University Library

MINERVA ACCESS

A gateway to Melbourne's research publications

Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:
Ojio, Y;Amemiya, R;Oliffe, JL;Rice, SM

Title:
Mental health help-seeking knowledge, attitudes and behaviour among male elite rugby players: the role of masculine health-related values

Date:
2025-01-31

Citation:
Ojio, Y., Amemiya, R., Oliffe, J. L. & Rice, S. M. (2025). Mental health help-seeking knowledge, attitudes and behaviour among male elite rugby players: the role of masculine health-related values. BMJ Open Sport and Exercise Medicine, 11 (1), https://doi.org/10.1136/bmjsem-2024-002275.

Persistent Link:
https://hdl.handle.net/11343/359879

License:
CC BY-NC

BMJ Open Sport & Exercise Medicine

Mental health help-seeking knowledge, attitudes and behaviour among male elite rugby players: the role of masculine health-related values

Yasutaka Ojio ,[1,2] Rei Amemiya,[3] John L Oliffe,[4,5] Simon M Rice[2,6]

To cite: Ojio Y, Amemiya R, Oliffe JL, *et al*. Mental health help-seeking knowledge, attitudes and behaviour among male elite rugby players: the role of masculine health-related values. *BMJ Open Sport & Exercise Medicine* 2025;**11**:e002275. doi:10.1136/bmjsem-2024-002275

► Additional supplemental material is published online only. To view, please visit the journal online (https://doi.org/10.1136/bmjsem-2024-002275).

Accepted 14 January 2025

Check for updates

© Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ Group.

[1]Department of Community Mental Health and Law, National Center of Neurology and Psychiatry, Kodaira, Japan
[2]The University of Melbourne, Melbourne, Victoria, Australia
[3]University of Tsukuba, Tsukuba, Japan
[4]School of Nursing, The University of British Columbia, Vancouver, British Columbia, Canada
[5]Department of Nursing, The University of Melbourne, Melbourne, Victoria, Australia
[6]Movember Institute of Men's Health, Melbourne, Victoria, Australia

Correspondence to
Dr Yasutaka Ojio;
ojio@ncnp.go.jp

ABSTRACT

Objectives Masculine norms of toughness and self-reliance can discourage help-seeking among elite athletes who are men. Effective ways to leverage masculine norms for help-seeking is a relatively unexplored area in athlete mental health. The study aimed to investigate how masculine health-related values measured by the Intentions Masculine Values Scale (IMVS) affect help-seeking behaviours among male elite rugby players.

Methods A cross-sectional survey was conducted among 220 Japanese male elite rugby players in the Japan Rugby League One (response rate: 40.6%). Participants completed an online survey assessing help-seeking knowledge, attitudes and behaviours, along with masculine health-related values using the IMVS. Psychological safety within sports settings was evaluated using the Sport Psychological Safety Inventory (SPSI). Multiple regression analyses examined relationships between help-seeking behaviours and IMVS/SPSI.

Results The Open and Selfless IMVS value was significantly associated with help-seeking knowledge (β=0.059, p=0.009) and attitudes (β=0.064, p=0.006), increasing recognition of the need for help and willingness to seek it. However, no significant association with actual help-seeking behaviour was found (β=−0.006, p=0.774). The Healthy and Autonomous IMVS value was associated with lower help-seeking behaviour (β=0.060, p=0.010), indicating higher autonomy may inhibit seeking professional support. The SPSI was not significantly related to help-seeking measures.

Conclusion Findings highlight critical gaps between intention and actual help-seeking behaviour among male elite athletes. Further research is needed to explore additional cultural and organisational factors that may better explain help-seeking behaviour and inform effective intervention strategies.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Male elite athletes face mental health challenges and are often discouraged from seeking help due to traditional norms emphasising toughness and self-reliance. However, the specific relationship between masculine values and psychological safety in shaping help-seeking behaviours remains underexplored.

WHAT THIS STUDY ADDS

⇒ This study reveals that masculine health-related values, particularly the Open and Selfless domain, are positively associated with mental health help-seeking knowledge and attitudes, while the Healthy and Autonomous domain is linked to lower actual help-seeking behaviours among Japanese male elite rugby players.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The findings emphasise the need for interventions that address the gap between help-seeking intentions and actions by reshaping masculine norms and creating culturally sensitive, supportive environments to promote mental health help-seeking in elite athletes.

