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Does Mental Health Medal? An Investigation of Canadian Olympic Sport Organizations

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Abstract

Background: Athletes have reported experiencing a variety of mental health symptoms or disorders. Sport organizations have a duty of care to safeguard and promote athlete mental health. **Purpose:** The purpose of this study was to document current approaches to safeguarding and promoting athlete mental health identified by Canadian Olympic Sport Organizations (COSO) websites. **Methods:** Using a descriptive, cross-sectional research design, a systematic search for content listed on COSO websites ($N = 49$) to identify the presence/absence of mental health resources was undertaken. **Results:** Across COSO websites, resources most commonly identified targeted Safe Sport ($n = 45$; 91.8%), identification of mental health organizations ($n = 44$; 89.8%), and psychological constructs linked to Long-Term Athlete Development ($n = 43$; 87.8%). Resources targeting access to mental health professionals and viable mental health action plans were less evident on COSO websites. Reference to mental health resources in under-represented cohorts of athletes was limited. **Conclusion:** COSO included a variety of mental health resources to safeguard and promote athlete mental health. Recommendations for future resource development are identified to further prioritize Canadian athlete mental health. **Health & Fitness Journal of Canada 2023;16(4):15-25.**

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Introduction

A growing body of evidence reveals that elite athletes are not impervious to mental health disorders or symptoms. For example, sport science researchers have reported that ~46% of elite Australian athletes experienced at least one mental health disorder during their career, while meta-analytic research indicated that 33.6% of elite athletes experienced symptoms of anxiety or depression (Gouttebauge et al., 2019; Gulliver et al., 2015). Presence of attention deficit hyperactivity disorder, bipolar disorder, eating disorders, and post-traumatic

stress disorder have also been reported by elite athletes (Aron et al., 2019; Currie et al., 2019a; Han et al., 2019; Wells et al., 2020). Relative to the general population, elite athletes report similar (e.g., depression, anxiety disorders), slightly higher (e.g., eating disorders), or slightly lower (e.g., suicide) rates of mental health disorders or symptoms (Gouttebauge et al., 2019; Rao, 2020; Schaal et al., 2011; Wells et al., 2020).

Researchers have identified factors that predispose athletes to greater risk of mental health disorders or symptoms within or beyond sport (e.g., Kuettel &

Larsen, 2020; Reardon et al., 2021). Most of these risk factors are linked to personal characteristics/experiences of the athlete (e.g., adverse life events, injury; Rice et al., 2019) and/or the dominant focus on performance inherent to sport (Papathomas, 2018; Willson et al., 2022). In terms of personal characteristics, biological sex (i.e., male/female) has received most attention with female athletes more likely to report symptoms of depression, anxiety, eating disordered behaviour and maltreatment when compared to male athletes (Kerr et al., 2019; Reardon et al., 2021). Beyond links to biological sex, investigations of mental health disorders and symptoms in athletes with consideration of race, religion, parasport, and persons identifying as lesbian, gay, bisexual, transgender, and queer (LGBTBQ+) are limited (Currie et al., 2021; Gorczynski et al., 2022). As mental health in athletes may be exacerbated by differences in abilities, values, cultural issues, and social backgrounds, calls for greater attention to under-represented cohorts seems justified (Castaldelli-Maia et al., 2019).

Using prevalence and risk factors as platforms, sport psychology organizations have advocated for developing and implementing resources to safeguard and promote athlete mental health (e.g., European Federation of Sport Psychology, International Society of Sport Psychology) (Moesch et al., 2018; Schnicke et al., 2022). The Canadian Public Health Association (2019) defined duty of care as an obligation to refrain from actions which are likely to cause others' harm. As applied to sport, Grey-Thompson (2017) commented that sporting organizations have a 'duty of care' to support athletes' mental health. Research targeting the promotion of mental health resources via

sport organizations remains limited with mixed support for organizational compliance with a duty of care. Research focused on sport in Australia reinforces this concern by revealing that 29% of sport organization websites mentioned athlete mental health (Liddle et al., 2017). Subsequent work found that 100% of Australian Football League academy websites promoted mental health, yet less than 25% of these websites contained links to resources designed to safeguard or promote mental health for athletes (Diamond et al., 2022).

