Moving for mental health

Research report

How physical activity, sport and sport for development can transform lives after COVID-19

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Executive Summary

The global COVID-19 crisis and associated lockdowns which have accelerated, widened, and deepened pre-existing inequalities have also negatively impacted the mental health of many people and intensified the already increasing rates of mental health problems globally. Since COVID-19 has occurred against a backdrop of pre-existing socio-economic inequalities in mental health and in the social determinants of health, strategies which support the mental health of everyone, but especially those living in more disadvantaged and deprived communities, is urgently needed. Sport and physical activity participation, and engagement in sport for development programmes, are not a panacea for this crisis. However, there is evidence that being active and involved in linked programmatic interventions and social networks can help to improve mental health, support wellbeing and resilience, and help to tackle social isolation.

The COVID-19 pandemic has had a substantial impact on sport and physical activity across the United Kingdom. Data have shown that the proportion of the adults who met physical activity guidelines prior to the pandemic dropped by over 7%, and children and young people by 2.6% during the first lockdown period. Community sport and sport for development were also affected, with much of the sector restricted or stopped as part of virus containment strategies. Given the association between physical activity and mental health and wellbeing, it is important to understand how to enhance the contribution physical activity, as well as sport and sport for development, can make to the mental health impacts of COVID-19 as communities rebuild and provide opportunities for people to move and (re)engage in activity.

By reviewing existing evidence on community-based programmes and peer-reviewed literature on physical activity, sport, and sport for development for mental health during COVID-19, this report sets out clear evidence-based recommendations for future policy and practice. The report is intended to inform government policy approaches to mental health and community-based physical activity, sport, and sport-for-development and support the work of public bodies, funders, commissioners, policy makers, and providers of community-based programmes which seek to promote movement (via physical activity, sport, and sport for development) and mental health.

Recommendations

1. **A cross-government public mental health strategy should be developed which recognises the promotion of movement through physical activity, sport, and sport for development for mental health as a collective responsibility of all relevant organisations.**
    - The promotion of movement for mental health and wellbeing should be a pillar of work, with ring fenced budget, within the framework of the new Office for Health Promotion and Disparities
    - Government should include an analysis of the workforce capacity (and associated resource allocations) to promote movement for mental health and wellbeing as part of reporting requirements set out in the revised Health and Social Care Bill
    - As part of the Care Programme Approach or discharge plan, secondary care mental health workers should provide opportunities to engage with community groups which promote movement for mental health to facilitate more effective, sustainable, and supportive transitions from secondary care to local community mental health settings
    - Workplaces should focus on employee mental health at all levels of the organisation. This includes developing positive management and leadership cultures, encouraging those in senior positions to role model behaviours supportive of appropriate work life balance, and normalising conversations around mental health

2. **The Office for Health Improvement and Disparities to take a strategic lead with DCMS and other partners (including the UK sports councils and Mind) in coordinating the delivery of movement opportunities for positive mental health outcomes whilst tackling deep-seated social and health inequalities. This approach should be replicated at devolved and local level with equivalent stakeholders. Funding dissemination should draw on and continue to include responsive and accessible approaches used during COVID-19. It should also include provision (with policy frameworks, funding, and commissioning models) for direct investment in programmes and interventions that incorporate movement alongside mentoring, talking therapies and other evidence-based actions**
    - The resourcing, delivery, and evaluation of services must be made available at a scale and intensity proportionate to those who needs them most (the principle of proportionate universalism). Health equity should be central to all policies and practices intended to support mental health
    - Care providers, programme designers and programme implementors should implement differential pricing models and work with locally trusted and culturally appropriate activity providers to engage diverse communities
    - Funders and commissioners seeking to support movement and mental health and wellbeing outcomes should prioritise place-based funding models and base investment decisions on index of multiple deprivation scores and other health inequality data

3. **COVID-19 has exposed the weaknesses of single sector responses to addressing complex mental health problems. Collaborative cross-sector partnerships and the involvement of experts by experience and diverse community stakeholders in the design, implementation, and evaluation of policy and programming should therefore be a key criterion for investment and an ongoing reporting requirement for all investment in movement for mental health**
    - Public bodies, funders and programme implementers should transparently report on how local communities and experts by experience are involved in the design, implementation and evaluation of policy, funding and programming using movement to support mental health
    - Funders and commissioners of movement-based programmes and interventions supporting mental health should include, as a key criterion for investment, evidence of effective cross-sector partnership working
    - To develop better relationships and encourage cross-sector working, dedicated funding should be provided to support the development of local hubs which bring together primary, secondary care services with Voluntary Community and Social Enterprise (VCSE) organisations to support mental health through movement

4. **The continuation, standardisation and expansion of training, professional development and other support opportunities should be provided for professionals and volunteers working to promote movement for mental health, including health professionals and social prescription link workers.**
    - To increase movement literacy, primary and secondary care service staff should be encouraged to engage in relevant education opportunities such as Active Hospitals Continuing Professional Development as part of the Moving Healthcare Professionals training (Sport England and Public Health England)
    - Sport and physical activity organisations should promote and make available mental health training and resources for coaches and volunteers as part of minimum coaching standards, to support their own mental health and to support wider duty of care practices
    - The Chartered Institute for the Management of Sport and Physical Activity (CIMSPA) could embed mental health into its higher education professional standards. Mental health training could also be a mandatory part of CIMSPA's Continuing Professional Development activities with members required periodically to refresh that training
    - Mental health training should be a mandatory part of physical education teacher training and other programmes which trained people to work at all levels of sport, physical activity and sport for development
    - Organisations should integrate peer support and peer mentoring into community schemes to enhance community engagement wherever possible, and ensure peer support workers are appropriately trained and supported (including financially and in relation to their own mental health)

    - **Given the lack of robust, systematic, and widely reported evaluations of programmes, standardised reporting of diverse programmes and service evaluations which use movement to aid the prevention, treatment, and management of mental health problems**

should be prioritised, consistent, accessible, and funded. Using validated tools and context specific forms of evidence will be needed to identify the different impacts and outcomes of programmes that use movement for positive mental health outcomes. This is also needed for programmes which contribute to tackling deep-seated social and health inequalities, and should be accompanied by practical guidance to support programme and policy implementors and evaluators

- To encourage standardised reporting of programme theories of change and outcomes, accessible guidance on design and evaluation (including the integration of non-traditional forms of evidence) should be provided by funding bodies and commissioners
- Providers should commit to the standardised reporting of the intended and unintended outcomes of their work for mental health (e.g. through the Sport for Development Coalition's standard measurement framework). This standardised reporting should include appropriate validated tools which address mental health and wellbeing (e.g. ONS-4, WEMWBS) and other context specific forms of evidence (e.g., interviews and case studies with key stakeholders)
- Providers should make evidence of their programmes publicly available via an open access repository to improve the availability and accessibility of existing evidence for all providers

We welcome the opportunity to work with partners on how best to implement these recommendations and actions in a timely way.

Background

Purpose of this report

It is now clear that COVID-19 has had a significant impact on the mental health of individuals, communities, and whole societies, but different groups have been impacted in different ways and at different time points, with some impacts likely to be substantial and long-term. Pre-existing inequalities in mental health, and in other areas of social life, have also been widened and made worse. The impact of COVID-19 on mental health is thus a significant public health problem which has had important implications for engagement in community-based physical activity, sport, and sport for development, including for mental health benefit.

The aim of this report is to set out clear evidence-based recommendations for future policy and practice to protect and enhance the contribution of physical activity, sport, and sport for development to mental health outcomes in the United Kingdom (UK). In doing so, the report reviews existing evidence on the links between mental health, inequality and COVID-19, and the use of community-based programmes which use movement (including physical activity and sport) and sport for development (a term used to describe the intentional use of sport and physical activity to bring about positive changes in the lives of people and communities) to support mental health.

The report then reviews a range of evidence on engagement in movement and sport for development and mental health outcomes during COVID-19 (March 2020-May 2021). The key recommendations identified from our review of the existing evidence are supported by recommended actions calling those responsible for the policy, funding, design, and delivery of primary and secondary care, and community-based programmes, to take action to protect and enhance the contribution of physical activity, sport, and sport for development for mental health following COVID-19.

The report is therefore intended to inform government policy approaches to mental health and community-based physical activity, sport and sport for development and support the work of public bodies, funders, commissioners, and policy makers as well as providers of community-based programmes which seek to promote movement (via physical activity, sport and sport for development) and mental health.

The report has been produced as part of a collaboration between the Sport for Development Coalition and Mind aimed at enhancing the contribution physical activity, sport, and sport for development can make to addressing the mental health and wellbeing emergency brought on by COVID-19. The research team, commissioned to support the work by developing key evidence-based recommendations, consists of academic researchers from Edge Hill University (Professor Andy Smith) and Loughborough University (Dr Florence Kinnafick and Dr Eva Rogers).