INTRODUCTION

Understanding factors that facilitate mental health help-seeking in elite athletes has the potential to mitigate the burden of mental health difficulties and enhance performance. While attention to cultural, interindividual and intraindividual factors is essential for supporting athlete's mental health help-seeking,[1] the role of gender (ie, masculine values) and organisational-level factors (eg, psychological safety) has been underexplored in the literature. Elite sports demand exceptional physical and mental resilience, with athletes performing under highly pressured psychological stress.[2 3] These pressures, combined with intense competition and public scrutiny, can contribute to significant mental health challenges such as depression and anxiety, further compounded by stressors including injuries and career uncertainty.[3–5] In high-risk elite sports cultures, where traditional masculine norms are often idealised, physical health is prioritised over mental well-being, and mental illness is frequently stigmatised or concealed.[6] Consequently, societal and commercial pressures to embody masculine ideals discourage

vulnerability and help-seeking, exacerbating risks such as de-selection, social isolation and substance use, and potentially leading to severe mental health outcomes, including suicidal ideation.[7–11] While these pressures may contribute to maladaptive behaviours, male athletes may at times demonstrate psychological resilience.[12 13] This resilience enables many to navigate significant stressors, recover from setbacks and adopt resourceful strategies for maintaining positive mental health and self-care. However, the interplay between such resilience and the stigma surrounding mental health challenges underscores the need to address systemic barriers that discourage help-seeking, while simultaneously fostering environments that support athletes' psychological well-being.

Masculine values, shaped by gender norms, significantly influence men's health behaviours. Traditional masculine norms— emphasising toughness, self-reliance and stoicism—lead male athletes to prioritise physical strength and competitiveness while denying vulnerabilities.[7 14 15] The concept of health-related masculine values[16] offers a more nuanced understanding of men's mental health.[17 18] These values, identified through the Intentions Masculine Values Scale (IMVS)[19 20] are categorised into two broad domains: Open and Selfless, and Healthy and Autonomous. Health-related masculine values might foster supportive relationships and promote help-seeking behaviours by leveraging healthier aspects of masculinity.[21 22]

Historically, the emphasis on physical prowess and toughness in elite sport has led to an underappreciation and mental health needs.[1 23] Educational approaches aimed at improving mental health literacy have shown promise in promoting help-seeking behaviours.[24 25] However, reviews of previous studies indicate that these interventions primarily enhance knowledge, attitudes and behavioural intentions, but rarely translate into actual help-seeking behaviours.[26 27] While these education-based interventions have demonstrated success in enhancing knowledge and attitudes towards mental health, the translation of these improvements into help-seeking actions has not materialised.[28 29] According to various health behaviour theories, there is a significant gap between men's knowledge, attitudes and actual behaviours.[30 31] Our previous research also indicated that while greater mental health knowledge among male rugby players reduces public stigma, it does not necessarily lead to help-seeking for their own mental health concerns.[9]

An important organisational construct influencing athlete help-seeking and well-being is psychological safety.[32] A recent review emphasised the potential of psychological safety to minimise harm, support mental health needs and promote help-seeking.[10] When athletes perceive their environment as psychologically safe, they are more likely to disclose mental health challenges and seek help, improving mental health outcomes. Psychological safety in elite sports is conceptualised through three core components: a mentally healthy environment, mental health literacy and low mental health-related stigma.[32] The current study aims to examine how masculine health-related values are associated with help-seeking knowledge, attitudes and behaviours among Japanese male elite rugby players, considering the role of psychological safety in sports.

METHODS

Study design and setting

This web-based cross-sectional survey, adhering to the Strengthening the Reporting of Observational Studies in Epidemiology guideline[33] for observational research, was designed through the Japan Rugby Players' Association (JRPA) by team representatives during their regular meetings. Participants received detailed information about the research objectives, data management procedures and their right to voluntarily participate and/or withdraw without consequence. This written information was provided on the survey's introductory page, which also assured participants of their anonymity. A survey link was distributed to participants, allowing them to complete the questionnaire on their own devices, such as laptops or tablets. The survey, which took about 15 min to complete, allowed only one-time access for each participant using IP address filtering to preserve data integrity. Data collection occurred during the pre-season period, November to December 2022.

Participants

Survey information was sent to 541 male rugby players, all>18 years old, who were members of the JRPA and actively participated in the Japan Rugby League One. These players meet the International Olympic Committee's (IOC) definition of elite athletes. Demographic information was collected, including age, educational level, rugby experience, marital status, presence of children in the household, residential status and national team experience.

Measures

Help-seeking

We evaluated knowledge, attitudes and behaviours related to seeking help for mental health problems with questions used in previous studies[9 34] and the UK.[35] Included were three distinct components: (1) recognition of the need for professional support, (2) favourable attitudes towards seeking help and (3) actual help-seeking behaviour. First, participants were asked to consider the necessity of professional support when faced with a mental health problem, 'If you had a mental health problem, do you think it would be necessary to be supported by a professional?' Responses were recorded on a Likert scale ranging from 1 to 5, where higher values indicated a stronger agreement with needing professional help. Second, participants' intention to seek help was assessed with the question, 'If you felt that you had a mental health problem, how likely would you be to go to a mental health professional for help?' Responses