The current study holds significance in the context of elite sport in Canada as the extent to which sport organizations have adopted a duty of care to safeguard and promote athlete mental health is unknown. Identifying the present scope of mental health resources offered by sport organizations within Canada is important given the presence of mental health disorders and symptoms among athletes. Therefore, the purpose of this study was to determine if websites representing Canadian Olympic Sport Organizations (COSO) included resources to safeguard and promote mental health for athletes.

Methods

Research Design and Data Collection

Using a descriptive, cross-sectional research design, a systematic search for mental health resources within COSO websites ($N = 49$; see Appendix A) from November (2021) to June (2022) was conducted. Data collection proceeded using an iterative approach guided by the work of Liddle et al. (2017). A keyword search was first conducted using 'mental*' followed by 'psych*' of COSO websites using the embedded search engine. Links identified per COSO website were subsequently examined for resources

targeting athlete mental health. Second, a manual search per COSO website was conducted using key links or subject headers to document additional mental health resources overlooked via the embedded search approach.

Instrumentation

Data Collection

A coding sheet was developed based on best-practice guidelines advanced in previous studies to systematically evaluate COSO websites for mental health resources targeting athletes (e.g., Currie et al., 2021; International Olympic Committee [IOC], 2021; Purcell et al., 2019). The coding sheet included five sections totalling 21 mental health resources that ranged across either the continuum of care or targeted under-represented cohorts (Currie et al., 2021; Purcell et al., 2019). The first section targeted resources ($n = 8$; Example resource: Identification of mental health organizations) linked to Prevention. Resources included within the first section focused on raising awareness of athlete mental health and/or establishing a safe psychological environment. The second section, Recognition/Early Detection, contained five resources (Example resource: Coach education) focused on the involvement of key stakeholders in sport to support athlete mental health. The third section encompassed resources ($n = 2$; Example resource: Identification of mental health care specialist) aligned with the strategy of Early Intervention. Resources for Early Intervention emphasized the role of qualified mental health professionals and/or mental performance consultants in supporting athlete mental health. The fourth section contained three resources (Example resource: Mental Health Strategy) for the strategy linked to

Specialist Mental Health Care. Resources identified within the fourth section focused on the need to support athletes exhibiting complex mental health disorders or symptoms. The final section highlighted resources ($n = 3$; Example resource: ParaSport) to address athlete mental health in under-represented cohorts. Each mental health resource was coded for their presence or absence per COSO website using a dichotomous format (i.e., Yes/No). The identification of other mental health resources (e.g., webinars) evident per COSO website not explicated within the coding sheet were classified as “Other”.

An iterative process was used to develop coding guidelines. Two coders, one with experience in conducting and publishing systematic reviews, independently coded all COSO websites evaluated in this study. Each coder underwent formal training followed by a familiarization period that served to refine the coding guidelines as needed. A sample of COSO websites ($n = 3$) were coded to familiarize each researcher with the study procedures. Initial agreement between coders averaged $> 90\%$ across mental health resources. Modifications to the coding guidelines were discussed, then implemented, to provide additional clarity to (a) the mental health resource being coded, or (b) the decision-making processes for data extraction. Comparisons between coders were conducted on a week-to-week basis using ~ 5 COSO websites per assessment. Discrepancies between coders were discussed before a final decision was made.

Data Analyses

Inter-rater reliability between coders was estimated with SPSS version 28 using

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Cohen's kappa (κ ; Crocker & Algina, 1986). Frequencies and percentages were used to report the presence of mental health resources promoted by COSO websites.

Results

Details of inter-rater reliability ($M\kappa = .93$) and the presence of mental health resources contained within COSO websites are reported in Table 1. Under Prevention, the majority of COSO websites promoted mental health resources with contact information for mental health

organizations and a dedicated Safe Sport Officer and Long-Term Athlete Development plans that include psychological skills training and/or psychological constructs. Identification of a Game Plan Officer to support wellness and the clear identification of mental health as a component of the COSO Mission, Values and/or Strategic Plan were less frequent mental health resources evident under Prevention. For Recognition/Early Detection, resources linked to athlete maltreatment through

Table 1: Mental Health Resources Identified in COSO Websites.

