a). Barriers and facilitators to mental health help-seeking for young elite athletes: A qualitative study. *BMC Psychiatry*, 12(1), 157. <https://doi.org/10.1186/1471-244X-12-157>
- Gulliver, A., Griffiths, K. M., Christensen, H., Mackinnon, A., Calear, A. L., Parsons, A., Bennett, K., Batterham, P. J., & Stanimirovic, R. (2012). Internet-based interventions to promote mental health help-seeking in elite athletes: An exploratory randomized controlled trial. *Journal of Medical Internet Research*, 14(3), e69. <https://doi.org/10.2196/jmir.1864>
- Haslam, S. A., O'Brien, A., Jetten, J., Vormedal, K., & Penna, S. (2005). Taking the strain: Social identity, social support, and the experience of stress. *British Journal of Social Psychology*, 44(3), 355–370. <https://doi.org/10.1348/014466605X37468>
- Henriksen, K., Schinke, R., Moesch, K., McCann, S., Parham, W. D., Larsen, C. H., & Terry, P. (2020). Consensus statement on improving the mental health of high performance athletes. *International Journal of Sport and Exercise Psychology*, 18(5), 553–560. <https://doi.org/10.1080/1612197X.2019.1570473>

- Hodge, K., & Smith, W. (2014). Public expectation, pressure, and avoiding the choke: a case study from elite sport. *The Sport Psychologist*, 28(4), 375–389.
- Johnson, D. R., Scheitle, C. P., & Ecklund, E. H. (2021). Beyond the in-person interview? How interview quality varies across inperson, telephone, and Skype interviews. *Social Science Computer Review*, 39(6), 1142–1158.
- Junge, A., & Prinz, B. (2019). Depression and anxiety symptoms in 17 teams of female football players including 10 German first league teams. *British Journal of Sports Medicine*, 53, 471–477.
- Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2), 207–222. <https://doi.org/10.2307/3090197>
- Küttel, A., & Larsen, C. H. (2021). Risk and protective factors for mental health in elite athletes: A scoping review. *International Review of Sport and Exercise Psychology*, 13(1), 231–265. <https://doi.org/10.1080/1750984X.2019.1689574>
- López, R. L., & Levy, J. J. (2013). Student athletes' perceived barriers to and preferences for seeking counselling. *Journal of College Counselling*, 16(1), 19–31. <https://doi.org/10.1002/j.2161-1882.2013.00024.x>
- Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26(13), 1753–1760. <https://doi.org/10.1177/1049732315617444>
- Mayan, M. J. (2009). *Essentials of qualitative inquiry*. Left Coast Press.
- McCabe, T., Peirce, N., Gorczynski, P., & Heron, N. (2021). Narrative review of mental illness in cricket with recommendations for mental health support. *BMJ Open Sport & Exercise Medicine*, 7(1), e000910. <https://doi.org/10.1136/bmjsem-2020-000910>
- Melton, D., Dail, T. K., Katula, J. A., & Mustian, K. M. (2011). Women's perspectives of personal trainers: A qualitative study. *The Sport Journal*, 14, 0104.
- Morgan, D. L. (2014). Pragmatism as a paradigm for social research. *Qualitative Inquiry*, 20(8), 1045–1053. <https://doi.org/10.1177/1077800413513733>
- Neergaard, M. A., Olesen, F., Andersen, R. S., & Sondergaard, J. (2009). Qualitative description—the poor cousin of health research? *BMC Medical Research Methodology*, 9(1), 1–5.
- Ntoumanis, N. (2001). Empirical links between achievement goal theory and self-determination theory in sport. *Journal of Sports Sciences*, 19(6), 397–409. <https://doi.org/10.1080/026404101300149357>
- Ogden, D. J., Coates, J. K., Plateau, C. R., & Barker, J. B. (2022). UK professional male cricketers' mental health and support experiences: A qualitative exploration. *Journal of Applied Sport Psychology*, 35(3), 372–391. <https://doi.org/10.1080/10413200.2022.2040652>
- Pankow, K., McHugh, T.-L. F., Mosewich, A. D., & Holt, N. L. (2021). Mental health protective factors among flourishing Canadian women university student-athletes. *Psychology of Sport and Exercise*, 52, 1–9. <https://doi.org/10.1016/j.psychsport.2020.101847>
- Pankow, K., Mosewich, A. D., McHugh, T.-L. F., & Holt, N. L. (2022). The role of mental health protection and promotion among flourishing Canadian university sport coaches. *Sport, Exercise, and Performance Psychology*, 11(1), 28–43. <https://doi.org/10.1037/spy0000277>
- Pankow, K., Mosewich, A. D., McHugh, T.-L. F., & Holt, N. L. (2023). A process map of flourishing between the coach and athlete in Canadian university sport. *Qualitative Research in Sport, Exercise and Health*, 15(3), 397–416. <https://doi.org/10.1080/2159676X.2022.2127859>
- Parkes, J. F., & Mallett, C. J. (2011). Developing mental toughness: Attributional style retraining in rugby. *The Sport Psychologist*, 25(3), 269–287. <https://doi.org/10.1123/tsp.25.3.269>
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). Sage.