Table 1 Demographics of the study participants

Age (in years; mean±SD)	27.97±3.98
Rugby experience (in years; mean±SD)	16.97±5.00
Highest level of educational attainment % (n)	
High school	3.18 (7)
Four-year college or university	96.8 (213)
Marital status % (n)	
Married	46.82 (103)
Never married	52.27 (115)
Divorced or widowed	0.91 (2)
Child living in household % (n)	34.55 (76)
Residential status % (n)	
Living alone	22.27 (49)
Living with family and/or partner	50.00 (110)
Dormitory	27.73 (61)
Experience of national team % (n)	12.73 (28)
IMVS total (mean±SD)	20.95±5.21
IMVS Open and Selfless	9.43±3.06
IMVS Healthy and Autonomous	11.52±2.79
SPSI total (mean±SD)	24.73±5.86
SPSI_Mentally Healthy Environment	9.82±3.15
SPSI_Mental Health Literacy	9.04±3.02
SPSI_Low Self-Stigma	5.87±2.55

IMVS, Intentions Masculine Values Scale; SPSI, Sport Psychological Safety Inventory.

were also recorded on a Likert scale from 1 to 5, with higher scores reflecting a greater likelihood of pursuing professional assistance. Finally, for actual help-seeking behaviour, participants were asked, 'During the past three months, have you actually consulted or received support for your mental health symptoms such as depression and anxiety?' The response options were: (a) 'I did not have any mental health problems', (b) 'I consulted or received support' and (c) 'I had problems but did not consult or receive support'. Participants who selected option (a) were excluded from further analysis, and the remaining responses were categorised into either (b) or (c).

Intentions Masculine Values Scale

We used the 8-item version of the IMVS. The IMVS, originally validated by Oliffe *et al*[19] as a 12-item self-report inventory, measures health-related masculine values. The 8-item version was chosen based on its robust validation by Rose *et al*,[20] ensuring reliability and accuracy in capturing the intended constructs. The IMVS was translated into Japanese by the first author (YO), with a bilingual English speaker producing a back-translation. The back-translated version was confirmed and approved by the original developers of the IMVS (SMR and JLO), ensuring cultural relevance and accuracy. The scale assesses two domains of health-related masculine values: Open and Selfless (eg, 'A man should care about other people') and Healthy and Autonomous (eg, 'A man should make his own decisions'). Each domain is represented by four items in the 8-item version. The introductory text to the items reads as follows: 'Please think back over the last four weeks and respond to each item considering how often it applied to you'. Responses were recorded on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating greater endorsement of each value domain. The original validation study by Oliffe *et al*[19] reported satisfactory internal consistency for the Open and Selfless domain (Cronbach's alpha coefficients=0.88) and the Healthy and Autonomous domain (α=0.85). In the current sample, using the maximum likelihood method for confirmatory factor analysis, we identified the same two factors as the original version, namely Open and Selfless and Healthy and Autonomous, validating the construct validity of the Japanese version of the IMVS (IMVS-J). In EFA, considering the results of the scree plots, we employed a two-factor structure as optimal. When the two-factor structure was employed, the factor loading values for all the items were≥0.3. In the results of CFA, the two-factor model of IMVS-J showed the following model fit indices: CMIN/df=1.908, RMSEA=0.064, CFI=0.995, SRMR=0.018. These indices indicate a good fit, as CMIN/df is below 2, RMSEA is within the acceptable range, and both CFI and SRMR show an excellent fit. Furthermore, the internal consistency of the factors was confirmed with Cronbach's alpha coefficients of 0.84 for Healthy and Autonomous and 0.768 for Open and Selfless, indicating good reliability of the Japanese version.

Psychological safety in sports environments

To evaluate psychological safety within sports settings, this study used the Sport Psychological Safety Inventory (SPSI).[32] This instrument consists of an 11-item scale divided into three subscales: (1) Mentally Healthy Environment, (2) Mental Health Literacy and (3) Low Self-Stigma. Each item effectively represents its respective domain. Responses were recorded on a 5-point Likert scale, where 0 signifies 'strongly disagree' and 4 signifies 'strongly agree'. Items designed for reverse scoring were adjusted before analysis to ensure that higher scores consistently reflect greater perceived psychological safety. Consequently, total scores range from 0 to 44, with higher scores indicating a stronger perception of psychological safety. The SPSI was translated into Japanese, ensuring linguistic accuracy and cultural relevance. The initial translation was performed by the first author (YO), who is proficient in both the source and target languages. This version was then refined to enhance clarity and ease of understanding, especially for elite rugby players participating in the study. A bilingual expert subsequently conducted a back-translation of the revised Japanese version into English to verify its accuracy. The final Japanese version of the SPSI was validated by the

original developers of the inventory who confirmed its fidelity and approved its use in this study. In this sample, the Cronbach's alpha for the SPSI was 0.755.

