

### Sport for mental health

## A global strengths-based change system

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# Sport for mental health A global strengths-based change system

WISH 2022 Forum on Mental Health and Sports

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### **FOREWORD**

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Mental health has become a shadow pandemic of COVID-19, omnipresent yet neglected. In the Top 10 causes of global disease burden since 1990, mental health disorders have an impact on all ages in all societies but disproportionately affect those already made vulnerable by the climate crisis, food and energy insecurity, conflict, pollution and poverty. Annually more than 750,000 people, many of them young, take their lives.

Mental health is the foundation of a flourishing world. A credible roadmap for global and local solutions requires four elements: (i) reach, including to marginalized communities; (ii) potential for growth and scaled-up solutions; (iii) evidence of effectiveness; and (iv) potency in addressing social and ecological determinants driving the mental health tsunami. Sport is arguably the only platform that can address all four. Sport reaches every country. Its unparalleled toolbox can address the needs of diverse communities and cultures, providing effective, locally and globally co-designed, community-based, mental health solutions. Sport can tackle the mental health footprint of the powerful syndemics that are continuing to unfold.



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### **EXECUTIVE SUMMARY**

"Sport has the power to change the world. It has the power to inspire. It has the power to unite people in a way that little else does. It speaks to youth in a language they understand. Sport can create hope where once there was only despair. It is more powerful than government in breaking down racial barriers. It laughs in the face of all kinds of discrimination."

#### **Nelson Mandela**

25 May 2000, inaugural Laureus World Sports Awards

To turn the tide of the global mental health pandemic, the World Health Organization (WHO) *Comprehensive Mental Health Action Plan (2013–2030)* highlights the importance of accessible and context-relevant mental health responses, particularly in low- and middle-income countries.<sup>1</sup>

This report identifies sport as a unique exemplar of a globally powerful, yet locally adaptive, community-embedded implementation model that can improve mental health. Sport has unmatched global reach and the power to unify people and cultures through a universal language. Sport can support health systems under pressure, while strengthening communities.

Section 1 presents the evidence of how sport has a positive impact on mental health. Section 2 describes how the scale of the global mental health pandemic can be best addressed by catalyzing sport as a potent mechanism for tackling social and ecological determinants of mental health. Section 3 focuses on elite athletes and how to create mental health ecosystems that are fit for purpose when facing challenging conditions.

We set out a vision for sporting organizations and communities, sporting ambassadors (whether elite athletes or local club representatives) and sporting events to turn the tide of the mental health crisis through leadership and mass mobilization. This report is solution-focused, prioritizing evidence-based recommendations for innovation and ethical best practice. The report has been actively shaped and influenced by an advisory panel of elite athletes, leaders in sporting organizations, practitioners and researchers.

The report concludes with recommendations for prioritizing sport as a mental health response with the scale to help achieve WHO's Triple Billions goals for health and wellbeing, as well as helping to deliver the United Nations (UN) Sustainable Development 2030 Agenda. We hope that policymakers, practitioners, athletes and researchers find this guidance helpful in creating virtuous circles of action to tackle mental health within sports organizations, and through sporting platforms.

## SECTION 1. SPORT FOR MENTAL HEALTH - ACTIVATING THE STRENGTH WITHIN

Corinne Reid, Liz Grant, Jennifer Morris, Camilla Brockett, Grant Jarvie, Mohammed Almuhannadi, Davies Banda, Andrew Murray, Kaitlin Simpson

### "We just have to change the perception that problems with mental health are something to hide."

#### **Michael Phelps**

Olympic swimmer in five Olympic Games, winner of 23 gold medals, with 1.9 million Twitter followers

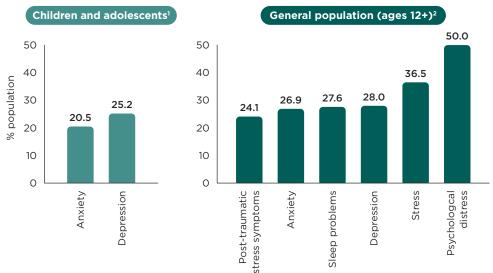
The Weight of Gold, HBO Documentary

Mental health disorders have been a Top 10 cause of global disease burden for more than 30 years.<sup>2</sup> Despite economic modeling showing a four-fold return on investment,<sup>3,4</sup> still less than 2 percent of the current global health budget is devoted to mental health.<sup>5</sup> COVID-19 has magnified this 'shadow pandemic' with a 25 percent increase in prevalence.<sup>6</sup> Disease modeling puts this figure at an *additional* 53.2 million cases of major depressive disorders, and 76.2 million of anxiety disorders globally.<sup>7</sup>

Figure 1. Global prevalence estimates of mental ill health, 2020

Children and adolescents

General population (ages 12+)²



1: 29 studies, 80,879 participants; 2: 32 countries; 398,771 participants. Sources: Racine (2021)<sup>8</sup>; Nochaiwong (2021).<sup>9</sup>

The economic projection of a rise to \$6 trillion globally by 2030<sup>10,11</sup> makes the cost of mental ill health greater than that of cancer, diabetes and respiratory conditions combined. Mental health is central to wellbeing yet

we are falling short of the WHO Triple Billions target for health: one billion more people enjoying better health and wellbeing by 2025. 12,13

While psychological and pharmacological interventions are effective where available, they are not of commensurate scale, and are counteracted by cost, patient attrition, drug resistance and a persistent increase in prevalence of mental ill health at the population level. <sup>14,15</sup> Global disparity in healthcare, as well as stigma and other known barriers, have been powerful deterrents for governments, communities and families to prioritize formal mental health services. <sup>16</sup> The majority of people who die by suicide are not known to mental health services. <sup>17</sup>

The Lancet Commission on Global Mental Health and Sustainable Development<sup>18</sup> highlighted that it takes a global movement to respond to a global crisis that is causing such hidden suffering, affecting lives, livelihoods and family relationships, reducing social capabilities and causing huge employability losses. The movement must have the ability to equalize, normalize, nurture and support mental health in all communities.

### How is sport relevant?

The ubiquity of mental ill health around the world is matched only by the ubiquity of global sport engagement. In 2020, 3.05 billion viewers watched the televised Tokyo Olympic Games;<sup>19</sup> there was a 10 million increase in social media followers at the Beijing Winter Olympics;<sup>20</sup> over half the global population (3.57 billion) tuned in to watch the football World Cup in Russia 2018 with low- and middle-income countries strongly represented.<sup>21</sup> The Twitter status of high-profile athletes frequently tops 1 million followers, while high-profile clubs attract tens of millions of followers. Sport has the potential to be a powerful platform for addressing mental health. When Japanese professional tennis player Naomi Osaka tweeted about her mental health struggles in 2020, the post received more than 90,000 'likes'.<sup>22</sup>

### Sport as a mental health catalyst

The United Nations Inter-Agency Group on Sport for Development and Peace defines sport as: "All forms of physical activity that contribute to physical fitness, mental well being and social interaction, such as play, recreation, organised or competitive sport and indigenous sport and games."<sup>23</sup>

Participation in sport directly improves mental health, reducing the impact of depression and anxiety through physical fitness, social engagement and skill building. In addition to reducing clinical symptoms, social isolation and suicidality, sport builds psychological resilience through the development of self-esteem, self-efficacy, emotion self-regulation, social skills, confidence and life satisfaction,<sup>24</sup> affecting both behavior and neurobiology.<sup>25</sup> Sport sits at the heart of a virtuous circle of physical fitness and social connection, influencing mental fitness, which in turn affects community wellbeing and resilience, and further encourages engagement in sport and physical activity (see Figure 2).