The Sport for Development Coalition is a network of over 200 organisations that use sport and physical activity to generate social outcomes. The Coalition is made up of a diverse group of organisations that include sporting bodies, community organisations, social enterprises, charities, and sector network and support organisations. The Coalition is supported by Sport England, Comic Relief, and Laureus Sport for Good.

Mind is the mental health charity for England and Wales and is a federated network of around 120 local Minds. Since 2014, Mind have been supporting the sport and physical activity sector to better understand mental health and use physical activity and sport to help them live with mental health problems through a strategic partnership with Sport England. This includes: The Mental Health Charter for Sport and Recreation, Get Set to Go, The Sector Support Programme, and partnerships with the English Football League, ASICS, and other corporate partners.

Mental Health, COVID-19, and inequality

COVID-19, a novel strain of coronavirus (SARS-CoV-2), causes severe acute respiratory syndrome and is primarily transmitted as aerosols as droplets at short range or airborne at longer range (Tang et al. 2021) with the risk of transmission highest where people are in close proximity (less than 2 metres). On 23rd March 2020, the UK government announced 'stay at home' guidance to prevent the transmission of COVID-19 (UK Government, 2020). The population throughout England were advised to leave their houses only to: (i) shop for food or necessities, (ii) undertake a form of exercise once per day, and (iii) for medical needs, or travelling to work when working from home was not possible. This coincided with the introduction of restrictions in the other devolved administrations.

Prior to the deployment of the first vaccines in late 2020, COVID-19 related public health policy relied exclusively on non-pharmaceutical intervention. Personal hygiene recommendations (e.g., emphasis on hand washing), social distancing and isolation were the key strategies employed during the lockdown period to reduce the spread of the virus. Social distancing in the UK focused on the recommendation of keeping more than 2m apart from others, whilst also closing leisure facilities, schools, nonessential shops, and workplaces, alongside banning public gatherings (NHS, 2020). The COVID-19 pandemic has also placed unprecedented demands on the NHS, particularly within acute and intensive care units. This increased demand for acute care, alongside staff shortages, resource configuration, and the pressures of implementing infection control (Johnson et al. 2021) has led to heightened pressure on existing services, and a reduction in resources available for non-coronavirus patients (Propper et al. 2020).

The World Health Organization (WHO) defines mental health as "a state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (Herman et al. 2016). Mental health and mental illness are two interrelated but distinct concepts (Keyes, 2002). While mental health is concerned with an individual's thoughts, feelings, and emotions, alongside an ability to

overcome difficulties, mental illness is defined as affecting the way an individual experiences thoughts, feelings, and behaviours, and has a negative impact on their overall well-being (WHO, 2014). Within this report, 'mental health problems' will be used as an overarching term to incorporate 'poor mental health' and include those with and without 'mental illness' or 'mental disorder'.

Prior to the outbreak of COVID-19, mental health problems were considered a serious public health challenge (Department of Health and Social Care, 2019), with studies projecting that by 2030 mental health problems such as depression and anxiety would be the leading cause of global morbidity and mortality (World Health Organization, 2010). Currently, depressive disorders contribute to over 50 million Years Lived with a Disability (YLD) and anxiety disorders contribute 24.5 million YLD globally (WHO, 2017), and collectively mental health problems contribute to 14% of age-standardised YLD (James et al. 2018). In the UK, depression and anxiety are among the most common and increasingly prevalent mental problems experienced by men and women, and in England the latest data indicate that the proportion of 5-16-year-olds with a probable mental disorder increased from one-in-nine in 2017 to one-in-six in 2020 (NHS Digital 2021, Newlove-Delgardo et al. 2021). Males account for three-quarters of annual suicides which have been increasing since 2017 (Office for National Statistics [ONS], 2020), and suicide is also the leading cause of death amongst the under 25s. Suicide amongst females aged 10-24-years-old, in particular, has risen to its highest level in 2019 (ONS 2020), while rates of self-harm – as a significant risk factor for subsequent suicide attempts and deaths (Rodway et al. 2020, Uh et al. 2021) – are also rising faster amongst young women than men with prevalence estimates amongst adolescents in England ranging between 13.2% and 19.7% (Uh et al. 2021). The increasing prevalence of mental health problems is particularly concerning. As well as their significant contribution to the burden of disease among individuals and their communities and societies (Vos et al. 2013), the estimated all-encompassing costs towards improving mental health are surplus of £105 billion per year within the UK (Department of Health, 2014).

The impact of COVID-19 on existing mental health inequalities

The global COVID-19 crisis and associated lockdowns which have unambiguously accelerated, widened, and deepened pre-existing inequalities between and within countries have also negatively impacted the mental health of many people (Marmot et al. 2020, Bambra et al. 2021) and compounded the already increasing rates of mental health problems globally and in the UK (Campion et al., 2020; Ford et al., 2020). Campion et al. (2020), for example, have argued that COVID-19 has had wide ranging effects on population mental health, which are even greater for particular groups, including people with pre-existing mental health problems. The risk of developing mental health problems during COVID-19 has also been shown to be mediated by 'socioeconomic inequalities, poverty, debt, unemployment, food insecurity, social factors, quarantine, physical distancing, and physical inactivity' (Campion et al., 2020: 1). As Marmot and Allen (2020: 681) have similarly noted, COVID-19 'exposes the fault lines in society and amplifies inequalities' that lead to inequalities in health more generally, but the mental health (and

other) impacts have been disproportionately observed among different social groups. This is because of the clear social gradient in disadvantage: the more deprived the area the higher the mortality and morbidity and these inequalities reflect existing unequal experiences of chronic diseases and the social determinants of health (Bambra et al., 2020; Bambra et al., 2021; Marmot et al., 2020; Marmot et al., 2021). The social determinants of health refer to 'the conditions in which people are born, grow, live, work and age and inequities in power, money and resources' (Mamot et al., 2020: 5) and via COVID-19 these will likely impact the current (White and Van Der Boor, 2021) and future (Holmes et al., 2020) mental health of everyone, especially those living in communities experiencing significant socio-economic challenges.

Increasing health inequality and a response proportionate to need

In the UK, the mental health impacts of COVID-19 have been experienced unequally (Campion et al., 2020) and it is now clear that inequalities in mental health and other socially patterned health inequalities 'have emerged through the syndemic nature of COVID-19—as it interacts with and exacerbates existing social inequalities in chronic disease and the social determinants of health' (Bambra et al., 2020: 4). Indeed, it has been argued that 'for the most disadvantaged communities, COVID-19 is experienced as a syndemic: a co-occurring, synergistic pandemic which interacts with and exacerbates their chronic health and social conditions' (Bambra et al. 2021: 28), including their mental health. Findings from a national probability sample survey in the UK found an overall increase in mental distress in individuals aged 16 and above compared with the previous year (Pierce et al. 2020). This increase in population mental distress was estimated to be 0.48 points higher than expected from trajectories of mental health problems from 2014-2019 and is consistent with mental health charities reporting an increased use of their helplines (Samaritans, 2020). Notably, evidence from the UK Household longitudinal study suggested that prevalence of mental health problems increased from 24.3% in 2019 to 37.8% in April 2020 and remained elevated in both May and June 2020 (Daly, Sutin & Robinson, 2020), highlighting an urgent need to find effective strategies to mitigate such detrimental outcomes across the UK population.

Since COVID-19 has occurred against a backdrop of pre-existing and still widening socio-economic inequalities in mental health, strategies which support the mental health of everyone, but especially those living in more disadvantaged and deprived communities, is urgently needed (Bambra et al. 2021; Campion et al. 2020; Marmot et al. 2020). Particularly important are prevention and early intervention strategies, policies and actions which seek to address inequalities in the 'causes of the causes' of mental health problems (i.e., the social determinants of health) and which seek to promote health equity (Marmot et al. 2020). This might involve:

- Moving away from reactive health services focusing solely on treatment for people already ill towards services that work to improve the conditions in which people live to improve health, including mental health
- An increasing focus on place-based approaches which influence the environment and social and economic conditions of local communities to improve individual and community mental health
- Developing cross-sector collaborations where multiple diverse organisations and sectors beyond health care, public health, and social care work together to address mental health
- Developing a better understanding of community mental health and health risks by assessing, and acting on, socio-economic drivers of health and supporting communities at risk of poor health
- Acting on the social determinants of health and medical treatment by health professionals and health care organisations to improve health outcomes and inequalities
- The development of proportionate universalist approaches which are responsive to those people with the greatest levels and highest risks of developing poor mental health (Marmot et al. 2010; Marmot et al. 2020)

As Marmot et al. (2010: 15): have noted, however:

Focusing solely on the most disadvantaged will not reduce health inequalities sufficiently. To reduce the steepness of the social gradient in health, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage. We call this proportionate universalism.