	<i>n</i>	Yes (%)	κ
Prevention			
Athlete Blogs/Stories	9	18.4	.98
Identification of Game Plan (i.e., Canada's Total Athlete Wellness Program)	15	30.6	1.00
Identification of Game Plan Officer	4	8.2	1.00
Identification of Safe Sport Officer	43	87.8	1.00
Identification of Sport/Non-sport Specific Mental Health Organizations	44	89.8	1.00
Long-Term Athlete Development	43	87.8	1.00
Mental health as part of COSO Mission, Values and/or Strategic Plan	5	10.2	.92
Promoting the Mental Health Benefits of Sport	14	28.6	.94
Other (e.g., workshops, webinars, etc.)	10	20.4	
Recognition/Early Detection			
Coach Education (Mental Health)	14	28.6	.95
Coach Education (Mental Skills/Fitness)	37	75.5	.95
Coach Education (Safe Sport)	38	77.6	1.00
Positive Body Image Guidelines	4	8.2	1.00
Safe Sport	45	91.8	1.00
Early Intervention			
Identification of Mental Performance Consultant	18	36.7	.88
Identification of Mental Health Care Specialist (i.e., clinical/counseling psychologist)	6	12.2	.85
Specialist Mental Health Care			
Competition Safeguarding Strategy	7	14.3	.72
Mental Health Emergency Action Plan	10	20.4	.78
Mental Health Strategy	4	8.2	1.00
Under-Represented Cohorts			
Equity/Diversity/Inclusivity/Indigeneity	7	14.3	.88
ParaSport	9	18.4	.88
Female	11	22.4	.90
Other (e.g., Workshops/coaching women in sport)	3	6.1	

Note: κ = Cohen's kappa (Crocker & Algina, 1986).

Safe Sport resources were evident in most COSO websites. Coach education linked to Safe Sport was also a resource identified among the majority of COSO websites. With regards to Early Intervention, mental performance consultants were identified within approximately one third of COSO websites with less support for qualified/registered mental health professionals evident. Mental Health Emergency Action Plans were evident in a fifth of COSO websites under Specialist Mental Health Care. Finally, less than one quarter of COSO websites promoted information linked to mental health for under-represented cohorts with resources targeting female athletes most frequent.

Discussion

Mental health is foundational to a culture of sporting excellence (Durand-Bush & Van Slingerland, 2021; Henriksen et al., 2020). Canadian athletes have further endorsed the benefits of resources to safeguard and promote their mental health (Poucher et al., 2023). Yet it remains unclear the extent to which sport organizations act with a duty of care to support mental health of their athletes (Grey-Thompson, 2017). Centered on Canadian Olympic sport, the purpose of this study was to identify resources designed to safeguard and promote athlete mental health advanced by COSO. Based on a systematic search of COSO websites, the major findings of this study were: (1) Evidence for mental health resources that spanned a continuum of care (Purcell et al., 2019) were identified; (2) Resources linked to mental health prevention were most prevalent and; (3) Resources devoted to supporting mental health in under-represented athlete cohorts appeared scarce.

Study findings partially support commitment by COSO towards a duty of care to safeguard and promote mental health to athletes with two points of interest worth highlighting. First, mental health resources within COSO websites seem more abundant relative to previous studies focused on Australian sport (Diamond et al., 2022; Liddle et al., 2017). Second, it is apparent that mental health resources most frequently identified across COSO websites were linked to federal government policy and/or COSO funding (i.e., Safe Sport and Long-Term Athlete Development; Government of Canada, 2022a; Government of Canada, 2022b). Although speculative, these findings may suggest a growing investment towards safeguarding and promoting athlete mental health within Canadian Olympic sport.

Results of this study also highlight areas that warrant further consideration to provide access to mental health resources for athletes. First, education modules found on COSO websites reinforce that coaches are deemed key stakeholders in safeguarding and promoting mental health of athletes within the Canadian sport system. This is hardly surprising given that coaches have ongoing and direct contact with athletes that can impact mental health (Purcell et al., 2019). Yet concerns have been raised that sport coaches feel insufficiently educated to recognize mental health symptoms and may unintentionally impact athlete mental health in negative ways (Ferguson et al., 2019; Mazzer & Rickwood, 2015). The importance of coaches has been reinforced with the launch of the Sport and Mental Health Resource Hub developed by the Coaching Association of Canada in 2023. The exclusive identification of coaches as key stakeholders safeguarding and

promoting athlete mental health ignores others who play a central role in athlete development (e.g., strength and conditioning coaches). Therefore, COSO may want to extend mental health resource development to other key stakeholders overseeing athlete development.