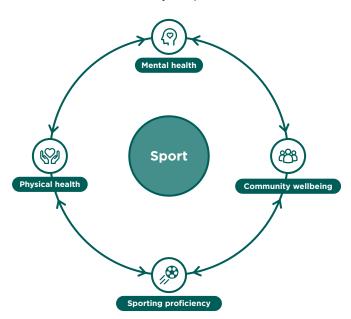


Figure 2. The virtuous circle of sport, health and mental health

Sport is an evidence-based means of building capital for youth mental health. The World Health Organization *World Mental Health Report* (2022)<sup>26</sup> spotlights a randomized control trial of after-school sports with more than 600 students in Hong Kong as an exemplar for improving mental wellbeing, self-efficacy and resilience in addition to physical fitness.<sup>27</sup>

As a powerful, destigmatizing modality, sport – intentionally, incidentally and pre-emptively – can address the mental health needs of elite and non-elite athletes.<sup>28-30</sup> Sport is a strengths-based solution<sup>31</sup> (see Figure 3), empowering through skill development and through self-management of mental health challenges<sup>32</sup> while having the capability of being culturally and contextually responsive.

Emphasize the positive!

Strengths-based health and wellness

Build on your family and community's strengths!

Build on your family and community's strengths!

Figure 3. Strengths-based health and wellbeing

Source: Warburton and Bredin (2019).33

While there is still work to be done in creating a culture, policies, evidence base and practices that address mental health for all,<sup>34,35</sup> sport provides a uniquely rich toolbox of resources and opportunities from which to craft positive pathways to mental health and wellbeing – as summarized in Figure 4.

Figure 4. Impact of sport on mental health: A global solution for a global challenge

Beneficiary	Mental health and wellbeing impacts of sport
Micro-level (individuals)	<ul> <li>Reduction in clinical symptoms</li> <li>Enhanced wellbeing</li> <li>Increased self-esteem and self-efficacy</li> <li>Physical fitness and health improvement</li> <li>Enhanced life satisfaction</li> <li>Reduced suicidality</li> </ul>
Meso-level (community)	<ul> <li>Reduced social isolation</li> <li>Stronger relational connections</li> <li>Enhanced sense of support in personal development</li> <li>Enhanced community wellbeing</li> </ul>
Macro-level (population)	<ul> <li>Low cost, accessible solution to global mental health pandemic</li> <li>Reduction in ecological and social determinants of mental health</li> <li>Building global relationships</li> <li>Reduction in burden of disease for mental health</li> <li>Corollary: reduction in burden of disease for health</li> </ul>

### Mental fitness through physical fitness: A low-cost, high-impact solution

Physical activity is the pre-eminent modifiable lifestyle factor for both physical health and mental health improvement. In addition to well established physical health benefits, exercise is an effective treatment for the most common mental health disorders. As an adjunct or stand-alone first-line treatment for depression, exercise produces comparable or advantageous effects when compared to pharmacotherapy or psychological interventions such as cognitive behavioral therapy, without the side effects often experienced with pharmacological interventions. Physical activity is the lowest cost and most accessible intervention with the most powerful impact on mental health.

High-intensity interval training,<sup>42</sup> cardiovascular exercise and strength training<sup>43</sup> improve mental health. Nature-based physical activity and green spaces when exercising confer additional mental health effects.<sup>44</sup>

Physical activity and exercise benefit all age groups – from children<sup>45</sup> to adolescents, <sup>46,47</sup> adults <sup>48</sup> and older adults, <sup>49</sup> positively impacting those with: comorbid physical health conditions; exposure to trauma; exposure to adverse childhood events; women with postnatal depression: <sup>50</sup> people living with disabilities; <sup>51</sup> healthcare workers during the pandemic; <sup>52</sup> people experiencing homelessness; <sup>53</sup> people with substance addictions; <sup>54,55</sup> children with adverse experiences; <sup>56</sup> youth in prison populations; <sup>57</sup> and adults living with a range of mental health conditions, <sup>58</sup> including severe mental illness, <sup>59</sup> among others.

The consistency of strong outcomes from exercise and physical activity options that target diverse groups is particularly promising. This is especially encouraging in the context of global interventions at scale, and the ability to adopt a personalized approach that suits individual and community needs and preferences. Exercise can be a *no cost* intervention, suitable for even the most resource-constrained setting. The strength of evidence for exercise and physical activity, while not unequivocal, 60-62 supports its increasing status as a public mental health prevention and promotion priority. 63

### Social connection through sport: Person-to-person prevention and mental health promotion

Sport adds to physical activity and exercise by encouraging a sense of social connection and purpose that is essential for wellbeing. Team sports<sup>64,65</sup> and group exercise<sup>66</sup> confer even greater advantages for mental health than individual sports.

Mental health benefits are experienced in sports as diverse as martial arts,<sup>67</sup> cricket,<sup>68</sup> golf<sup>69-71</sup> and rugby.<sup>72</sup> Sport has benefits for diverse populations including war veterans,<sup>73</sup> people with intellectual disabilities,<sup>74</sup> marginalized cultural groups,<sup>75</sup> and displaced persons.<sup>76,77</sup> The potential for sport to have an impact in low-resource settings is significant.<sup>78,79</sup>

Figure 5. Sport connecting communities around the world

Event	Host		No. of athletes	No. of sports	No. of countries
Summer Olympic Games		Tokyo 2020/2021	11,420	33	206
Winter Olympic Games	*:	Beijing 2022	2,834	7	91
Summer Paralympic Games		Tokyo 2020/2021	4,403	22	162
Winter Paralympic Games	*:	Beijing 2022	564	6	46
Invictus Games		The Hague 2022	500	10	20
Special Olympics - Summer		Abu Dhabi, UAE 2019	7,500	24	190
Special Olympics - Winter		Austria 2017	2,700	8	105
Refugee Olympic Team		Tokyo 2020/2021	29	12	11
Refugee Paralympic Team		Tokyo 2020/2021	6	4	4
Homeless Football World Cup - Women's & Men's		Cardiff 2019	600+	1	66

Sources: ONOC (2021);<sup>80</sup> Bonesteel (2022);<sup>81</sup> Homeless World Cup (2022);<sup>82</sup> International Paralympic Committee (2020, 2021, 2022a, b);<sup>83-86</sup> Invictus Games (2020);<sup>87</sup> International Olympic Committee (2020a, 2020b, 2022);<sup>88-90</sup> Special Olympics (2017, 2019);<sup>91,92</sup> Special Olympics World Games (2022).<sup>93</sup>

Sport is all about connection. Mental health benefits extend to sports participants, but also to spectators, <sup>94</sup> fans, <sup>95</sup> volunteers <sup>96</sup> and the broader community. <sup>97</sup> Sporting preferences vary by country <sup>98</sup> and by age group, <sup>99</sup> highlighting a rich diversity of opportunity for engagement. Sport is a mental health solution with truly universal potential for high-impact outcomes for mental health and for developing strong communities, with an unparalleled number of sporting 'treatment' options on offer (see Figure 5).