Movement, physical activity, sport, and sport for development for mental health

Movement, which here we take to include all levels and modes of physical activity and sport including as activities delivered in sport for development programmes, makes a strong and positive contribution to promoting and protecting mental health (Hu et al. 2020; Rosenbaum et al. 2014; Stubbs et al. 2018). It is important, however, that we do not conflate the evidence bases since physical activity (including exercise) is not the same as sport, and sport for development. That is, programmes may include physical activity and/or sport but the achievement of wider social outcomes (including mental health outcomes) is often an additional, and sometimes primary, objective of those programmes.

The emerging evidence base

In relation to physical activity, the European Psychiatric Association has argued that there is clear evidence of the benefits of physical activity for the prevention and treatment of mild to moderate mental health problems (Stubbs et al. 2018). The mental health benefits of physical activity are numerous and extensive, and include (Shvedko et al. 2018; Vancampfort et al. 2017):

- Improvements in social cognition, functional capacity, and quality of life
- Increased social interaction, shared experiences, optimism, and life satisfaction

- Reduced stress, worries, cognitive decline, and loneliness
- Improved self-esteem, increases in perceived social support and a sense of belonging, often facilitated through social interaction and a sense of belonging
- Improvements in psychotic symptoms in schizophrenia and affective disorders
- Reductions in depressive symptoms (including low mood and energy)

In adults, empirical studies have also reported significant reductions in psychological distress (Hamer et al. 2009), improved sleep quality in those with depressive disorders (Jahrami et al. 2021) and a protective effect against incidences of depressive and anxiety symptoms (Firth et al. 2020) for those who participate in physical activity. While evidence of the mental health benefits of physical activity for children and young people is less established, Biddle et al. (2019: 153) have noted that 'physical activity is associated with mental health in young people. A causal association can be claimed for cognitive functioning, in part for depression, but not currently for self-esteem', and more research is needed on the links between anxiety and physical activity. They also add that while physical activity is often perceived as being 'essentially "good" for young people', the positive mental health benefits of physical activity 'may depend on the experience of physical activity and the context it takes place in' (Biddle et al. 2019: 147) and the various mechanisms which explain changes in mental health because of changes in physical activity (Biddle et al. 2019).

A similar conclusion can also be reached in relation to community sport and sport for development where there has been a rapid growth in the number, variety, and delivery models of mental health related programmes for children and young people and adults (Smith et al. 2022). Indeed, although the scientific evidence may provide a strong case for the mental health benefits of engaging in physical activity (including exercise) and including these in the routine delivery of programmes and interventions to people with mental health problems, the evidence base for community sport and sport for development programmes is presently much less developed and robust (see Smith et al. 2016). For children and young people in particular, community sport has been identified as a potentially important mental health promotion setting (Vella, 2019; Vella et al. 2021). Sport participation has been linked to more favourable mental health outcomes alongside positive social development and reducing social exclusion (Graupensperger et al. 2021), with greater participation in team sport prospectively predicting fewer symptoms of depression and anxiety at subsequent timepoints (Graupensperger et al. 2021). Faulkner and Tamminen (2016: 414) have also suggested that 'there is good evidence that sport participation, particularly team sport participation, may have a protective effect against depressive symptoms', but evidence of the impact of sport participation on self-esteem in young people is inconsistent.

More research is needed, however, on the use of community sport as a vehicle for mental health promotion among children and young people not least because 'the potential of supporting mental health at an earlier age could have important effects later in life' (Swann et al. 2018: 56). It is also the case that, for children and young people and adults, we need to recognise that different kinds of sports participation will likely generate different mental health outcomes for different groups of people, and those outcomes will be produced in different social contexts where community sport and sport for

development programmes are delivered (Smith et al. 2016). Closer examination of the various contexts, mechanisms and processes associated with the differential mental health outcomes of sport participation is warranted, and on the basis of current evidence it might be concluded that participating in sport within community settings, and as part of sport for development programmes, may make a positive contribution to aspects of mental health and may be a helpful component in preventing and treating mental health problems, but this is likely only to occur under specific circumstances which are progressively but not yet fully understood (Smith et al. 2016).

Programme components influencing mental health outcomes

Social support from a trusted source is known to play an important role within community-based group physical activity programmes in helping people to initiate activity through physical presence and emotional support (Quirk et al. 2020). Peer-led programmes and programmes involving peer-support, have shown promise for yielding improvements for mental health, exercise related psychosocial benefits, knowledge relating to self-care (Tweed et al., 2020), social identity (Stathi et al., 2019) and social connections (Graham et al., 2017), as well as persistence to, and re-engagement of physical activity (Mind, 2017). Peer support, and the role of the expert by lived experience, warrants greater focus as the effectiveness of, and context in which peer support programmes can better promote physical activity for people with mental health problems is not well understood (Quirk et al., 2017).

The role of significant others, especially coaches, in supporting the mental health of participants in community sport and sport for development programmes has also become of increased interest to researchers, though the evidence base remains under-developed. In response to the public mental health challenge, there is an increased policy expectation that sports coaches could and should play a role in supporting the mental health of children, young people and adults in many countries (Smith et al. 2022; Smith et al. 2020; Vella & Liddle, 2020). In light of current government sport policy, Sport England (2021), Mind, and UK Coaching (2021), for example, have identified the importance of coaches' roles in supporting the mental health of others *and* of their own mental health, and have developed the sector-specific Mental Health Awareness for Sport and Physical Activity+ training programme to support coaches. The #21by21 campaign, led by the Sport for Development Coalition, also provided mental health training to 41,614 coaches and volunteers (25,493 completed the training virtually) who felt that the training improved their confidence and skills to support the mental health of community sport participants. Evidence from Australian studies has revealed that many coaches recognise they have a role to play in the identification, referral and prevention of mental health problems, in the facilitation of participant wellbeing, and in the promotion of mental health through the development of positive relationships with participants (Ferguson et al. 2019; Gulliver et al. 2012; Mazzer and Rickwood, 2015a,b).

Despite coaches wanting to support mental health, many of them report being underprepared, lack sufficient confidence and skills to act, and require additional training to support the mental health of

participants (especially children who are often more likely to confide informally in a coach) (Ferguson et al. 2019; Mazzer and Rickwood, 2015a,b; Smith et al. 2020; Vella & Liddle, 2020). As a result, there is an urgent need to develop and implement holistic evidence-based, context-specific mental health literacy programmes for coaches which are accessible, practical, and proportionate to the mental health needs of participants (Bissett et al. 2020, Vella &Liddle, 2020), and which support coaches' own mental health (Smith et al. 2020). The provision of such training has been advocated as a potentially effective way of: starting conversations about mental health and reducing the stigma associated with it; improving knowledge of the prevalence of mental health problems; signposting to relevant professional mental health support services; and promoting an understanding of mental health as part of overall wellbeing (Ferguson et al. 2019; Gorczynski et al. 2020; Mazzer & Rickwood, 2009, 2015a,b; Vella & Liddle, 2020). In Australia, mental health literacy and resilience focused training provided as part the Ahead of the Game programme for 12-17-year-old males engaged in community-based organised sports clubs had significant benefits for depression and anxiety literacy, resilience and wellbeing, intentions to seek help from formal sources, and confidence to seek mental health information (Vella et al. 2021). A review of the *Safe, Fit and Well* programme delivered by StreetGames in the UK also revealed how the provision of mental health training (Mental Health First Aid) improved the mental health literacy of community sport coaches working with children living in low-income communities and increased coaches' engagement with mental health services (John & Mansfield 2018).

Public policy landscape

Before we move on to discuss the second phase of our evidence review, it is important to note that, in England at least, the promotion of public mental health and prevention and treatment of mental health problems through participation in physical activity or exercise, as a formal goal of mental health policy, has until recently been a generally neglected feature of the public health policy landscape (Smith et al. 2016). Similarly, until the publication of the UK Government's current sport policy, *Sporting Future* (HM Government, 2015) and Sport England's *Uniting the Movement* strategy (Sport England, 2021), public mental health has also been a largely ignored priority of community sport and physical activity policy in England. Indeed, despite the reported mental health benefits of engaging in movement and sport for development programmes, government policy in this area is a relatively new ad hoc development and there remains no lead organisation with overall responsibility for mental health in this sector. This is something which requires urgent consideration if the potential mental health benefits of movement and sport for development are to be realised as the long-term impacts of COVID-19 become known.

The emerging public health and social care policy context in the UK, including the establishment of the Office for Health Promotion and Disparities, the introduction of Integrated Care Systems by March 2022, and a new Health and Social Care Act which emphasises, among other things, the importance of workforce planning, will likely require greater attention to be focused on the production of positive mental health outcomes. The importance of mental health following COVID-19 was also recognised in the new Green Book supplementary guidance on wellbeing which noted how 'physical and mental health are consistently among the most important factors for wellbeing' (HM Treasury, 2021: 61), and that

programmes including those involving sport and cultural activities can be important contexts for generating positive mental health outcomes.