A second area of concern emerging from this study is linked to the role of COSO promoting access to qualified mental health professionals 'if' and 'when' needed by athletes. Closer inspection of the data presented in Table 1 makes it clear that few COSO websites identified dedicated mental performance consultants and/or mental health specialists. Experts have championed the importance of access to qualified professionals as mental health resources to support athletes (e.g., Henriksen et al., 2020; Moesch et al., 2018; Van Slingerland et al., 2019). Purcell et al. (2019) further questioned the utility of mental health resources targeting prevention in lieu of access to qualified mental health professionals. Based on these findings, the collective commitment of COSO to safeguard and promote athlete mental health that includes a network of mental health professionals may be questioned (Reardon et al., 2021; Van Slingerland et al., 2019).

A third area of concern focuses on notable omissions contained within COSO websites. The overwhelming omission of mental health as a foundational element to COSO mission/values/strategic plans may be interpreted as diminishing the importance of athlete mental health when contrasted against physical health, sport performance and/or growth of the sport. Another notable omission across most COSO websites was the absence of a dedicated mental health strategy that

includes emergency and competition action plans. A mental health strategy plays a pivotal role in turning an organizations' commitments into tangible actions to safeguard and promote the mental health of athletes (IOC, 2021). It is reinforced that existing resources (e.g., Safe Sport) should not be adopted in lieu of a dedicated mental health strategy as risk factors for lowered mental health extend beyond athlete maltreatment (Kuettel & Larsen, 2020; Reardon et al., 2021). Sporting organizations may want to consult existing resources should a targeted initiative to develop a comprehensive mental health strategy be undertaken (e.g., Currie et al., 2019b; Durand-Bush & Van Slingerland, 2021; Neal et al., 2015).

A final area of concern noted in this study is focused on the limited identification of mental health resources for under-represented athlete cohorts evident in COSO websites. Researchers have noted a higher prevalence of negative mental health in athletes who identify as female, Black, Indigenous, People of Color, and LGBTQ+ (Gouttebauge et al., 2019; Kaishian & Kaishian, 2021; Oftadeh-Moghadam & Gorczynski, 2022; Schaal et al., 2011). Resource development, which includes input from under-represented athletes, may be useful to COSO seeking to safeguard and promote mental health in athletes who may be at greater risk based on their ability, values, culture and/or social background.

This study is not without limitations that warrant consideration relative to interpreting the findings. First, mental health resources identified via the systematic search were based on the date the information was coded (i.e., November [2021] to June [2022]). Given the dynamic nature of information published via the

World Wide Web, mental health resources endorsed by COSO websites may have been updated since data collection. Second, mental health resources identified were restricted to those publicly disclosed by COSO websites. They may not fully encompass all resources adopted by individual COSO to safeguard and promote athlete mental health. Finally, these data are presented in aggregate format and thereby represent overall mental health resources published via COSO websites. It was not the intent of this study to identify specific COSO offering more versus fewer resources to support athlete mental health via their websites.

Conclusions

In sum, recognition of athlete mental health was embedded within COSO websites given the identification of a number of different resources that span Prevention through Specialist Mental Health Care. Building on this foundation, gaps in resources to safeguard and promote athlete mental health were identified. Select recommendations were advanced to address noted gaps and further reinforce COSO responsibility to safeguard and promote athlete mental health and a culture of sporting excellence.

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Authors' Qualifications

The authors' qualifications are as follows: Isabella L. Tremonte BSc; Melanie R. Burgess MSc; Emily A. Bonisteel BSc; Philip M. Wilson BSc, MSc, PhD; Diane E. Mack PhD.

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Appendix A: COSO Websites

<https://alpinecanada.org/>
<https://archerycanada.ca>
<https://artisticswimming.ca>
<https://athletics.ca>
<https://www.badminton.ca>
<https://baseball.ca>
<https://www.basketball.ca>
<https://biathloncanada.ca>
<https://www.bobsleighcanadaskelton.ca>
<https://boxingcanada.org>
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