### Athletes speaking up: Sport advocacy and activism for mental health

Sport's unique reach provides a powerful platform for mental health advocacy. High-profile athletes, such as Olympians Naomi Osaka,<sup>100</sup> Simone Biles<sup>101,102</sup> and Michael Phelps<sup>103,104</sup> sharing their mental health challenges, and advocating for better mental health as experts-by-experience, have changed the perception of mental health.

Athlete-led initiatives championing mental health (See Case study 1) and mental health activism, advocacy and investment by high-profile sport stars and sporting organizations, destignatize mental health issues and bring the value of mental healthcare into the mainstream.<sup>105,106</sup>

### Inclusivity, disability and disadvantage

Sport can foster mental health among groups who have been socially, culturally and physically marginalized. Paralympians and para-sports athletes have become champions for mental health, at grassroots and elite level, in and beyond the para-sporting fraternity (see Case study 2).

The Invictus Games<sup>107</sup> were designed to aid recovery in sick and wounded returned armed forces personnel, and have affected mental health and wellbeing through engagement with sport. The international Homeless World Cup<sup>108</sup> tournament draws together a network of street football partners from across more than 70 countries to compete together each year. The Special Olympics is dedicated to improving the health and wellbeing of people with intellectual disabilities through participation in sports.<sup>109</sup> The Olympic and Paralympic refugee teams launched at the Rio Olympics in 2016 inspire many parallel grassroots programs to support mental health in marginalized groups and serve as a catalyst to public health initiatives (discussed in Section 2).<sup>110</sup> Research is urgently needed to guide best practice and develop national policies addressing the mental health needs of marginalized groups through sport.



### CASE STUDY 1. ELITE ATHLETES: EXPERTS-BY-EXPERIENCE ADVOCATING FOR MENTAL HEALTH

### Ride for Youth



Photo with permission: © Jennifer Morris OAM

In March 2022, more than 200 cyclists set off to cover 700 kilometers raising money along the way for Youth Focus, a youth mental health support service in rural and regional Australia. Among them was Jennifer Morris OAM, dual gold medal winning Olympic Hockey Player. The ride took 4.5 days and six months of training.

Most elite athletes understand what it is to struggle with life's pressures. Athletes are using their powerful platform to break the stigma of mental illness and to promote mental health as a priority. While cycling through rural towns, the riders visited high schools to engage with students on issues of youth suicide,

depression, anxiety and self-harm, sharing stories of struggle and success to provide mutual benefit and new connections.

Youth Focus has raised AU\$30 million over 20 years, providing services for more 30,000 vulnerable young people. School visits en route have engaged another 35,000, raising awareness and providing education in regional areas.



### CASE STUDY 2. ELITE ATHLETES: EXPERTS-BY-EXPERIENCE ADVOCATING FOR MENTAL HEALTH

### The power of sport: "Football saved my life."



Photo with permission: © Ashley Pringle and Scottish Football Association

Increasingly, athletes are sharing their own experiences to encourage others. Rebecca Sellar, Scottish national para footballer, is a vocal advocate for the power of sport in overcoming mental health challenges.

"I still get anxiety about the future, but I know now I can do this. Things are really tough but I will definitely be able to do it and that's the experience I have had from playing football. Football saved my life because if I didn't have football I would be a shell of myself."

To support others, Rebecca is also part of the Hope United campaign which tackles online abuse, sharing her own experiences of being bullied and being the target of online 'trolling'. The high-impact campaign draws together a high-profile team of footballers and was launched in the build-up to the UEFA Europa League Final 2022, with an international viewing audience of more than 20 million fans.

### Bringing sport to the forefront of the conversation about mental health

While the engagement, entertainment and physical health value of sport is undisputed, the benefit of sport for mental health is generally a secondary or incidental consideration. At a time when global mental health needs arguably match global physical health needs, it is important to consider sport through the lens of mental health. Just as sport enables us to find our physical strength, it also helps us find our mental strength.

Partnerships between researchers, practitioners, communities, sporting organizations, policymakers, governments and athletes will be key to putting sport at the foreground of conversations about mental health. These partnerships can help by creating an evidence base to catalyze change and address significant personal, social and economic burdens (see Figure 6).<sup>112</sup> Sport is an untapped, strengths-based<sup>113</sup> change system for actively ensuring that one billion more people enjoy better health and wellbeing by 2025.<sup>114,115</sup>

Figure 6. Critical partnerships for activating mental health through sport



## SECTION 2. TOWARDS 2030 - SPORT'S CONTRIBUTION TO IMPROVING GLOBAL MENTAL HEALTH

Mohammed Almuhannadi, Davies Banda, Grant Jarvie, Andrew Murray, Kaitlin Simpson, Corinne Reid, Liz Grant, Jennifer Morris and Camilla Brockett

"Sport is also an important enabler of sustainable development. We recognise the growing contribution of sport to the realisation of development and peace in its promotion of tolerance and respect, and the contributions it makes to the empowerment of women and of young people, individuals and communities as well as to health, education and social inclusion objectives."

#### Sustainable Development Goals 2030 agenda

A world where physical, mental and social wellbeing are assured is only possible if the 17 United Nations Sustainable Development Goals (SDGs) are met. These goals provide the ultimate roadmap for addressing social and ecological determinants of *global* mental health.<sup>116,117</sup> The Lancet Commission on Global Mental Health emphasized the importance of reconceptualizing mental health beyond the traditional individual diagnosis and treatment of mental disorders – proposing large-scale influence, by achieving the SDGs, to enable an environment that allows everyone to flourish and promotes mental health for all.<sup>118</sup>

COVID-19 has severely challenged the 2030 SDG targets and progress towards the World Health Organization Triple Billions target for 2025. A commensurate, at-scale, innovative solution is required. 119,120

### Lessons from a global pandemic: Sport as a beacon for communities in troubled times

When restrictions designed to curb the spread of the pandemic resulted in a shutdown of community sport and physical activity, a protective factor for mental health was lost. The result was social isolation, boredom, fear and anxiety. Though limited by these restrictions, sport was arguably one of the few platforms that was able to cut through deep community distress. Sporting organizations showed leadership in addressing mental health needs by making sport accessible whenever possible (SDG3), while professional organizations went to extreme lengths to create 'sporting

bubbles'. Beyond the playing field, sporting organizations contributed to wider social wellbeing by: converting facilities to shelters, vaccine hubs and hospitals (SDG3 and SDG10); providing food to families in local communities (SDG2); partnering with governments to spread critical health and mental health messages in an accessible non-stigmatizing way (SDG17); and keeping communities connected and active, albeit remotely (SDG16).<sup>123</sup>