Statistical analysis

Analyses were conducted using Stata V.16 (StataCorp, College Station, Texas, USA) to examine the relationships between help-seeking knowledge, attitude and actual help-seeking behaviour with three predictors: IMVS Open and Selfless, IMVS Healthy and Autonomous and the SPSI. The significance threshold for the p-value was adjusted to 0.0167 using Bonferroni correction to account for multiple comparisons. Multiple regression analyses were performed to investigate the predictors of help-seeking knowledge and help-seeking attitudes. Each model included help-seeking knowledge and help-seeking attitudes as dependent variables, respectively, with IMVS Open and Selfless, and Healthy and Autonomous, and SPSI as independent variables. For actual help-seeking behaviour, a multiple logistic regression analysis was used because the dependent variable was binary. This model also included IMVS Open and Selfless, IMVS Healthy and Autonomous and SPSI as independent variables.

Patient and public involvement

This research is a joint project with the JRPA. Participant representatives from the JRPA were consulted regarding the recruitment strategy and provided feedback on the study's structure and methodology. We also collaboratively developed hypotheses regarding the relationships among key variables.

Consent to participate

Informed consent was obtained from all participants after providing a comprehensive explanation of the study, including the settings and primary objectives.

RESULTS

Participant Characteristics

Table 1 shows the demographics of the study participants. Among the 541 players surveyed, 347 consented to participate, yielding a response rate of 64.1%. Of these, data from 220 Japanese players who provided complete responses to all items—including background information/demographics, help-seeking, IMVS, SPSI and mental health status used in our previous study—were included in the analysis. Respondent's average age was 27.97 years old, and they had an average of 16.97 years of rugby experience. University graduates made up 96.8% of the participants. Regarding marital status, 46.8% were married and 34.6% had children. About half lived with family or a partner, and 12.7% had national team experience. The mean scores were 20.95 for IMVS and 24.73 for SPSI.

Help-seeking responses

As presented in table 2, 9.5% of respondents believed that professional support for mental health problems was unnecessary, and 60% felt it should or must be received. Regarding help-seeking attitudes, 17.8% were unlikely to seek help and 47.7% were likely to or would always seek help. In terms of actual help-seeking behaviour over the

Table 2 Survey items and responses

Variable	Item	Response item n (%; 95% CI)
Help-seeking knowledge	If you had a mental health problem do you think it would be necessary to be supported by a professional?	
	Never receive support	4 (1.8; 0.7 to 4.8)
	Should not receive support	17 (7.7; 4.8 to 12.1)
	Neutral	67 (30.5; 24.7 to 36.9)
	Should receive support	106 (48.2; 41.6 to 54.8)
	Must receive support	26 (11.8; 8.2 to 16.8)
Help-seeking attitude	If you felt that you had a mental health problem how likely would you be to go to a mental health professional for help?	
	Never seek help	3 (1.4; 0.4 to 4.2)
	Unlikely to seek help	36 (16.4; 12.0 to 21.9)
	Neutral	76 (34.6; 28.5 to 41.1)
	Likely to seek help	92 (41.8; 35.4 to 48.5)
	Always seek help	13 (5.9; 3.5 to 9.9)
Actual help-seeking behaviour	During the past 3 months have you actually consulted or received support for your mental health symptoms such as depression and anxiety?	
	I did not have any mental health problems	130 (59.1; 52.4 to 65.4)
	I consulted or received support	42 (19.1; 14.4 to 24.9)
	I had problems but did not consult or receive support	48 (21.8; 16.8 to 27.8)

Table 3 Relationship between help-seeking knowledge and attitudes, IMVS and SPSI

	Help-seeking knowledge*		Help-seeking attitude†	
Independent variables	B (95% CI)	P value	B (95% CI)	P value
IMVS Open and Selfless	0.059 (0.015 to 0.103)	0.009	0.064 (0.018 to 0.109)	0.006
IMVS Healthy and Autonomous	0.047 (–0.001 to 0.096)	0.054	–0.014 (–0.064 to 0.036)	0.586
SPSI	0.005 (–0.014 to 0.023)	0.628	0.020 (0.001 to 0.040)	0.038

To account for multiple comparisons in the analysis, Bonferroni correction was applied. P value<0.0167 is considered statistically significant.
*$F(3, 216) = 8.46$, p<0.0001, adjusted R^2=0.093.
†$F(3, 216) = 4.51$, p=0.0043, adjusted R^2=0.046.
IMVS, Intentions Masculine Values Scale; SPSI, Sport Psychological Safety Inventory.

past 3 months, 59.1% reported not having any mental health problems, 19.1% had consulted or received support and 21.8% had problems but did not seek or receive support. Proportions for these variables, categorised by demographic characteristics, are provided in the online supplemental information.

Help-seeking knowledge and attitudes

As presented in table 3, Open and Selfless values significantly influenced help-seeking knowledge and attitudes, with β=0.059 (SE=0.022, p=0.009) for knowledge and β=0.064 (SE=0.023, p=0.006) for attitudes. This indicates that higher endorsement of these values is associated with an increased recognition of the need for professional help and a greater willingness to seek support. The adjusted R^2 for help-seeking knowledge was 0.093 and for help-seeking attitude was 0.046, indicating that while these models play a significant role, they still leave a large amount of variance unexplained. Healthy and Autonomous values did not significantly affect help-seeking knowledge (β=0.047, SE=0.025, p=0.054) or attitudes (β=–0.014, SE=0.025, p=0.59). Additionally, psychological safety in sports environments showed no significant impact on help-seeking attitudes after adjusting for multiple comparisons (β=0.020, p=0.04).