- Perry, C., Chantry, A. J., & Champ, F. M. (2022). Elite female footballers in England: An exploration of mental ill-health and help-seeking intentions. *Science and Medicine in Football*, 1–10. <https://doi.org/10.1080/24733938.2022.2084149>
- Rees, T., & Hardy, L. (2000). An investigation of the social support experiences of high-level sports performers. *The Sport Psychologist*, 14(4), 327–347. <https://doi.org/10.1123/tsp.14.4.327>
- Rice, S. M., 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*, 46(9), 1333–1353. <https://doi.org/10.1007/s40279-016-0492-2>

- Richman, E. L., & Shaffer, D. R. (2000). "If you let me play sports": How might sport participation influence the self-esteem of adolescent females? *Psychology of Women Quarterly*, 24(2), 189–199. <https://doi.org/10.1111/j.1471-6402.2000.tb00200.x>
- Prinz, B., Dvořák, J., & Junge, A. (2016). Symptoms and risk factors of depression during and after the football career of elite female players. *BMJ Open Sport—Exercise Medicine*, 2, e000124.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health*, 23(4), 334–340. [https://doi.org/10.1002/1098-240X\(200008\)23:4<334::AID-NUR9>3.0.CO;2-G](https://doi.org/10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G)
- Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing & Health*, 33(1), 77–84. <https://doi.org/10.1002/nur.20362>
- Sarkar, M., & Fletcher, D. (2014). Psychological resilience in sport performers: a review of stressors and protective factors. *Journal of Sports Sciences*, 32(15), 1419–1434.
- Schinke, R. J., Stambulova, N. B., Si, G., & Moore, Z. (2018). International Society of Sport Psychology position stand: Athletes' mental health, performance, and development. *International Journal of Sport and Exercise Psychology*, 16(6), 622–639. <https://doi.org/10.1080/1612197X.2017.1295557>
- Seigfried, C. H. (2002). *Feminist interpretations of John Dewey*. Penn State University Press.
- Slater, A., & Tiggemann, M. (2011). Gender differences in adolescent sport participation, teasing, self-objectification and body image concerns. *Journal of Adolescence*, 34(3), 455–463. <https://doi.org/10.1016/j.adolescence.2010.06.007>
- Smith, B. (2018). Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for the sport and exercise sciences. *Qualitative Research in Sport, Exercise and Health*, 10(1), 137–149. <https://doi.org/10.1080/2159676X.2017.1393221>
- Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology*, 11(1), 101–121. <https://doi.org/10.1080/1750984X.2017.1317357>
- Sport Australia. (2019). *Cricket: State of play report*. https://www.clearinghouseforsport.gov.au/__data/assets/pdf_file/0006/762090/State_of_Play_Report_-_Cricket.pdf
- Swann, C., Moran, A., & Piggott, D. (2015). Defining elite athletes: Issues in the study of expert performance in sport psychology. *Psychology of Sport and Exercise*, 16, 3–14. <https://doi.org/10.1016/j.psychsport.2014.07.004>
- Varnes, J. R., Stellefson, M. L., Janelle, C. M., Dorman, S. M., Dodd, V., & Miller, M. D. (2013). A systematic review of studies comparing body image concerns among female college athletes and non-athletes, 1997–2012. *Body Image*, 10(4), 421–432. <https://doi.org/10.1016/j.bodyim.2013.06.001>
- Vella, S. A., Schweickle, M. J., Sutcliffe, J. T., & Swann, C. (2021b). A systematic review and meta-synthesis of mental health position statements in sport: Scope, quality and future directions. *Psychology of Sport and Exercise*, 55, 101946. <https://doi.org/10.1016/j.psychsport.2021.101946>
- Vella, S. A., Swann, C., Batterham, M., Boydell, K. M., Eckermann, S., Ferguson, H., Fogarty, A., Hurley, D., Liddle, S. K., Lonsdale, C., Miller, A., Noetel, M., Okely, A. D., Sanders, T., Schweickle, M. J., Telenta, J., & Deane, F. P. (2021a). An intervention for mental health literacy and resilience in organized sports. *Medicine and Science in Sports and Exercise*, 53(1), 139–149. <https://doi.org/10.1249/MSS.0000000000002433>
- Vigo, D., Thornicroft, G., & Atun, R. (2016). Estimating the true global burden of mental illness. *The Lancet Psychiatry*, 3(2), 171–178. [https://doi.org/10.1016/S2215-0366\(15\)00505-2](https://doi.org/10.1016/S2215-0366(15)00505-2)
- Wall, M., & Côté, J. (2007). Developmental activities that lead to dropout and investment in sport. *Physical Education & Sport Pedagogy*, 12(1), 77–87. <https://doi.org/10.1080/17408980601060358>
- Walton, C. C., Gwyther, K., Gao, C. X., Purcell, R., & Rice, S. M. (2022). Evidence of gender imbalance across samples in sport and exercise psychology. *International Review of Sport and Exercise Psychology*, 1–19. <https://doi.org/10.1080/1750984X.2022.2150981>
- Weller, S. (2017). Using internet video calls in qualitative (longitudinal) interviews: Some implications for rapport. *International Journal of Social Research Methodology*, 20(6), 613–625.
- World Health Organization. (2022). *Mental health*. <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>