Sport and physical activity became critical enablers of the mental health and wellbeing of all communities – key elements in a race to make up lost time for the SDGs and deliver to their ambitions.<sup>124,125</sup>

### Building back better from COVID-19: A Capability Framework for community wellbeing

COVID-19 made it clear that mental health investments cannot be singularly oriented to the individual, but must target improved capabilities and capacities in communities. The Capability Framework<sup>126-129</sup> – a strengths-based, growth-oriented approach – proposes enhanced capabilities through removing inequalities and barriers to participation. Specifically, a global post-COVID response to improving mental health and community wellbeing requires: (i) an equity lens to ensure that no one is left behind;<sup>130</sup> (ii) a return to pre-COVID or higher levels of involvement in community sport as a basis for further progress;<sup>131</sup> (iii) renewed commitment of local, regional and national advocacy and community groups to grasp the opportunity provided by sport and exercise as an enabler of mental health outcomes; (iv) redesign of the social contract;<sup>132</sup> and (v) a commitment to co-designing solutions with communities, to ensure that empowerment is a key outcome.<sup>133,134</sup>

Sport is one of the few platforms for building capability that can cross sectors, circumvent stigma, build powerful partnerships, and connect communities at a time when these have been severely challenged by COVID-19 restrictions. The potential for grassroots sport to influence community wellbeing, and thus mental health at scale, was recognized in 2015 when sport was given a mandate by the United Nations as an enabler of the 2030 Agenda for Sustainable Development. We propose that the powerful grassroots 'global sporting village' holds an important key in building back better for mental health after COVID-19.

### Sport as a mental health catalyst in local and global communities

High-profile organizations, reports and action plans have all highlighted sport's potential to sustain community capabilities that promote mental health. In 2017, 116 countries signed the Kazan Action Plan, which committed UNESCO to developing common indicators for measuring the contribution of physical education, physical activity and sport to prioritized SDGs and targets. These interventions have been critical in bringing sports to some of the poorest people and marginalized groups in the world as a cost-effective resource delivering against difficult global challenges (see Figure 7). 140,141

The Commonwealth Secretariat review showed that positive mental health outcomes were achieved from participation, and emphasized sport as a powerful platform for community health messaging and education.<sup>142</sup> The report highlighted the importance of investment by local, national and international public health authorities and development agencies as a central pillar of preventative health policy, and the promotion of inclusive approaches to sport and physical activity.

Sports are pioneering effective environments for community mental health interventions. Notably, initiatives from the community to national level have successfully used football (soccer) as a tool to provide mental health interventions, education, and recovery to community members<sup>143</sup> and to bring mental health interventions to harder-to-reach groups, such as men with mental health issues.<sup>144</sup> A systematic review of football interventions in populations with severe mental health problems noted that many projects had positive outcomes (see Case study 3).<sup>145</sup>

Figure 7. Sport and mental health: Why and how to use sport to enable the UN Sustainable Development Goals

		Why use sport	How to use sport
17 PARTNERSHIPS FOR THE GOALS	3 GOOD HEALTH AND WELL-BING	- Maximize the health and wellbeing benefits of sport and physical activity participation  - Address the economic impact of physical inactivity  - Harness the potential to deliver health education through sport	- Embed in preventative health and education policy and implementation mechanisms - Prioritize inclusive sport and physical activity provision - Undertake population-level planning, monitoring and evaluation
	4 QUALITY EDUCATION	- Contribute to improved education outcomes - Create quality learning environments - Engage disenfranchized learners - Deliver holistic education	Position as a pillar of education policy     Prioritize resourcing of implementation and capacity building mechanisms     Align planning, monitoring and evaluation with education policy objectives
	5 cteases  S cteases  Cteases  S cteases	- Harness the role of sport in society - Promote female leadership - Create safe spaces to address gender issues - Engage men and boys	- Mainstream gender issues - Promote female leadership and access to resources - Address the intersection of gender, ethnicity and socioeconomic status - Foster partnerships between sport, gender and media agencies - Account for differentiated attitudes, values and stereotypes across sporting codes - Conduct gender-disaggregated monitoring and evaluation
	8 DECENT WORK AND ECONOMIC GROWTH	Respond to the growing scale of the sport industry Harness the link between sport and other sectors Capitalize on the economic impact of sport events Realize the potential of sport-based employment and entrepreneurship	- Establish sport and economic development strategies - Incentivize sport-based investment and social enterprize - Invest in sport events and activities - Promote volunteering and skills development through sport
	11 SUSTAINABLE CITIES AND COMMUNICS	- Create healthier, safer, greener and more cohesive settlements - Sustain space for sport and active recreation - Promote inclusive settlements	- Embed in urban planning processes - Integrate with health, education and community development facilities - Prioritize inclusive, accessible and safe space for sport and recreation - Leverage the impact of sporting events
	16 PEACE JUSTICE AND STRONG INSTITUTIONS	Respond to the changing nature and scope of global violence Establish platforms for dialogue Engender respect and understanding Limit abuse, violence and exploitation in sport Promote effective, accountable sporting institutions	- Embed in urban planning processes - Integrate with health, education and community development facilities - Prioritize inclusive, accessible and safe space for sport and recreation - Leverage the impact of sporting events

Source: Adapted with permission from Commonwealth Secretariat (2015).  $^{146}$ 



# CASE STUDY 3. GRASSROOT SOCCER MAKING A DIFFERENCE TO MENTAL HEALTH IN LOW-RESOURCE SETTINGS



Photo with permission: © Grassroot Soccer

Grassroot Soccer (GRS), an adolescent health organization, combines the appeal of soccer with evidence-based curricula to address young people's most acute health, mental health and social issues, including sexual and reproductive health and rights, HIV/AIDS and gender-based violence. Since its founding in 2002, GRS programs have reached more than 13 million adolescents in over 60 countries, using soccer to improve access to high-quality services and increase adherence to treatments and healthy behaviors.

GRS is deeply embedded in communities, with a large network of partners across Africa, including community-based organizations and local governments. Agile and sensitive to the challenges facing young people, GRS's unique sports-based methodology combines interactive activities, role models and fun to drive sustainable, positive health and mental health outcomes. GRS programs create supportive environments where adolescents can build resilience and self-esteem, as well as develop vital coping skills to navigate the stresses and challenges during a formative and complicated stage of life.

As part of its mental health strategy, GRS is training 'SKILLZ Coaches' (young adult mentors who facilitate their programs) as community-based lay mental health workers to identify, support and refer adolescents in need of higher levels of care.

In the wake of COVID-19, a local, national and international financial investment in sport is required to address community wellbeing and promote mental health at scale, and at pace. Emerging Social Return on Investment economic modeling studies suggest that, in the UK and Commonwealth countries, an investment in sport of £1 results in a return on investment in health and social benefits of between £1.20 and £3.42.147-150 This return is likely to be greater in contexts of social disadvantage.