Finally, the importance of addressing mental health as part of the Levelling Up and Building Back Better agendas was identified by the Secretary of State for Health and Social Care, The Rt Hon Sajid David, who noted that 'Realising our mission to level up in health means tackling our social backlog – in mental health and public health – with the same spirit and sense of urgency with which we all tackled the pandemic' (Department of Health and Social Care/Javid, 2021). Javid also remarked that COVID-19 has been a 'disease of disparity', one that has revealed significant pre-existing inequalities in health (especially mental health) which requires urgent attention: 'whether it's in the NHS or across the country, it's vital people are getting the right kinds of support…mental health…(is) an indispensable part of levelling up in health – and the key to a safer, fairer and more supportive society' (Department of Health and Social Care/Javid, 2021).

Methods and approach of the report

Realist reviews have been conducted in mental health (Duncan et al. 2018), sport (Griffiths & Armour, 2014) and physical activity settings (Harden et al. 2015) in response to suggestions that traditional systematic review approaches are inappropriate to evaluate complex social programmes and interventions (Emmel et al. 2018; Greenhalgh et al. 2014; Pawson, 2006, 2013; Pawson &Tilley, 1997). Characterised by their explanatory focus and appreciation of contextual complexity, realist reviews go beyond asking whether a programme or intervention works by unpacking what works, for whom, in what circumstances, in what respects, over what duration, with what outcomes and why (Goodridge et al. 2015; Pawson, 2013). This helps provide a fuller understanding of the individuals, groups, social relationships and wider societal, economic, and cultural processes which help explain the outputs, outcomes and impacts of programmes and interventions. Using the principles underpinning a realist review (Pawson, 2006, 2013; Pawson et al. 2005), a non-linear process was undertaken by evaluating evidence from a range of sources. The review which informed this report involved three phases. The first phase involved a systematic search of the academic peer-reviewed empirical literature relating to physical activity, sport, sport for development, and mental health outcomes during COVID-19 (March 2020-May 2021). The second phase involved synthesising relevant policy documents, grey literature and submissions of evidence from primary and secondary care providers and community organisations who support movement for mental health outcomes and who responded to a call for submission of evidence by the Sport for Development Coalition and Mind between March and May 2021. The final phase involved stakeholder engagement activities facilitated by Mind and the Sport for Development Coalition, including a roundtable consultation with key stakeholders from across the sport, physical activity and health sectors, a focus group held with six experts by experience, and a stakeholder discussion with representation from Sport England and Department for Digital, Culture, Media, and Sport. A full list of participating organisations can be found in the Appendix.

In the first phase, data were extracted relating to the following outcomes: type of evidence (peer-reviewed or community submission), information on programme or intervention context, sector delivery (primary care, secondary care, community), participant group (including programme or intervention location and/or setting), study/project aims, overview of methods and procedures, summary of main findings and outcomes, and implications and recommendations. The systematic search resulted in 12347 hits, 21 of which contributed to the synthesis. Submissions of evidence included 33 projects, all of which were included in the synthesis. Based on insight of programme or intervention context and mechanisms of change, and how these relate to the outcomes and impacts produced, our findings led us to identify several key messages and recommended actions that were disseminated to key stakeholders and experts by experience for discussion and subsequent revision following feedback. Findings from these consultation exercises were synthesised alongside the empirical data and community submissions to inform the key recommendations and associated recommended actions.

Findings

In this section we present our key findings and group these into four sections for ease of presentation: primary care, secondary care, community open programmes and community targeted programmes. This is followed by 5 key recommendations and associated recommended actions intended to inform future policy and practice which promotes mental health and movement via physical activity, sport, and sport for development. In this report, primary care services are defined as services that provide the first point of contact in the healthcare system, and secondary care services provide expert care and specialist treatment for patients who have been referred from primary services (NHS England, 2021). Community open projects refer to population level programmes seeking to engage the general public in movement activities. Community targeted projects refer to those projects which engage specific individual groups within the population, including but not limited to: geographical regions, mental and/or physical health needs, ethnicity, age, and gender.

Primary Care

Prior to the COVID-19 pandemic, several approaches in primary care have shown small yet positive effects for promoting movement for general mental health outcomes. Such approaches largely consist of brief interventions (i.e., lifestyle advice) and exercise referral schemes (ERS) (Lion et al. 2018). The most notable challenges regarding the integration of movement for mental health into primary care prior to the COVID-19 pandemic include:

- Primary health care professionals (HCPs) have insufficient knowledge to provide physical activity and behaviour change advice (Din et al. 2015). Inconsistent reporting of programme outcomes and a lack of robust and standardised measures limit the evidence available for HCPs to understand the efficacy of ERS (Shore et al. 2019)
- Movement promotion has less impact if restricted to primary care facilities and professionals – collaborative community work, referral pathways, and social prescribing is recommended, but are not used effectively (van der Wardt et al. 2021).
- Despite estimations that around 90% of mental health problems are managed in primary care (Mind, 2018), people with mental health problems comprise a low number of participants in ERS and community sport and physical activity groups (Tobi et al. 2017)

Our search returned 1 empirical paper and 2 community sessions. This lack of available evidence of movement programmes for mental health in primary care was notable prior to the pandemic, and offers considerable challenge to researchers, programme implementors and policy makers seeking to change policy and practice relating to movement and mental health. It is likely that the explanations for the paucity of available evidence in primary care highlighted during our synthesis of evidence were existent prior to COVID-19, and exacerbated during the associated lockdowns and restrictions:

- There is limited empirical evidence of the benefits of exercise referral schemes and social prescribing, particularly around targeted issues of inequality for mental health
- HCPs are concerned about the availability and accessibility of localised provision. Schemes are often transient in nature with precarious funding for community groups
- Formal training for primary care HCPs on movement and mental health is lacking, and evidence of efficacy of physical activity programmes is unavailable to GPs. Referral pathways between primary care and community projects are tenuous and under-utilised

Whilst increased capacity and enhanced access to secondary services is essential for those with more persistent mental health problems, increased resources for community initiatives to support mental health is needed in primary healthcare (Sidhu, 2019). Social prescribing (defined as the referral of patients from a GP to community sources of support) is crucial to this endeavour. Although delivered prior to COVID-19, Wesport Active Partnership provided evidence of a holistic social prescribing service through GP surgeries aimed at those with long-term mental or physical health problems and/or welfare issues. All participants perceived improvements to their mental and physical health (low mood and mental well-being scores). Project leaders indicated the collaborative partnership between the GP surgery and the community project workers was crucial for long-term impact of the programme, and to facilitate the recruitment of clients. Such collaborative working between primary care and community programmes is particularly critical for the sustainable delivery of movement and mental health programmes, particularly in the COVID-19 recovery period. However, as such is the case in many of the community submissions, little information was provided on the unsuccessful aspects of the project, potential programme theories of change, unintended outcomes, or challenges which could be useful for other, similar programmes, and limits the strength of evaluation of such projects.

Training and supporting Health Care Professionals

Although social prescribing programmes have shown positive outcomes, there are number of possibilities explaining the under-use of social prescribing and exercise referral schemes. Alongside a lack of visibility of community schemes, and potential reluctance of GPs to refer patients to schemes due to limited mental health literacy, shortages of project evaluation may be contributing to the under-use of referral pathways, as evidence of programme efficacy is not reaching or is unavailable for primary care HCPs. To improve referral pathways, providers of movement programmes that promote mental health must increase the communication of evidence from community schemes to primary care HCPs to identify the different impacts and outcomes of such programmes. Further, to emphasise that mental health is the collective responsibility of all relevant organisations, there is an urgent need to promote new and existing training opportunities to support all professionals working in movement and/or mental health, as GPs have stated that the lack of formal training on community engagement and social prescribing hampers the regularity of referrals to community programmes (Aughterson, Baxter & Fancourt, 2020). In this study, informal evidence presented to GPs via feedback from the group or link worker provided a significant incentive for GPs to increase referrals to community groups.

Active Suffolk Two Rivers Medical Practice project provided evidence supporting the development of sport, physical activity, and mental health training for GP services whereby 33 clinical and non-clinical staff at the medical practice received physical activity training. Preliminary findings indicated that the project has successfully increased physical activity behaviours and access to localised services and activities. A subsequent evaluation carried out by two postgraduate students from Loughborough University working in collaboration with Active Suffolk confirmed significant improvements in levels of physical activity and found sleep quality, known to be associated with mental health, also improved (Little & Kinnafick, 2021). Qualitative work revealed the importance of the initial touch points with GPs and link workers for initiation into the programme, and peer-support and a sense of autonomy facilitated through 'activity menus' being key for adherence (Simmons & Kinnafick, 2021). Importantly, this evaluation included insight from those who had not initiated upon referral and from those who had dropped out of the programme. Understanding 'what has not worked' is seldom reported in programme evaluations due to the difficulties in recruiting such individuals to the research. These extended findings indicate collaborations between academic institutions and programme deliverers may hold potential for gaining more useful insight using a cost-effective approach where evaluation funding is limited.