Actual help-seeking behaviour

Analysis of actual help-seeking behaviour revealed that higher Healthy and Autonomous values were significantly associated with less help-seeking (β=0.060, SE=0.023, p=0.01). This suggests that there may be a correlation between autonomy and reduced help-seeking for mental distress. Open and Selfless values and perceived psychological safety did not significantly influence actual help-seeking behaviour, with β=–0.006 (p=0.77) and β=0.003 (p=0.78), respectively (table 4).

DISCUSSION

The current findings indicate that higher endorsement of the Open and Selfless masculine values are associated with more positive mental health help-seeking knowledge and attitudes in Japanese male elite rugby players. Conversely, Healthy and Autonomous values were associated with not engaging in actual help-seeking behaviours. Moreover, perceived sport-related psychological safety was not significantly associated with help-seeking, suggesting that health-related masculine values appear to have a stronger relationship with help-seeking behaviour than sport-related psychological safety. Data also indicated that a sizeable minority (21%) of respondents who experienced mental health challenges did not seek, or receive, formal help, highlighting the need for tailor-made efforts to improve mental health help-seeking, and service responses for Japanese male elite rugby players.

Masculine values and help-seeking knowledge, attitudes and behaviour

The findings highlight the important role of masculine values in shaping mental health help-seeking knowledge, attitudes and behaviours. The results may advance understanding about factors inhibiting men's help-seeking

Table 4 Relationship between actual help-seeking behaviour, IMVS and SPSI

	Actual non-seeking behaviour (experienced mental health problems but did not seek consultation or support)	
Independent variables	B (95% CI)	P value
IMVS Open and Selfless	–0.030 (–0.216 to 0.157)	0.756
IMVS Healthy and Autonomous	0.266 (0.053 to 0.479)	0.014
SPSI	0.012 (–0.069 to 0.093)	0.774

To account for multiple comparisons in the analysis, Bonferroni correction was applied. P value<0.0167 is considered statistically significant.
IMVS, Intentions Masculine Values Scale; SPSI, Sport Psychological Safety Inventory.

when experiencing mental health concerns despite self-reporting adequate knowledge about mental health.[9] The Open and Selfless value was positively associated with recognising the need for professional help, and the willingness to seek it, aligning with previous research indicating that progressive masculine values promote healthier behaviours by fostering emotional openness and social connectedness.[19 36] Additionally, the healthy and autonomous masculine values were significantly associated with less actual help-seeking behaviour. This association implies that respondents who prioritised autonomy were less likely to seek professional mental health support, a finding that confirms previous work highlighting the detrimental effects of excessive self-reliance on health help-seeking.[37 38] Interestingly, the Open and Selfless value and perceived psychological safety did not significantly influence actual help-seeking behaviour. This underscores the critical gap between attitudes and behaviours, and the differences and discords between what men say and do. In essence, the respondents in this study may have recognised the need for help and expressed a willingness to seek it, but this did not necessarily translate to help-seeking actions. The current analysis included the degree of perceived psychological safety in sports as a related environmental factor. However, since the accounted variance was relatively small, other factors influencing mental health help-seeking behaviours are likely at play.

Cultural context in Japan and sport-specific dynamics in Rugby

This study focuses on Japanese male rugby players, a subpopulation uniquely situated at the intersection of cultural norms and sports. In Japan, societal expectations often emphasise discipline, perseverance, and emotional restraint[39 40]—values historically shaped by concepts like 'Bushido'.[41] These cultural norms are perpetuated through systems like school-based physical education and extracurricular sports clubs, which promote collective harmony and hierarchical relationships. Such environments contribute to stigmatising mental health issues, discouraging expressions of vulnerability and help-seeking behaviours.[42] Rugby, a sport strongly associated with toughness and endurance, further exemplifies these dynamics, reinforcing traditional masculine ideals that often hinder access to mental health support.[43] Studying this population offers critical insights into how cultural and sport-specific norms interact to influence mental health behaviours, highlighting the importance of culturally tailored interventions.