## Increasing capability by developing eco-systems for mental health in our sporting organizations

The sporting community has taken an increasingly proactive approach to mental health, developing policies and practices in relation to the conduct of their own clubs<sup>151,152</sup> as well as using the platform of sport to design mental health interventions as a community service. Psychological safety in sport<sup>153</sup> is a topical issue, with athletes demanding accountability and driving change (as explored in Section 3). Sporting organizations, at both grassroots and elite levels, are taking the initiative to improve the mental health culture in local communities, and supporting others to do the same, through a form of sports diplomacy – leading by example, through advocacy and activism.

Programs that address individual mental health include FIFA's #ReachOut campaign, which is designed to raise awareness of the symptoms of mental health conditions<sup>154</sup> and encourages people to seek help when they need it and take actions every day for better mental health<sup>155</sup> and the Whole Being Athlete Program, founded by Athletes for Hope, a group of elite athletes, to unite and empower athletes of all levels and backgrounds to end the stigma of mental health in and out of sports.<sup>156</sup>

Other organizations focus on promoting community wellbeing by addressing social determinants of global mental health. The Centre for Sport and Human Rights is dedicated to "harnessing the power of sport to act collectively" based on the belief that "sport can help promote human rights and sustainable development, and foster co-operation, solidarity, fairness, social inclusion, education and health at the local, regional and international levels". Initially in Afghanistan and now in the Democratic Republic of Congo, Fight for Dignity – a group led by Laurence Fischer, three-time world karate champion – helps women who have been victims of violence to reconnect mind and body through karate, supporting resilience-building and rehabilitation. Is so that the local property of the control of the

These few examples illustrate how local and global organizations across high- and low-resources settings are increasingly using sport as a means to promote mental health for community members and members of marginalized groups.

### Effectively promoting mental health through community sports

WHO's *Global Action Plan on Physical Activity 2018–2030* <sup>159</sup> advocates for the creation of integrated (i) active societies, (ii) active environments, (iii) active people, and (iv) active systems to protect and promote mental and physical health. The opportunity exists to build on investments that have proven effective, which include sport and physical activity programs in schools, <sup>160,161</sup> communities and workplaces. <sup>162,163</sup>

Community sporting clubs, associations and leagues have the potential to influence mental health and wellbeing among players, coaching staff, supporters, fans, officials and the community. Designing a sporting culture that reflects a positive and proactive approach to mental health is key to addressing stigma, and leading social change.

Orygen, the National Centre for Youth Excellence in Mental Health in Australia, has developed a bespoke mental wellbeing in community sport toolkit to support organizations in this endeavor (see Figure 8). Applying the toolkit to a local context can help shape a mental health ecosystem that is fit for purpose.

Figure 8. Supporting mental wellbeing in community sport:

A toolkit for sporting organizations

Raise awareness

Build links to external supports

Build a culture of support



Source: Orygen (2019).166

## Growing capability through conscious planning around mega-events as major economic and social investments

Sporting mega events have historically had economically and socially costly legacies, including national budgets for health and mental health being redirected to hosting costs. A key part of future planning for mega events must include positive legacies for community wellbeing and mental health. Can mega sporting events move from a singularly entertainment-driven investment to become a considered and ethical part of the sport for development ecosystem?

The FIFA (Men's) World Cup Qatar 2022™ is a current example of health-related legacy planning (see the WISH 2022 report, *Playing the long game: A framework for promoting physical activity through sports mega-events*, for more information). A national target has been set to develop a community sport participation strategy to reach all segments of society, and that is driving planning for the event. Qatar's Cultural and Sports Sector Strategy (CSSS) 2018–2022 aims to motivate young people as part of its intermediate outcome to promote community participation in cultural and sports affairs.¹¹¹ Related to this CSSS 2018–2022 outcome is the National Health Strategy 2018–2022 promoting mental health. Generation Amazing – a social legacy foundation from the World Cup – brings together these goals by raising public awareness and signposting young people to service providers (see Case study 4).

### The way forward: Centering mental health in the conversation about sport

Grassroots sport has proven pivotal to reducing the impact of mental ill health. During the COVID-19 pandemic, sport showed a unique power to influence mental health and the wellbeing of communities, locally and globally. Sport is more than a physical remedy; it is also a remedy for social isolation and challenges to mental health. Capturing and harnessing the lessons from this experience will inform a rich program of collaboration between researchers, sporting organizations and policymakers over the decade ahead. In searching for urgent solutions to the escalating challenge of global mental health, an emerging evidence base points to the untapped potential of sport. Purposeful mental health priorities and accountabilities will ensure that sport achieves its potential as part of the overall global mental health solution.<sup>172</sup>



### **CASE STUDY 4. GENERATION AMAZING**



Photo with permission: © Generation Amazing

Sport can promote important messaging around mental health to a wide audience, particularly signposting patients to sport and physical activity opportunities within the community.<sup>173</sup>

Generation Amazing<sup>174</sup> is a human and social legacy program of the FIFA World Cup Qatar 2022<sup>™</sup>. The group hosts an annual youth festival to engage and inspire young people to be agents of social change.<sup>175,176</sup>

Mental health has been identified as a top-ranking social issue facing young people in the region, and organizations offering mental health services are promoted during the festival.<sup>177</sup> The Generation Amazing Community Club in Lusail, opened in Doha in the lead-up to FIFA World Cup,<sup>178</sup> also promotes mental health and wellbeing sessions.

Generation Amazing has extended its active contribution to mental health through the support of refugees fleeing in-country conflict in Afghanistan.<sup>179</sup> Airlifted in 2021 by the State of Qatar, evacuees were housed in facilities constructed to host delegations to the FIFA World Cup Qatar 2022<sup>TM</sup>. At the request of Qatar's Ministry of Foreign Affairs, Generation Amazing, and Maktaba Children's Library (Qatar) set up a nursery, and with the evacuee community co-created sport and leisure activities to address the mental, social, emotional and physical health needs of their guests.

### SECTION 3. ELITE ATHLETES AND MENTAL HEALTH - CREATING SUPPORTIVE CLIMATES

Gretchen Kerr, Katherine Tamminen and Claudia Reardon

"At the end of the day, if I can say I had fun, it was a good day."

#### Simone Biles

Olympic gymnast, winner of seven Olympic medals

### Addressing the myth of mental health in elite sport

Although substantial research demonstrates the mental health benefits of sport and other physical activity,<sup>180,181</sup> those engaged in these activities can, and do, suffer from mental health symptoms and disorders. Sport participation, especially at the elite level, can be a risk factor for certain mental health disorders.<sup>182</sup> The myth of elite athletes as the epitome of physical and mental health has been dispelled by research evidence.

Unfortunately, the prevalence studies that are available have limitations. 183,184 Most studies of elite athletes have lacked comparison groups from the general population. Different instruments have been used to assess mental health symptoms and disorders in athletes versus the general population. Studies do not consider cross-cultural differences in mental health symptoms. Studies vary in whether they describe clinician-diagnosed *disorders* versus self-reported mental health *symptoms*. Also, several groups, including female athletes, LGBTQ+ and Indigenous athletes, athletes from many ethnic groups, and para athletes, are under-represented in studies. 185

With those limitations, existing data suggest that the prevalence of mental health symptoms and disorders in elite athletes is substantial. Athletes suffer from many mental health symptoms and disorders at rates that meet or exceed those in the general population.<sup>186-188</sup>

Our ability to address the mental health needs of athletes and provide a peak mental health ecosystem for athletes, speaks to our capacity as a sporting community to be a potent force for good in the global mental health challenge.