Action: To reduce the 'postcode lottery' of availability and accessibility of localised community programmes and accelerate cross-sector working, referral pathways from primary care to community sport, physical activity, and sport for development programmes must be strengthened. These can be achieved by increasing the number of link workers, educating the primary care workforce on movement for mental health, and increasing availability of evidence for primary care professionals to ensure appropriate and effective programmes are available to the recipient.

Colleagues within stakeholder activities unanimously agreed that improving formal education on movement, sport for development, and mental health for primary care HCPs, link workers and community workers is essential to improve referral pathways and cross-sector working. COVID-19 has exposed the weaknesses of single sector responses to addressing complex mental health problems, and collaborative cross-sector working is urgently needed for more effective delivery of programmes promoting movement for mental health. Stakeholders suggested that cross-sector working should include increased capacity for link workers and community health workers to promote sport for development, sport and physical activity services in the local area to better support the transition of clients to sustainable supported groups.

Action: To improve awareness of the benefits of moving for mental health, primary care providers should recommend staff undertake training, for example The Royal College of General Practitioners (RCGP) Physical Activity toolkit as part of the Moving Healthcare Professionals (Sport England and Public Health England) online training. Accessing these kinds of practical resources to encourage discussions around movement for mental health in routine care is also needed

Recent work focusing on inequalities in ERS indicated that, alongside improving referral pathways generally, forming working partnerships between GP surgeries and community schemes refined the

specificity of referral pathways, whereby participants with individual barriers were referred to appropriate local services (Oliver et al. 2021). Lived experience representatives discussed the importance of referral specificity and the need to develop an insight into local communities to increase engagement. The integration of those with lived experience into the referral pathways and recruitment strategies for community projects may provide reassurance to potential programme participators that the programme is appropriate for their individual experiences.

Action: Healthcare providers should use place-based models of investment which better reflect the mental health needs of local communities and neighbourhoods.

Health inequalities and social prescribing

Despite a need to improve referral pathways to increase the number of participants accessing community schemes, a blanket increase to supported community work may not be effective to tackle the pervasive and unequal impact of COVID-19 in the local area. Exercise referral schemes are typically aimed to align with proportionate universalism (Carey, Crammond & De Leeuq, 2015), however, COVID-19 has amplified and widened pre-existing mental health inequalities, and academics have recommended primary care providers widen access to schemes informed by local health priorities rather than seeking general expansion (Oliver et al. 2021). Thus, community programmes with a heightened focus on spaces and places within neighbourhoods that are accessible to diverse groups are needed within collaborations between primary care and community programmes to develop locally relevant solutions. Stakeholders indicated that there is an urgent need to embed social prescribing in primary care for all ages, with a targeted strategy for those experiencing inequalities. Issues such as rurality, transport, and accessibility must be considered alongside capacity and resource constraints of local facilities. In line with the NHS Long Term Plan, strategies to improve social prescribing include increasing the number of link workers (with 1000 new social prescribing link workers aimed to be in place by the end of 2021), which will allow longer periods of time to be spent engaging with each individual (Tierney et al. 2020).

Action: Issues of inequality (i.e., those living in poverty, those with long-term health conditions, and culturally and ethnically diverse populations), capacity and resource (i.e., transport, accessibility, and wider system) should be the focus of social prescribing, programme and intervention design, delivery, and evaluation.

Balancing standardised reporting with context specific evidence

A prominent barrier to integrating social prescribing more widely into primary care, highlighted both in the empirical literature and community submissions, is the lack of formal evidence on the benefits of community schemes and the wider notion of social prescribing. Many community programmes are collecting outcome measures, however the lack of consistent and standardised reporting, and the communication of such outcomes with primary care is problematic (Shore et al. 2019). Standardised

reporting of intended and unintended outcomes of programmes and service evaluations, and context specific forms of evidence, are needed to capture what works, for whom, in what contexts, over what duration, and with what outcomes, and provide important implications in how the impact of such schemes are assessed and evidence is made available to those who make referrals. Further, although it is important for community providers to continue to disseminate successful project outcomes, providers might also help identify unitended outcomes to offer a balanced evaluation of services, whilst also providing information on barriers and facilitators to future programme developers. Further discussion on outcome measures is provided in the community open section.

Secondary Care

Prior to COVID-19, there have been numerous calls to integrate movement into routine mental health care as a key component of secondary care provision (Stubbs et al. 2018). Prioritising movement at a value synonymous with recognised mental health treatment may help advocate the implementation of structured physical activity into secondary services (Deenik et al. 2019). There are a range of long-standing issues regarding the integration of movement into routine care (Rogers et al. 2019), including:

- Individuals with mental health problems experience many physical, psychological, and social barriers to engaging in physical activity and require additional support (Firth et al. 2016; Rogers et al. 2021)
- There is limited funding, resources, and structural support available in secondary mental health services to implement sport and physical activity into routine care (Pratt et al. 2016)
- HCPs have limited education regarding physical activity as a singular or additional treatment for mental health problems, and a lack of time to promote physical activity amongst other priorities (Happell et al. 2012; Kinnafick et al. 2018)

As in primary care, movement and mental health evidence in secondary care is sparse, with our search returning 1 empirical article, and 3 community submissions. Overall, the impact of COVID-19 on the secondary care system include:

- Disproportionately affecting those in secondary care services already experiencing inequalities. In many cases, individuals living with physical and/or mental health problems are experiencing a decline in mental health and an increase in mental health symptoms due to adverse psychological consequences of the pandemic
- Community programmes working with secondary care services have resulted in positive outcomes (i.e., improved mental health and reduced loneliness), however referrals from secondary care are still not operating as efficiently as is necessary
- There is now a more urgent call for the integration of sport and physical activity for mental health outcomes within practice and policy within the mental health sector

Lifestyle behaviours of individuals in secondary care settings

Research exploring the impact of COVID-19 on lifestyle behaviours in more than 500 individuals attending weight management services found that 55% of participants had experienced declines in their mental health, healthy eating habits, and sleep duration during the first lockdown (Brown et al. 2021). Over 60% reduced their physical activity levels, with those experiencing more severe depression and/or higher BMI noting the greatest decrease in physical activity. Although studies have indicated that in some cases, individuals in the general population increased their physical activity levels during COVID-19, it is likely that those experiencing declines in mental health have also been disproportionally impacted regarding physical activity behaviours, with mental health status likely an important driver of worsened health behaviours (Brown et al. 2021). Research also suggests a heightened risk of individuals developing and/or worsening clinically significant mental health problems (Holmes et al. 2020) and increasing demand for referrals to secondary services (Chen et al. 2020).

Action: While people are under secondary care, to maximise benefits of physical and mental health (parity of esteem) people with mental health problems should be supported – where appropriate - to discuss and engage in opportunities to be physically active including the barriers, facilitators, and motivations for doing so.

During Covid-19 there has been a dramatic increase in admissions and referrals to eating disorder services for both adults and young people (Marsh, 2021; NHS, 2021), alongside the development of lengthy waiting lists (Solmi et al. 2021). Whilst there is little empirical research exploring the impact of COVID-19 on physical activity in UK secondary services, there is learning which can be taken from research conducted overseas. Studies have noted an exacerbation of illness symptoms (increases in binge eating, purging, restricting and over exercising) as a psychological consequence of the pandemic (Phillipou et al. 2020; Scharmer et al. 2020). It is crucial that alongside greater psychological support, HCPs working in secondary care are aware of the adverse psychological consequences of lockdown for those with eating disorders, and responsible messaging around the detrimental impact of physical activity in this population group is available to all secondary care staff to offer support in these services.

Action: Given the negative impact of COVID-19 on mental health, improvements in mental health and movement literacy should be made through relevant, *responsible*, clear, and evidence-based messaging. Organisations might usefully consult the Digital Marketing Hub delivered by the Chartered Institute for the Management of Sport and Physical Activity (CIMSPA) and supported by Sport England to support this messaging and to encourage people to become active

Sport and physical activity programmes and referrals in secondary care settings

Despite an increased need for secondary mental health services during the pandemic, the capacity of such services was reduced (Liberati et al. 2021). Community programmes have provided evidence

supporting the efficacy of sport and physical activity programmes operating with individuals in secondary mental healthcare services. For example, We Care Stockport and Ealing IAPT services worked collaboratively with secondary care (mental health care and services for those who are homeless or seeking shelter from abuse) to deliver movement sessions to support mental wellbeing. Both programmes evidenced successful outcomes, including improvements in mental health symptoms, reductions in social isolation, and improved motivation and confidence to exercise. Despite overall positive results, there were notable challenges of working with secondary care services. Firstly, over 60% of participants indicated that there is insufficient availability of physical activity in their local area that met their needs (We Care Stockport). These findings support the need for an improvement in the number of place-based schemes for sport for development, sport and physical activity provision to become inclusive, accessible, and representative of the demographic and socio-economic needs of the local area. Secondly, despite successful outcomes, community project leaders noted that gaining referral to the project was challenging, with secondary care HCPs not feeling confident to recommend sport and physical activity for mental health or not considering activity as important as talking therapies. Much like challenges noted in primary care, strengthening referral pathways within secondary care so service users can begin to, or continue, accessing physical activity in the community was also unanimously agreed within the roundtable discussion. One colleague stated: *"Mental and physical health should be treated in tandem, but professionals need to be appropriately supported and connected to enable that"*.