Implications for mental health interventions in elite male athletes

To bridge the gap between alignments to masculine values and men's mental health help-seeking, interventions should address cultural and structural barriers that prevent action on intentions. Specifically, making mental health support more easily accessible and confidential may reduce fears of stigma and judgement, encouraging athletes to seek help.[44 45] In addition, these interventions must be culturally transformative, acknowledging (and disrupting) deeply rooted traditional masculine norms that can excessively police and restrict behaviours. Sustained education and public mental health awareness campaigns can help shift gender and cultural norms over time, promoting more mentally healthy behaviours.[28 46 47] This content/messaging could involve framing help-seeking as strength-based, asset-building and performance-enhancing rather than a debility state and/or sign of weakness. Leveraging influential athletes and coaches to lobby and affirm men's help-seeking behaviours can wield positive normative effects.[6 48 49] Additionally, the commercial and highly competitive determinants of health play a role in influencing mental health behaviours as elite athletes navigate the transient and high-pressure nature of their careers, making psychological safety in sports environments, as self-protection, essential for optimising their mental health. Integrating digital mental health solutions could help address the gap between attitudes and help-seeking behaviours in elite athletes. Artificial intelligence-driven platforms may offer private, scalable support through screening, self-assessment and brief interventions aligning with Open and Selfless values while encouraging Healthy and Autonomous engagement.[50] These tools could also reduce stigma and privacy concerns, significant barriers in elite sports.[51] Future research might explore their potential in culturally tailored interventions for elite athletes, addressing gaps in traditional mental healthcare.

Limitations

Several limitations must be considered when interpreting the current results. First, the cross-sectional design limits the ability to infer causality, necessitating longitudinal studies to establish the relationships between masculine values, psychological safety and mental health help-seeking behaviours. Second, the reliance on self-reported data can introduce bias, as participants might under-report or over-report their attitudes and behaviours due to social desirability. Third, the sample consisted solely of male rugby players from the Japan Rugby League One, limiting the generalisability of the findings to other sports or cultural contexts. Broader professional sports have a diverse player, both domestic and international, with varying commercialisation and financial stakes. These factors create diverse hierarchical, high-risk environments where players might hesitate to seek mental health help due to the potential career or financial impacts. Additionally, this study focused solely on cisgender male athletes and did not account for potential variations in help-seeking behaviours and masculine values among individuals of different gender identities, including transgender or non-binary individuals. Future research should explore how gender identity and biological sex interact to influence mental health behaviours, as well

as the unique challenges faced by transgender athletes in elite sports environments. Acute stressors, such as career instability or high-performance pressures, may lead to adjustment disorders, which often resolve within 6 months if the stressor is removed.[52] This underscores the importance of early intervention strategies targeting these stressors to prevent escalation into more severe mental health issues.[53] Adopting a biopsychosocial model offers a comprehensive framework to address these challenges, integrating biological, psychological and social dimensions to inform tailored interventions.[3] Finally, this study did not account for other factors influencing help-seeking behaviours, including family experiences with mental health, availability of resources or national gender-related cultural factors. We recognise the necessity of conducting international comparative studies that comprehensively include these variables.

Conclusion

This study highlights significant gaps between masculine health-related values and actual help-seeking behaviour among Japanese elite rugby players. While being open and selfless was positively associated with help-seeking knowledge and attitudes, the value of being healthy and autonomous was negatively linked to actual help-seeking behaviour. This emphasises the need to address masculine values to improve follow-through actions. Promoting open and selfless masculine values while reframing healthy and autonomous values by fostering supportive environments can position mental health promotion as a performance-enhancing strategy for these athletes. Further research involving diverse sports and cultural contexts is essential to enhance the applicability of these findings and inform more inclusive and effective mental health strategies.

X Yasutaka Ojio @yasutaka_ojio

Acknowledgements We appreciate the support and cooperation of the Japan Rugby Players' Association secretariat staff and the players from each club in this study.

Contributors YO, RA, JLO and SMR contributed to the conceptualisation and design of the study. YO conducted the statistical analysis, while RA, JLO and SMR contributed to the interpretation of the results and the discussion. YO also managed the data. All authors collaborated on drafting the manuscript and contributed to the data assessment. YO is the guarantor and takes responsibility for the overall content. All authors have approved the final version of the manuscript.

Funding YO, as the principal researcher, declares that this study received funding from the TOYOTA Foundation (D22-PI-0002), KAKENHI Fostering Joint International Research (21KK0226). The authors declare no conflicts of interest in this paper.

Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not applicable.

Ethics approval This study adhered to the ethical principles outlined in the Declaration of Helsinki and received approval from the Research Ethics Committee at the National Center of Neurology and Psychiatry, Japan (approval number: B2022-003).