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# CASE STUDY 5. INTERNATIONAL OLYMPIC COMMITTEE CONSENSUS WORK GROUP ON MENTAL HEALTH IN ELITE ATHLETES

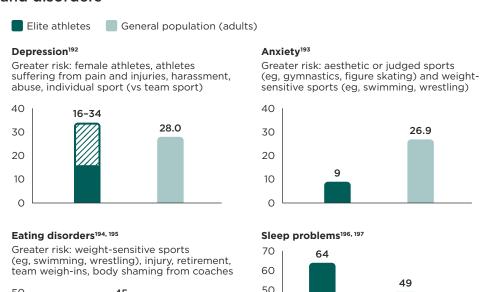
Spanning the past 20 years, the International Olympic Committee (IOC) has convened work groups of experts from around the world on a variety of sports medicine-related topics. These topics have ranged from sudden cardiovascular death in sport to thermoregulatory and altitude challenges in the high-level athlete.

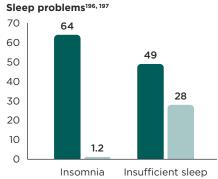
In 2018, the organization convened its first such work group solely dedicated to the topic of mental health in elite athletes. The IOC recognized the urgent need for an in-depth analysis of the world's literature, including research on epidemiology, relevant stressors and environmental factors, diagnostic challenges, symptom manifestations, and management of elite athlete mental health at the individual athlete and systems levels. The resultant consensus statement was the product of a 27-member work group spanning six continents.<sup>189</sup>

A subset of the group continues to translate this knowledge into practice. They have worked with IOC stakeholders to publish the *IOC Mental Health in Elite Athletes Toolkit* for use by International Federations, National Olympic Committees, athletes' entourage members, healthcare professionals, national federations, clubs, and teams for the purposes of developing and implementing initiatives and best practices related to protecting and promoting mental health.<sup>190</sup> They have also developed Diploma and Certificate programs on mental health in elite sport. Finally, they have developed comprehensive mental health screening tools specifically for athletes, covering the spectrum of mental health needs – from mental health disorders to life balance to peak performance.<sup>191</sup>

### Common mental health symptoms and disorders

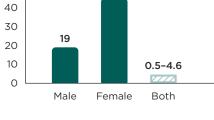
### Figure 9. Prevalence of common mental health symptoms and disorders





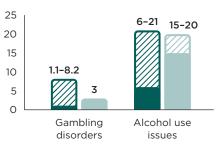
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26.9



#### Addictive disorders<sup>198</sup>

Greater risk: team sport athletes (for substance use)



### **Depression**

Depression in elite athletes occurs with a prevalence of 16-34 percent in various samples, with larger samples suggesting that rates are equivalent to those in the general population. 199-201 Subpopulations at greater risk include female athletes, those suffering from pain, injury, harassment, or abuse, and individual rather than team sport athletes.<sup>202</sup> Care must be taken to distinguish overtraining from depression, as there can be substantial symptom overlap and comorbidity. Psychological manifestations of overtraining include fatigue, insomnia, appetite changes, weight loss, and amotivation.<sup>203</sup> Overtraining may be the more likely explanation for symptoms if there is no dysfunction extending outside sport (for example, in school or work), and if reduced training improves symptoms.<sup>204</sup>

#### Self-harm and suicide risk

Concerns for self-harm and suicide exist whenever considering mood disorders. A study of suicide in elite US collegiate student athletes indicated that 7.3 percent of all deaths were attributed to suicide.<sup>205</sup> The mean age for victims of suicide was 20 years, and male collegiate athletes who participated in American football were at greatest risk. Risk factors in athletes included being replaced on teams, injury, lengthy rehabilitation process post injury, substance abuse, retirement, eating disorders, sleep disturbances, anabolic steroid use, history of child abuse and suicide attempts, and post-concussive syndrome.<sup>206-208</sup>

### Anxiety and related disorders

In a period of 12 months, anxiety disorders in combination affected 9 percent of athletes, 209 with frequently cited samples demonstrating rates similar to those in the general population.<sup>210</sup> Generalized anxiety disorder consists of multiple persistent worries (not just sport-related) and is more common in aesthetic or judged sports.<sup>211</sup> Panic disorder consists of panic attacks that are recurrent and unexpected. If they predictably happen in a particular context, such as before or during competition, they may be part of competitive performance anxiety. 212 Social anxiety disorder - intense fear of being negatively evaluated in a social or performance situation may lead to avoidance of, or struggle in, individual sports (where there is a greater perception of public scrutiny) - but not in team sports<sup>213</sup> or a variety of team functions. 214 To be diagnosed with obsessive-compulsive disorder, there is typically at least one hour per day of obsessions and/or compulsions. This is to be distinguished from sport-related idiosyncratic routines.<sup>215</sup> Traumas leading to post-traumatic stress disorder (PTSD) symptoms in athletes may occur within sport (for example, major injury, witnessed or experienced abuse) or outside sport. Injuries are more likely to cause PTSD symptoms in athletes with high athletic identity.<sup>216</sup> Finally, competitive performance anxiety is a circumstantial and temporary form of anxiety that occurs around the time of competition, to be distinguished from 'normal' competition-induced hyperarousal that does not cause significant distress or dysfunction, and from more enduring anxiety disorders.<sup>217</sup>

### **Eating disorders**

Eating disorders disproportionately affect elite athletes compared with the general population. Risk factors include: participation in weight-sensitive sports; injury; recent retirement; team weigh-ins; and body shaming from coaches.<sup>218,219</sup> Eating disorders may be part of a constellation of symptoms known as relative energy deficiency in sport (RED-S).<sup>220</sup>

### Sleep problems

Athletes may suffer from a higher rate of sleep problems than the general population.<sup>221</sup> They commonly report insufficient sleep, with fewer sleep hours as the strongest predictor of injuries in some athlete cohorts.<sup>222</sup> Athletes are also at risk for circadian dysregulation owing to early morning practice and frequent travel.<sup>223</sup> Up to 64 percent of elite athletes have reported insomnia.<sup>224</sup> Obstructive sleep apnea is common in sports where a high body mass index is advantageous.<sup>225</sup>

#### Addictive disorders

The most commonly used and misused substances among elite athletes mirror those among the general population: alcohol, caffeine, nicotine, cannabis, and stimulants.<sup>226</sup> Athletes in most sports use substances at lower rates than the general population, especially during the competitive season. Exceptions include higher rates of binge drinking, especially during off seasons.<sup>227</sup> Team sport athletes are more likely to misuse substances than are individual sport athletes.<sup>228</sup> Gambling disorder is a behavioral addiction that often remains hidden among athletes.<sup>229</sup>

### **Causes and contributors**

A myriad of causes and contributing factors to mental health symptoms and disorders has been identified in the existing literature – ranging from individual and interpersonal influences, to the demand characteristics of the elite sport context itself (see Figure 10).