In line with Sport England and Public Health England's Moving Healthcare Professionals initiative, colleagues, academics, and community programme providers have endorsed the need to transform mental health care by systematically embedding sport and physical activity pathways as part of routine care in secondary services. One colleague stated: *"It is important to acknowledge the lack of opportunities to participate in physical activity, exercise and sport in secondary care, especially through COVID restrictions. If we are looking to advocate exercise for mental health, this needs to be an opportunity [situated] at the core of care when people are admitted [to hospital] for supporting someone's physical and mental health."* A first step to achieve this is a need for physical activity to be embedded in secondary care services and held at a value synonymous with more traditional mental health treatment (medication and psychotherapeutic intervention) to endorse holistic health. Initiatives aiming to change physical activity culture within hospitals to encourage patients to move more have been developed (i.e Moving Healthcare Professionals Active Hospitals training and physical activity toolkit) and should be used to initiate a culture change towards embedding movement into individual care plans whilst under secondary care, and as part of the Care Programme Approach following discharge from secondary services.

Action: As part of the Care Programme Approach or discharge plan, secondary care mental health workers should provide opportunities to engage with community groups which promote movement for mental health to facilitate more effective, sustainable, and supportive transitions from secondary care to local community mental health settings.

Oxford NHS Trust delivered a quality improvement project to embed physical activity into mental health pathways. The project delivered Mind's Mental Health Awareness in Sport and Physical Activity (MHASPA+) training to over 200 coaches, instructors and therapists within the network and encouraged the integration of physical activity into their conversations with service users. Clinicians stated physical activity consultations were relevant to most of the service users they assessed, however, project evaluators indicated that partnerships between mental health and sport and physical activity providers was key to ensure sustainability of the programme and share success. It was also noted that a 'one size fits all' approach is not appropriate for secondary mental health care services, and targeted strategies to engage multiple audiences were needed. Whilst project's such as the Oxford NHS Trust project provide an important starting point to increase the awareness of movement within the mental health sector, continuing to build education opportunities for upskilling HCPs within the mental health care sector on sport and physical activity is vital to this endeavour.

Action: Increase opportunities for educational provision on the benefits of movement to staff within the cross-sector response. To increase movement literacy, secondary care service staff should be encouraged to engage in relevant education opportunities such as Active Hospitals as part of the Moving Healthcare Professionals training (Sport England and Public Health England), including the Active Hospitals physical activity toolkit

Community Open

The impact of lockdown and social distancing measures on community sport, physical activity, and sport for development has been substantial. Whilst the pandemic has magnified the positive and under-valued impacts of community sport and physical activity on health and wellbeing (e.g., improved self-esteem and social connectedness), it has also exposed the existing challenges such as limited investment and vulnerable business models, that have obstructed the sectors response to the pandemic (The Commonwealth, 2020). Our search returned 16 items (11 empirical articles and 7 community submissions), and the main findings relevant to the impact of the COVID-19 pandemic which we will discuss on movement and sport for development are:

- Population surveys highlight reduced levels of physical activity behaviours in several groups: women, young adults (16-24) and older adults (+75)
- The pandemic has differentially impacted certain groups of society regarding opportunity and access to physical activity and sport
- Empirical work notes an increase in weight and body-image related physical activity changes and mental health at community level during the pandemic, particularly a worsening of eating disorder experiences and growth of disordered eating amongst young women
- Community programmes have reported improved mental health outcomes, with higher physical activity levels generally associated with better mental health. However, findings are not consistently reported and are not available to other community providers

Disproportionate impact of the pandemic on sport and physical activity participation

COVID-19 has exacerbated the existing inequity in population mental health, with certain subgroups disproportionately affected by lockdown restrictions (i.e., the socio-economically disadvantaged, ethnic minorities, and those with a mental health and/or long-term health condition) (Daly, Sutin & Robinson, 2020). Epidemiological research in the early stages of the pandemic found that mental health symptoms significantly decreased with increasing physical activity, indicating that higher levels of physical activity during the lockdown period is associated with better mental health status (Jacob et al. 2020). However, due to reduced opportunities and access to sport and activity facilities, and many groups self-isolating or shielding due to having an at-risk condition, health behaviours such as physical activity are likely to be associated with existing health inequalities during the pandemic (Abrams & Szefler, 2020). Thus those that are already experiencing an enhanced psychological vulnerability and barriers to sport and physical activity pre-COVID-19 are also amongst those struggling to become or remain active during the COVID-19 related restrictions and lockdowns. Data from Sport England's Active Lives' survey (2020) indicate an unprecedented decrease in physical activity across the population during COVID-19 (0.7 million fewer active, and 1.2 million more inactive adults), with increased anxiety and decreased happiness coinciding with the largest reductions in activity when comparing data to 12 months prior to the pandemic. Those in routine jobs, those who are unemployed or who have never worked are the least likely to be active, and whilst activity levels have fallen amongst all groups, the biggest reduction in physical activity is amongst lower socio-economic groups. The pandemic has seen an overall decline in activity for women, older adults, and those with long-term health conditions, alongside substantial decreases in activity for Black and Asian adults in comparison to those who are white or of mixed race.

Action: Since COVID-19 has amplified and widened existing mental health inequalities, the resourcing, delivery, and evaluation of services must be made available at a scale and intensity proportionate to those who needs them most, which is consistent with the principle of proportionate universalism. Providing everyone with a fair and equal opportunity to live a long, healthy life (i.e., the promotion of health equity) should be central to all policies and practices intended to support mental health, including through the promotion of movement.

Empirical studies show similar results, with the largest reductions in physical activity independently associated with having a COVID-19 at risk condition, greater deprivation, having a higher BMI, or being younger (Naughton et al. 2021). Data from Faulkner et al. (2021), Naughton et al. (2021), and Sport England's Active Lives Survey (2020) all indicate a negative change in physical activity behaviours in young adults compared to all other age groups. Notably, findings from Sport England (2020) indicate that those aged 16-24 are driving this decrease in young people's physical activity, with their perceived opportunity to exercise (due to closures of sports facilities, gyms, and physical activity groups) substantially reduced. As younger people have generally displayed more notable 'unhealthy' behaviours, there is an urgency to disrupt such short-term changes to avoid developing long-term habits.

Action: To challenge pre-existing and COVID-19 accelerated health inequalities, care providers, programme designers and programme implementors should implement differential pricing models (based on deprivation and other health inequality data) and work with locally trusted and culturally appropriate activity providers to engage diverse communities (e.g., faith based, youth clubs, community hubs as well as gyms and sports clubs

There is, however, evidence indicating that lockdown measures have facilitated a positive increase in physical activity in other groups. A cross-sectional multi-country analysis of an online survey during lockdown in April and May 2020, indicated that 74% of individuals who did not meet recommended physical activity guidelines before COVID-19 increased their physical activity during lockdown (Faulkner et al. 2021). Although it is important to note that there may be demographic explanations to these findings (most participants were of white ethnicity, and the average age was 44 years), these findings suggest that national 'stay at home' guidance provided opportunities for inactive individuals to instigate important changes in health behaviours. Notably, individuals who positively changed their physical activity also reported better mental health compared to those who had reduced their physical activity levels. Thus, although lockdown measures have introduced new or exacerbated existing barriers to those already experiencing health inequalities, changes to work or social patterns (i.e reduced commute, and increased access to online platforms) may have facilitated additional opportunities to engage in physical activity for others. It is yet to be seen whether such increases in physical activity behaviours have been sustained as individuals transition back to original routines, and lockdown 'novelty' subsides.

Action: Because COVID-19 has reinforced the significance of social inequalities for mental health, a more sustained focus on the causes and consequences of these inequalities and their social determinants (i.e., the conditions in which people are born, grow, work, live and age) is *urgently* needed.

Whilst much of the empirical work indicates that those with mental health problems are more likely to report declines in activity during COVID-19 (Robinson et al. 2020), it is crucial to recognise the impact of the pandemic on those with mental health problems is not homogenous. Empirical surveys have indicated that COVID-19 may be a catalyst for the development or worsening of disordered eating (Robertson et al. 2021). In Robertson et al's (2021) study, women, young people, and those with mental health conditions were more likely to report changes in thoughts and behaviours regarding eating and appearance and present compulsive behavioural changes (such as increased physical activity) driven by heightened anxiety and appearance-based concerns. These findings indicate an increase in disordered eating presentations may be amongst the collateral impact of COVID-19, which was provisionally supported by contributors to the consultation exercise in secondary care services noting significant increases in demand for services during the lockdown. When promoting physical activity for mental health, providers should be cautious to ensure messaging is clear and responsible, with the acknowledgement that physical activity is not a panacea for all mental health problems and can have detrimental consequences for some.