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement No data are available. Data cannot be publicly shared due to ethics approval restrictions. The informed consent obtained from study participants, which was approved by the Research Ethics Committee of the National Center of Neurology and Psychiatry, does not cover data set publication. The data are solely owned by the researchers. For data access requests, please contact the Research Ethics Committee of the National Center of Neurology and Psychiatry at rinri-jimu@ncnp.go.jp.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

ORCID iD

Yasutaka Ojio http://orcid.org/0000-0002-9660-206X

REFERENCES

1 Purcell R, Pilkington V, Carberry S, *et al*. An Evidence-Informed Framework to Promote Mental Wellbeing in Elite Sport. *Front Psychol* 2022;13:780359.
2 Rice SM, Purcell R, De Silva S, *et al*. The Mental Health of Elite Athletes: A Narrative Systematic Review. *Sports Med* 2016;46:1333–53.
3 Reardon CL, Hainline B, Aron CM, *et al*. Mental health in elite athletes: International Olympic Committee consensus statement (2019). *Br J Sports Med* 2019;53:667–99.
4 Rice SM, Gwyther K, Santesteban-Echarri O, *et al*. Determinants of anxiety in elite athletes: a systematic review and meta-analysis. *Br J Sports Med* 2019;53:722–30.
5 Ojio Y, Matsunaga A, Hatakeyama K, *et al*. Anxiety and Depression Symptoms and Suicidal Ideation in Japan Rugby Top League Players. *Int J Environ Res Public Health* 2021;18:1205.
6 Purcell R, Gwyther K, Rice SM. Mental Health In Elite Athletes: Increased Awareness Requires An Early Intervention Framework to Respond to Athlete Needs. *Sports Med Open* 2019;5:46.
7 Souter G, Lewis R, Serrant L. Men, Mental Health and Elite Sport: a Narrative Review. *Sports Med Open* 2018;4:57.
8 Gulliver A, Griffiths KM, Christensen H. Barriers and facilitators to mental health help-seeking for young elite athletes: a qualitative study. *BMC Psychiatry* 2012;12:157.
9 Ojio Y, Matsunaga A, Yamaguchi S, *et al*. Association of mental health help-seeking with mental health-related knowledge and stigma in Japan Rugby Top League players. *PLoS One* 2021;16:e0256125.
10 Walton CC, Purcell R, Pilkington V, *et al*. Psychological Safety for Mental Health in Elite Sport: A Theoretically Informed Model. *Sports Med* 2024;54:557–64.
11 Oguro S, Ojio Y, Matsunaga A, *et al*. Mental health help-seeking preferences and behaviour in elite male rugby players. *BMJ Open Sport Exerc Med* 2023;9:e001586.
12 Hosseini SA, Besharat MA. Relation of resilience whit sport achievement and mental health in a sample of athletes. *Procedia - Social and Behavioral Sciences* 2010;5:633–8.
13 Fletcher D, Sarkar M. A grounded theory of psychological resilience in Olympic champions. *Psychol Sport Exerc* 2012;13:669–78.
14 Seidler ZE, Dawes AJ, Rice SM, *et al*. The role of masculinity in men's help-seeking for depression: A systematic review. *Clin Psychol Rev* 2016;49:106–18.
15 Drummond MJN. Sport and Images of Masculinity: The Meaning of Relationships in the Life Course of "Elite" Male Athletes. *The Journal of Men's Studies* 2002;10:129–41.
16 Kiselica MS, Benton-Wright S, Englar-Carlson M. Accentuating Positive Masculinity: A New Foundation for the Psychology of Boys, Men, and Masculinity. 2016.
17 Sloan C, Gough B, Conner M. Healthy masculinities? How ostensibly healthy men talk about lifestyle, health and gender. *Psychol Health* 2010;25:783–803.