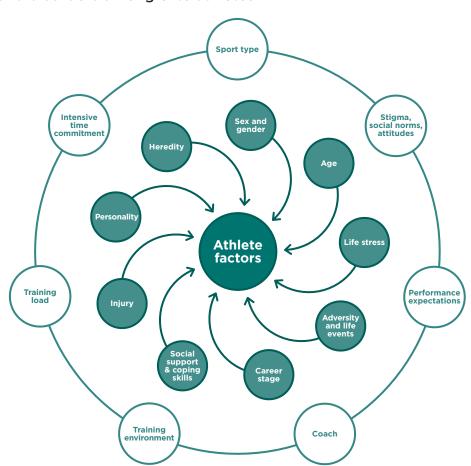


Figure 10. Causes and contributors to mental health symptoms and disorders among elite athletes

#### Individual athlete factors

While the biological and genetic influences on mental health symptoms and disorders have been explored in the general mental health literature, 230 there is limited research on the role of these factors in elite athletes' mental health. However, several other individual-level factors have been linked to mental health symptoms and disorders.

Some researchers have reported gender differences in mental health challenges among athletes, with female athletes reporting greater depression scores than males.<sup>231</sup> Personality factors such as perfectionist concerns<sup>232</sup> and extreme athletic identity<sup>233</sup> may influence mental health symptoms and disorders among athletes. The type of sport athletes compete in also plays a role: athletes participating in individual sports report significantly higher symptoms of mental health challenges compared to athletes participating in team sports.<sup>234,235</sup>

Overall life stress, <sup>236,237</sup> previous adverse life events, and injuries <sup>238-240</sup> are also positively associated with greater mental health symptoms and disorders.

Athletes' career stage is also an important factor in mental health challenges: younger athletes<sup>241</sup> and athletes who are transitioning to higher levels of competition may face increased risks for mental health symptoms and disorders.<sup>242</sup> Additionally, retired athletes or athletes planning to retire report greater difficulties with mental health symptoms and disorders.<sup>243</sup>

While there are several risk factors for mental health symptoms and disorders among athletes, there are also protective factors for elite athletes. These factors include: having positive relationships and social support; feelings of autonomy, competence, and control in one's sport career and decisions; and development of adaptive coping skills to deal with the demands of high-performance sport and life stress.<sup>244,245</sup>

### Interpersonal factors

Interpersonally, the power imbalances between athletes and adults in positions of authority in sport, have been associated with negative outcomes for athletes. Coaches play a critical role in athletes' wellbeing and sport performance, and coaches also have a significant impact on athletes' mental health symptoms and disorders.<sup>246-248</sup> Coaches with a history of previous success and expertise can hold significant power over athletes.<sup>249</sup> This relationship and misuse of power by coaches and other adults in positions of authority can lead to maltreatment of athletes, contributing to mental health symptoms and disorders including anxiety, eating disorders, self-harm, and suicidal ideation.<sup>250</sup>

### **Sport context**

Characteristics of the elite sport training environment also contribute to mental health symptoms and disorders. Such influences include a higher training load, less opportunity for a work-life balance, and high physical demands.<sup>251</sup> The intensive time commitment required of elite sport also encourages a narrow, singular, athletic identity which presents difficulty at critical times, such as during the sport retirement transition or in dealing with injuries.<sup>252</sup> In some sports, such as gymnastics, swimming, running, and wrestling, the emphasis on the body and demands for leanness have been linked to mental health symptoms and disorders, especially eating disorders, in elite athletes.<sup>253,254</sup>

Elite sport training environments that emphasize performance outcomes, such as winning medals and financial rewards, can lead to 'win at all costs' attitudes. These environments may condone bullying, abuse, and controlling behaviors. They may also promote excessive training without sufficient recovery, competing while injured, and ignoring symptoms of mental ill health.<sup>255</sup> The sport environment may also contribute to greater

stigma surrounding mental health symptoms and disorders, where seeking help may be seen as a sign of weakness in a context that values mental toughness and resilience. <sup>256,257</sup>

### Investing and leading in athlete-centered prevention, early detection, and intervention

To prevent and address mental health symptoms and disorders in elite athletes, an ecological systems approach is needed. Such an approach considers: influences at the macro level or the climate of the national sport system; the individual sport environment; the microsystem of coaches, parents, administrators, and support team members; and the individual level of the athlete's personality, coping skills, and attitudes.<sup>258</sup> An ecological systems approach also highlights the importance of policies, education, the conditions of the training and competition environments, including mental health literacy, and roles and responsibilities of all stakeholders within the elite sport environment. A comprehensive approach to athlete mental health includes strategies for prevention, recognition and early detection, and intervention (see Figure 11).

#### Prevention

A psychologically safe environment is one where athletes feel safe, included, and accepted, respected by others in the sports ecosystem, and feel that mental health is prioritized.<sup>259</sup> Athletes are more inclined to express their emotions, including feelings of distress, when they feel psychologically safe.

To promote a psychologically safe environment, a rights-based, athlete-centered approach is recommended, including designing and delivering sport programs that are developmentally appropriate, and involving athletes in decisions that affect them.<sup>260</sup> Democratic styles of coaching that involve the sharing of power between the coach and athlete in age- and stage-appropriate ways, two-way communication, and decision-making based on athletes' needs and rights, are more likely to promote feelings of competence, autonomy, mastery and acceptance.<sup>261,262</sup> When athletes feel they have trusting relationships where conversations about mental health can occur, they are more likely to feel safe discussing their mental health challenges, and asking for help with mental health care.

Figure 11. Prevention, early detection and intervention strategies for mental health in elite athletes

	<del></del>	<del></del>	<del></del>
	Prevention	Recognition and early detection	Intervention
Athlete level (Athlete's personality, coping skills, attitudes, knowledge)	<ul> <li>Mental health literacy</li> <li>Knowledge of care pathways and referral processes</li> <li>Developing coping skills</li> <li>Developing social support networks</li> </ul>		
Microsystem level (Coaches, parents, administrators, sport team members)  Exosystem level (Individual sport environment)	<ul> <li>Mental health literacy</li> <li>Psychologically safe environment</li> <li>Rights-based, athlete-centred approach</li> <li>Democratic styles of coaching and decision-making</li> <li>Mental health screening</li> </ul>	<ul> <li>Knowledge and education about signs and symptoms of mental disorders</li> <li>Knowledge about responding to athlete distress/disclosures about mental health</li> <li>Knowledge of care pathways</li> <li>Shared decision-making to address mental health symptoms and disorders</li> </ul>	<ul> <li>Early introduction to available professionals</li> <li>Clear referral processes</li> <li>Availability of support from the sport community or organization, or from external support that feels appropriate for the athlete</li> <li>Individualized, culturally relevant care, resources and support</li> </ul>
Macrosystem level (National sport system climate)	<ul> <li>Policies, education and decision-making prioritizes athlete mental health</li> <li>Address bullying and harmful behaviours by coaches and others in positions of power</li> <li>Explicit duty of care</li> </ul>		<ul> <li>Policies and guidelines to identify resources and support for athletes</li> <li>Development of clear referral pathways for care</li> </ul>

Education, and specifically the development of mental health literacy, among all sport stakeholders is key to prevention. Mental health literacy includes building awareness of the stressors athletes face within and outside sport, accommodating for and responding to these stressors, knowledge of the signs and symptoms of mental health challenges and disorders, awareness of care pathways, and reducing stigma associated with mental health symptoms and disorders. For athletes, specific education to advance coping skills – such as the ability to find and use social support – is important. Prevention also includes practices such as regular mental health screening for early detection of health challenges; this screening should be sensitive to the sport context and key periods of challenge for athletes, such as the occurrence of injury and retirement transition. Prevention also includes practices and key periods of challenge for athletes, such as the occurrence of injury and retirement transition.