Action: Programme providers should understand and recognise the potential challenges with encouraging people who exercise compulsively and experience body image concerns to ensure messaging is both clear and safe to those who receive it. Programme providers should attend relevant training opportunities (e.g., Mind's physical activity and mental health toolkit, webinars, and e-learning)

(Re)engaging vulnerable groups in sport and physical activity for mental health

Shur et al. (2020) highlight the need for targeted physical activity campaigns to help re-engage vulnerable groups (including those who experience eating problems) of society in sport and activity, with a need for place-based approaches built into both local and national government decisions. Including the voice of those with lived experience of mental health problems in the design of community programmes may help identify barriers of vulnerable groups to activity, inform localised and targeted schemes and facilitate transition of vulnerable groups back to activity.

Stakeholders enforced the need for continued and new flexible and designated funding to target inequalities as imperative to tackle the pervasive impact of COVID-19 on vulnerable groups. Sport England provided a range of funding options to support sport and physical activity during the COVID-19 pandemic, with Return to Play, Community Leisure Recovery, and the Tackling Inequalities funds all providing an agile and robust response to the challenges faced during the pandemic. Stakeholders strongly endorsed the effectiveness of the Tackling Inequalities fund due to a heightened focus on under-represented groups and a flexible, participatory approach to engage with local communities and partners. Given the demand for, and success of, such flexible funding streams in addressing issues of inequality and facilitating quick access to funding diverse groups, the implementation of similar funding streams available and accessible to support local and targeted issues of mental health must be continued, developed, expanded, and sustained following the end of the pandemic.

Action: Given the success of more flexible funding opportunities to address the impact of COVID-19 on social and health inequalities (e.g., Sport England's Tackling Inequalities Fund), the implementation of similarly responsive and accessible funding streams which better support people's mental health needs, and those of their local communities, should be continued and expanded. This includes increased health and social care funding for the use of movement to support mental health.

Including the voice of those with lived experience of mental health problems in the design of community programmes should be prioritised to better identify and address barriers faced by vulnerable groups to sport and physical activity, inform localised and targeted schemes and facilitate transition of vulnerable groups back to activity. While flexible funding streams focused on addressing issues of inequality and facilitating quick access to funding diverse groups should be continued, developed, expanded, and sustained following the end of the pandemic. Funders and commissioners of movement-based mental

health programmes and interventions should include as a key criterion for investment evidence of effective multisector partnership working, especially in health and social care, sport and physical activity, and the voluntary and community sectors through Voluntary Community and Social Enterprise (VCSE) organisations.

Strengthening the evidence base for movement and sport for development and mental health
Stakeholders involved in the consultation exercises identified three unanimously supported suggestions to improve the accessibility of funding streams. Firstly, to support inclusion of non-traditional evidence into funding bids (including the voice of lived experience representatives). Secondly, improving the availability of evidence and facilitate translation to community providers, and finally, adapting the structure of funding applications with an emphasis on community ownership to address inequalities exacerbated by COVID-19. There are a vast number of community projects evidencing mental health improvements through sport and physical activity, but there is little consistency of how outcome measures are collected and reported. Currently, evidence from many community programmes largely includes information on attendance figures, individual case studies and forms of anecdotal feedback.
To strengthen both the impact and the evidence base for movement and sport for development and mental health, community providers may seek to explore partnerships with academic colleagues or institutions with evaluative research experience. An example of a successful working partnership is the collaboration between Oxford University and RED January, exploring the impact of using a community-based physical activity initiative to support mental health and target health inequality. Academic partnerships with community providers have been encouraged to enhance the robustness of collected data, improve dissemination of programme findings, and facilitate two-way meaningful engagement with communities (Centre for Mental Health, 2021).

However, it is important to note that academic collaborations are not viable in every circumstance and independent programme evaluation will remain undertaken by community providers in many cases. In such cases, a strategy to further enhance the impact of programmes is to encourage standardised reporting of programme outcomes. To achieve this, funding providers may consider the integration of non-traditional evidence (i.e., qualitative feedback and case studies) and evidence of unintended outcomes into funding applications. Incorporating non-traditional evidence can ensure all relevant evidence is included, alongside specific detail on what works and why, for whom, and in what circumstance. Incorporating such evidence may ensure wider representation of community voice and improve the quantity and value of the contributions of lived experience representatives to designing and evaluating programmes. To ensure a degree of comparability between programmes, funders should consider developing guidance on programme evaluation (including examples of non-traditional evidence) to ensure smaller community providers without access to independent evaluation teams are not disadvantaged when reporting outcomes and evaluating programmes.
Action: Standardised reporting of the outcomes (intended *and* unintended) of community programmes and service evaluations using both validated tools and context specific forms of evidence (e.g., interviews and case studies with key stakeholders), alongside expected theories of change, are needed to capture what works, for whom, in what contexts and with what outcomes.

The current state of evidence for movement, sport for development and mental health limits the potential for policy makers to deploy population level mental health approaches (Centre for Mental Health, 2021). The evidence base for community mental health programmes is under-developed, and resources and evidence of existing sport and physical activity programmes are often not widely accessible for community providers or policy makers. While academic and research partner involvement in assessing programme outcomes would provide robust evidence for community providers to inform the design and evaluation of future projects, costs can be prohibitive and academic work is often not accessible, with subscription-based journals excluding most community providers. This evidence also often needs to be translated into more meaningful terms to community groups and policy makers who need access to headline and summary findings. Building an inclusive and accessible evidence base is needed to continue advocating movement to tackle mental health problems. By ensuring providers and policy makers can access the latest evidence and best practice examples, there are opportunities for providers to assess their programme impact and share this with others conducting similar projects. Much like academic databases for journal articles, it may be useful for community schemes to have the opportunity to 'pool' findings, challenges, and best practice in an open-access format, to allow the distribution of findings across the community and for community providers to gain access to information that will help facilitate change to practice and policy.

Action: Programme providers should commit to the standardised reporting of the intended and unintended outcomes of diverse programmes and service evaluations and use validated tools and context specific forms of evidence to identify their impacts and outcomes

Community Targeted

Prior to COVID-19, community sport provision and targeted physical activity programmes offered a useful avenue to facilitate discussion around mental health promotion and prevention (Hurley et al. 2020) and are considered a localised and accessible tool to enable participation of socially disadvantaged groups (Van der Veken et al. 2020). Our findings from empirical search (8 studies) and community submissions (23 entries) indicated how existing mental health inequalities were exacerbated in the field of sport, physical activity, and sport for development:

- Those groups who experienced inequality in opportunity and access to sport and physical activity programmes to support mental health prior to the pandemic are now experiencing similar or greater disadvantage (Shur et al. 2020)
- Many community providers have successfully adapted services to deliver online provision during the pandemic, however digital poverty and exclusion has been highlighted as a pervasive barrier to supporting certain groups in society to be active (especially older people, people from Black and Asian ethnic minority communities, and those of lower socio-economic status)

- Working partnerships between physical activity and sport providers and mental health providers are successful to promote sustainable targeted mental health programs, however, there is a paucity of partnerships in place to support groups of people experiencing the greatest risks.

Programme design during COVID-19

During COVID-19, many community sport and physical activity projects continued providing adapted services to broadly targeted community groups experiencing social inequality (e.g. Albion in the Community 2020/21 programme broadly focused on adults of all ages with physical, mental, or long-term health conditions and disabilities. Others have focused on increasing physical activity participation among women, such as Active Suffolk's 100 miles for Mind (2020) challenge, promoting mental health and preventing suicide among men in North England (e.g. Rugby League Cares' Offload programme; see also, Wilcock et al., 2021), and supporting the mental health of children and young people via the Tackling the Blues programme delivered by Everton in the Community, Edge Hill University and Tate Liverpool (see also Haycock et al. 2020; Jones et al. 2019). Such programmes that continued to run throughout the pandemic have documented positive effects regarding mental health outcomes and improvements in psycho-social determinants of good mental health, including emotional well-being, social connectedness, happiness, and life satisfaction, and increased engagement in online mental health literacy activities which include a focus on the benefits of being activities as part of the Five Ways to Wellbeing.