18 Macdonald J. A different framework for looking at men's health. *Int J Mens Health* 2016;15:283.
19 Oliffe JL, Rice S, Kelly MT, *et al*. A mixed-methods study of the health-related masculine values among young Canadian men. *Psychology of Men & Masculinities* 2019;20:310–23.
20 Rice SM, Kealy D, Ogrodniczuk JS, *et al*. Health-related masculine values, depression and suicide risk in men: associations among men with a history of childhood maltreatment. *J Ment Health* 2022;31:317–24.
21 Rice SM, Purcell R, McGorry PD. Adolescent and Young Adult Male Mental Health: Transforming System Failures Into Proactive Models of Engagement. *J Adolesc Health* 2018;62:S9–17.
22 Wilson M, Gwyther K, Swann R, *et al*. Operationalizing positive masculinity: a theoretical synthesis and school-based framework to engage boys and young men. *Health Promot Int* 2022;37:daab031.
23 Bauman NJ. The stigma of mental health in athletes: are mental toughness and mental health seen as contradictory in elite sport? *Br J Sports Med* 2016;50:135–6.
24 Kelly CM, Jorm AF, Wright A. Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. *Med J Aust* 2007;187:S26–30.
25 Arango C, Díaz-Caneja CM, McGorry PD, *et al*. Preventive strategies for mental health. *Lancet Psychiatry* 2018;5:591–604.
26 Breslin G, Shannon S, Haughey T, *et al*. A systematic review of interventions to increase awareness of mental health and well-being in athletes, coaches and officials. *Syst Rev* 2017;6:177.
27 Breslin G, Shannon S, Cummings M, *et al*. An updated systematic review of interventions to increase awareness of mental health and well-being in athletes, coaches, officials and parents. *Syst Rev* 2022;11:99.
28 Castaldelli-Maia JM, Gallinaro JG de ME, Falcão RS, *et al*. Mental health symptoms and disorders in elite athletes: a systematic review on cultural influencers and barriers to athletes seeking treatment. *Br J Sports Med* 2019;53:707–21.
29 Bu D, Chung PK, Zhang CQ, *et al*. Mental Health Literacy Intervention on Help-Seeking in Athletes: A Systematic Review. *Int J Environ Res Public Health* 2020;17:7263.
30 Tomczyk S, Schomerus G, Stolzenburg S, *et al*. Ready, Willing and Able? An Investigation of the Theory of Planned Behaviour in Help-Seeking for a Community Sample with Current Untreated Depressive Symptoms. *Prev Sci* 2020;21:749–60.
31 Dai M, Harrington NG. The need to examine behaviors within "actual" constraints: a systematic review of research using the integrative model of behavioral prediction. *J Hum Behav Soc Environ* 2023;33:126–42.
32 Rice S, Walton CC, Pilkington V, *et al*. Psychological safety in elite sport settings: a psychometric study of the Sport Psychological Safety Inventory. *BMJ Open Sport Exerc Med* 2022;8:e001251.
33 von Elm E, Altman DG, Egger M, *et al*. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. *J Clin Epidemiol* 2008;61:344–9.
34 Ojio Y, Yamaguchi S, Ohta K, *et al*. Effects of biomedical messages and expert-recommended messages on reducing mental health-related stigma: a randomised controlled trial. *Epidemiol Psychiatr Sci* 2019;29:e74.
35 Rüsch N, Evans-Lacko SE, Henderson C, *et al*. Knowledge and attitudes as predictors of intentions to seek help for and disclose a mental illness. *Psychiatr Serv* 2011;62:675–8.
36 Juillerat T, White K, Obst P. A theory-based examination of the predictors of mental health help-seeking in young men. *Aust Psychol* 2023;58:466–82.
37 Wilson CJ, Deane FP. Brief report: Need for autonomy and other perceived barriers relating to adolescents' intentions to seek professional mental health care. *J Adolesc* 2012;35:233–7.
38 Habeeb C, Warner S, Walsh D. Managing mental health: athlete help-seeking. *Sport Management Review* 2022;25:871–91.
39 Gelfand MJ, Raver JL, Nishii L, *et al*. Differences between tight and loose cultures: a 33-nation study. *Science* 2011;332:1100–4.
40 Uchida Y, Kitayama S. Happiness and unhappiness in east and west: themes and variations. *Emotion* 2009;9:441–56.
41 Nishigori H, Harrison R, Busari J, *et al*. Bushido and medical professionalism in Japan. *Acad Med* 2014;89:560–3.
42 Mojaverian T, Hashimoto T, Kim HS. Cultural differences in professional help seeking: a comparison of Japan and the u.s. *Front Psychol* 2012;3:615.
43 Coupland C. Organizing masculine bodies in rugby league football: groomed to fail. *Organization (Lond)* 2015;22:793–809.
44 Miller TW, Coates J, Plateau CR, *et al*. Exploring the barriers and facilitators to mental health help-seeking behaviours in British elite track and field athletes. *J Appl Sport Psychol* 2024;36:98–118.
45 Cosh SM, McNeil DG, Jeffreys A, *et al*. Athlete mental health help-seeking: A systematic review and meta-analysis of rates, barriers and facilitators. *Psychol Sport Exerc* 2024;71:102586.
46 Egan KP. Supporting Mental Health and Well-being Among Student-Athletes. *Clin Sports Med* 2019;38:537–44.
47 Rao AL, Hong E. Mental health in the athlete: modern perspectives and novel challenges for the sports medicine provider. In: Hong E, Rao AL, eds. *Overcoming the Stigma of Mental Health in Sport*. Springer International Publishing, 2020: 1–10.
48 Breslin G, Smith A, Donohue B, *et al*. International consensus statement on the psychosocial and policy-related approaches to mental health awareness programmes in sport. *BMJ Open Sport Exerc Med* 2019;5:e000585.
49 Bissett JE, Kroshus E, Hebard S. Determining the role of sport coaches in promoting athlete mental health: a narrative review and Delphi approach. *BMJ Open Sport Exerc Med* 2020;6:e000676.
50 Balcombe L, De Leo D. Digital Mental Health Challenges and the Horizon Ahead for Solutions. *JMIR Ment Health* 2021;8:e26811.
51 Balcombe L, De Leo D. Psychological Screening and Tracking of Athletes and Digital Mental Health Solutions in a Hybrid Model of Care: Mini Review. *JMIR Form Res* 2020;4:e22755.
52 Strain JJ, Friedman MJ. Considering adjustment disorders as stress response syndromes for DSM-5. *Depress Anxiety* 2011;28:818–23.
53 Kalra G, Christodoulou G, Jenkins R, *et al*. Mental health promotion: guidance and strategies. *Eur Psychiatry* 2012;27:81–6.