To promote a positive culture surrounding mental health, leaders must clearly express that mental health is a priority for their sport organization. Mental health and wellbeing must be reflected in policies, compulsory education, and embedded in all decision-making. Sport organizations must also take seriously and address athlete concerns about bullying and harmful behaviors by coaches and others who are in positions of power. A clear and explicit duty of care for all sport stakeholders will facilitate the development of a positive and psychologically safe environment where prevention, early detection, and support for mental health symptoms and disorders can occur.

### Recognition and early detection

Mental health literacy is important for all stakeholders in sport, as athletes may disclose concerns to those closest to them, including teammates, coaches, physiotherapists, and other members of the athlete's entourage. Given the closeness and frequency of interactions between an athlete and the entourage, it may be the members within this circle who first notice changes in behavior or signs of mental health symptoms and disorders. Therefore, it is critical for those people to know how to respond supportively and constructively to an athlete in distress and to help the athlete make decisions about accessing care.<sup>270</sup>

The IOC developed a Sport Mental Health Recognition Tool (SMHRT-1) which, while not a diagnostic tool, can help athletes, coaches, family members and other members of an athlete's entourage to determine if an elite athlete needs professional assistance.<sup>271</sup> Coaches and trainers may need to respond by adapting or modifying training plans to reduce sport-related stressors while an athlete addresses mental health symptoms and disorders, particularly when an athlete returns to training after an absence.

#### Intervention

Professional care may be needed when the demands on athletes exceed their abilities to cope or function well, or when athletes experience severe or complex mental health symptoms that cannot be addressed by preventative measures or early intervention.<sup>272</sup> Better outcomes are predicted with early interventions. Early introduction to available professionals with clear referral processes<sup>273</sup> when athletes are well helps to reduce the stigma associated with help-seeking and reduce barriers to accessing care. Athletes should have the opportunity to access support from those in the sport community that they are already familiar with, or from external support providers that feel appropriate to them. Here, individualized approaches that are culturally appropriate are important considerations for care.<sup>274</sup> The importance of culturally relevant resources and supports<sup>275</sup> may be heightened for athletes from equity-deserving groups such as women, para athletes, LGBTQ+, and racialized and Indigenous athletes, although more research is needed to advance our understanding of effective interventions for these athletes.

# SECTION 4. CONCLUSION AND RECOMMENDATIONS

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The escalating shadow pandemic of mental illness requires an urgent global response and a collective investment. As Emeritus Professor Dinesh Bhugra CBE, past President of the Royal College of Psychiatists, says:

"Mental health is too important to be left to the specialists, it is everyone's business."<sup>276</sup>

# Why should we invest in sport as a mental health solution?

As an unparalleled global influencer, sport must be 'present' and 'a presence' in the conversation, to lead the discussion beyond stigma and toward innovative local and global solutions co-designed with communities and with governments. The arguments for sport's potential to have an impact on mental health are compelling, economically, socially, clinically and ecologically.

#### The economic argument

Investing in sport for mental health is investing in what works - the evidence base is substantial and the findings are robust and clear. It is activating an intervention modality that already exists at scale - more than half the world's population already engage with sport - but one which is not yet activated for the purpose of mental health and wellbeing. Sport is also the *equitable* solution to a global shadow pandemic - a no-cost or low-cost investment in mental health.

Sport has the potential to add *more* scale, to match the scale of the problem - to reset the trajectory for the Triple Billion health target of an *additional* billion people experiencing good health and wellbeing, and to change the arc toward the 2030 deadline for the Sustainable Development Goals.

### The social argument

Importantly, as a mental health intervention, sport can be enjoyable! It can be non-stigmatizing and accessible and strives to leave no one behind - it is potentially accessible to all ages, genders, and cultures.

Sport provides myriad options and opportunities to fit the needs of individuals and unique communities - and there is evidence to prove its effectiveness. The sporting toolbox is uniquely flexible and adaptable, with more than 200 recognized national sports for all age groups, from low-cost to well-resourced settings.

### The clinical argument

The evidence tells us that sport is not only a universal solution for preventing mental health problems and promoting good mental health – it is also an effective first-line or adjunctive clinical treatment for significant and severe mental health conditions. Physical activity and social engagement are powerfully effective active ingredients in mental health treatments for a range of disorders and clinical presentations.

#### The ecological argument

Sport addresses the symptoms as well as the causes of mental health – affecting both the social and physical determinants. Sport also provides a global mechanism for SDG17, 'partnerships for the goals' – sport offers pathways to drive action toward all other SDGs.

In sum, sport is not just a *pan*demic solution, it is a *syn*demic solution – a mental health service without stigma that is achieving the unthinkable – changing the way the world thinks about mental health. The powerful voices of our elite athletes and sporting organizations are using the power of sport for good, on local and global platforms. Sport is the global solution for our times.

# Recommendations for policy and practice: A call to action

To optimize the value of sport for addressing the global mental health shadow pandemic, we must integrate virtuous circles of action locally, nationally and globally.

While seeing health and mental health as part of a whole ecosystem, we must commit to the following actions to achieve the strongest outcomes:

• globally, disentangle *health* goals from *mental health* goals and set priority, measurable, targets and accountabilities<sup>277</sup> for action on mental health and community wellbeing.

- nationally, encourage governments, policymakers and mental health services to invest in, and engage with sports, for the purpose of planning local and global mental health policy and practice.
- locally, encourage all sporting organizations to do a mental health 'stocktake', to partner for mental health change with local communities, and invest in training staff and athletes in mental health literacy.<sup>278,279</sup>

## Conclusion

Sport is an unmatched global influencer with an enduring reputation as a 'force for good' in supporting the mental health and wellbeing of individuals and communities, through participation, spectatorship, fandom, and many other forms of engagement. Investment in sport for its entertainment value and physical health impacts is widely endorsed, while sport for mental health seems to be considered a lucky side effect. When compared to physical health, mental health outcomes through sport are neither commonly reported nor held in parity of esteem within global health reports – this must change. The sporting toolbox is a potent untapped change system *for mental health* with the potential to lead the way to reaching the WHO Triple Billion health priorities in 2025, and to resetting the arc toward achieving the SDGs in 2030.

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- Prof Gretchen Kerr, University of Toronto, Canada
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