Whilst broadly inclusive and intentionally designed sport for development programmes have generated positive mental health outcomes in response to their delivery, targeted programmes (i.e Active Surrey's Shifa project and Off the Record and Empire Fighting Chance Cornerman project) focusing on specific issues of inequality have been particularly powerful to promote mental health outcomes through sport and physical activity throughout the pandemic. The Shifa project encourages physical activity participation (via virtual yoga classes and a weekly walk) in Asian women who are marginalised, experiencing disadvantage, or who are having difficulty accessing services. Similarly, projects delivered by the English Football League (Fit Fans and Tackling Loneliness Together) have evidenced improvements in mental health outcomes in targeted groups of adults. Fit Fans **(**multi component lifestyle behaviour change programme for overweight adults) showed reductions in body mass and BMI, alongside improvements in mental health (i.e., anxiety) and well-being measures (i.e., life satisfaction and happiness), whilst Tackling Loneliness Together (supporting older adults 65+ during the pandemic) reported improvements in wellbeing, decreases in loneliness, increases in social connectivity, life satisfaction and well-being. Although it is important to encourage collaborations between movement and mental health organisations to create locally relevant programmes for mental health, stakeholder discussions identified that collaborations are not isolated to include solely movement and mental health providers. Stakeholders emphasised that responsibility to promote mental health *"is not the coming together of two worlds, its multiple worlds",* highlighting the collective responsibility of multiple partners to promote mental health locally and nationally.

Action: Mental health and community partners (e.g., local government, voluntary organisations, and sport and health bodies) should work together to shape the design, delivery and evaluation of programmes that use physical activity, sport, and sport for development to promote mental health in neighbourhoods, places, and across systems nationally.

Further, community providers targeting vulnerable and/or minority groups should aim to gather insight from the target audience to understand how to inclusively adapt or tailor services and communications to have the greatest impact. Colleagues involved in our consultation exercises and evidence from the We are Undefeatable campaign, the Shifa project, Offload and Tackling the Blues highlighted an urgent need to incorporate the voice of experts by lived experience – of both mental health problems and of their local communities – into the design and delivery of services to challenge pre-existing and COVID-19 accelerated health inequalities. This is also important to reduce barriers to activity and support real, meaningful, and sustainable inclusion to movement and sport for development programmes. Community providers should, where possible, avoid the possibility of homogenous grouping and recognise intersectional identity characteristics when tackling inequalities in mental health.

Experts by lived experience contributing to this report highlighted programme participators often feel more supported by others with similar lived experience and suggested specific lived experience representatives may improve the recruitment and delivery of community programmes. Experts by experience noted the importance of not just acknowledging inequality but giving voice to the individuals experiencing inequality to discuss how these experiences are impacting their lives, and how incorporating lived experience knowledge in the design, delivery and evaluation of current and future programmes may support meaningful and targeted inclusion.

Action: Providers should demonstrate and report on the involvement of experts by experience and diverse community representatives when shaping the design of programmes and delivery and evaluation of those programmes.

Online and hybrid delivery

Programmes have documented several challenges to providing support during the pandemic. Many services have successfully transitioned to online delivery engaging large numbers of people, with programmes already using online or hybrid delivery prior to the pandemic showing the easiest transition to online services during lockdown (e.g. Shifting the Dial project). Transition to online delivery of webinars and training programmes have also had some success, with online delivery of Mind's MHASPA+ training in response to COVID-19 receiving positive feedback from organisations within the physical activity and sport sector (Mind's Sector Support Programme). However, other groups have been unable to access online services and have been digitally excluded from mental health support by sport and physical activity providers operating online during the pandemic. Digital poverty and poor digital literacy are longstanding problems that have been exacerbated by COVID-19, with research estimating that 20% of the UK population experienced digital exclusion prior to the pandemic (Lloyds Bank, 2019). During the

initial lockdowns of COVID-19, digital poverty and poor digital literacy were frequently cited barriers to engaging in sport and physical activity programmes, including those involving older people (Tackling Loneliness Together), men (Offload), children and young people (Tackling the Blues), those of lower socio-economic status (Kent Sport), culturally and ethnically diverse communities (Shifa project), and those with long-term health conditions and disabilities (We are Undefeatable, 2021).

Acknowledgement of the pervasive impact of digital exclusion and digital poverty is crucial, and programmes should consider developing blended or hybrid delivery of online and in-person services going forwards, with assurance that support and alternative in-person access will be available to those who require it. To ensure as many groups as possible have access to either online or in person-services following the pandemic, community providers should consider working with targeted community groups to identify the most appropriate solutions for specific groups. In addition to digital exclusion, ethnically diverse communities, those with long-term health conditions and those experiencing social disadvantage at a higher risk of COVID-19 have been advised to take extra steps to shield, have been less likely to leave their home (Public Health England, 2020), and have experienced a greater decrease in mental wellbeing (Centre for Mental Health, 2021). Thus, such groups are experiencing more barriers to activity, and require additional support.

Action: Programmes should develop blended or hybrid delivery of online and in-person services with support available for those transitioning back to in-person sessions. Alternative methods and support should be available to those who experience digital exclusion and digital poverty.

Impact on children and young people

In addition to recognising inequality in opportunity and access to sport and physical activity for those experiencing disadvantage and/or disability, it is important to recognise both the disproportionate and complex impact COVID-19 has had on the mental health of children and young people. Evidence indicates that adolescent girls (O'Kane et al. 2021) and university students (Savage et al. 2021) have shown reductions in physical activity during the pandemic. Notably, adolescent girls who normally participate in team sports showed the greatest reduction in physical activity motivation (O'Kane et al. 2021). In student groups, most showed reductions in physical activity and increases in sedentary behaviour, alongside reductions in mental well-being (Savage et al. 2020; Savage et al. 2021). Notably, students whose physical activity had decreased but remained above recommended guidelines showed the smallest decrease in mental wellbeing (Savage et al. 2021), whilst maintaining physical activity levels also counteracted the negative impact of coronavirus fear on mental health and wellbeing in adolescents (Wight et al. 2021). Community submissions noted the disproportionate impact of COVID-19 on the acceleration of mental health and physical activity inequalities in young people from ethnically diverse communities (Shifting the Dial 2021; Youth Sport Trust 2020) and of lower economic status (Kent Sport, 2020) and living in under-served communities (Everton in the Community, Edge Hill University and Tate Liverpool, 2021; Street Games, 2020**).** Targeted programmes to support individuals experiencing mental health inequality though physical activity and sport over the pandemic have shown positive outcomes. For example, Youth Sport

Trust Active in Mind (2020) offered peer mentoring to more than 1000 young people to create sport and physical activity opportunities and support mental wellbeing to secondary school aged children experiencing mental health problems. Similarly, Herts Sport Partnership Fit, fed and read summer programme (2020) offered a summer physical activity programme focusing on improving mental health and well-being and sustainable consumption of healthy foods in the most deprived and disadvantaged neighbourhoods in Hertfordshire. Both projects saw increases in emotional and mental-wellbeing, physical activity levels and social skills. However, despite the positive reported outcomes of these projects, the challenges and weaknesses of programme delivery are often not documented. Thus, insight from unsuccessful outcomes (such as drop out and unintended outcomes) is often not used in evaluation, which may limit the learning taken from programmes.

Despite the perceived success of many programmes, project deliverers noted two key facilitators to improve the reach and increase impact of projects. Firstly, collaborative partnerships between providers, institutions of interest (i.e., schools and colleges, such as Kent Sport and recognising that those with lived experience are vital to identify and recruit those experiencing the most disadvantage to such projects. For example, working in partnership with the young people involved in the project to identify barriers to engagement (Youth Sport Trust Mental Wellbeing in Children and Young People, 2020) and triggers of poor mental health (Shifting the Dial, 2021) ensured programmes had clear objectives for those involved, and addressed needs relevant to the group and local area (see Street Games, 2020).

Secondly, programmes incorporating mental health trained staff (Kent Sport, 2020; Street League UK, 2020) and/or peer support workers and role models (Centre for Mental Health, 2021; Mind, 2017; Youth Sport Trust, 2020) were particularly effective in engaging young people in physical activity and sport programmes for mental health promotion. Similar evidence has been found for adults, with Mind's Get Set to Go project evidencing the key role of volunteer 'peer navigators' with lived experience of mental health problems play for creating a positive and supportive social environment, and increasing connectedness when supporting people with mental health problems to become more physical active (Mind, 2017). Those involved in our consultation exercises also identified coaches, peer support workers, and volunteers as key individuals to support both adults and young people's mental health during the pandemic.

Action: Organisations should integrate peer support and peer mentoring into community schemes to enhance community engagement wherever possible, and ensure peer support workers are appropriately trained and supported (including financially and in relation to their own mental health).

Mental health literacy of the sport and physical activity workforce

The development of educational courses to improve mental health knowledge of the sport and physical activity workforce, and those that work in movement promotion have shown to be well received (UK Coaching MHASPA+ impact evaluation, 2021), with 94% of coaches highlighting that the course was relevant to their needs and 88% stating that learning from the course had led to some difference in their

coaching practice. Findings from (Mind's Sector Support Programme) also found similar results. In particular, the MHASPA+ was considered successful to improve knowledge and awareness of both internal employees and external partners within the sport sector, when delivered in-person and online during COVID-19 (Kinnafick et al. 2021). Courses such as the MHASPA+ training (developed by Mind, UK Coaching, and First4Sport) and the Mental Health and Physical Activity Toolkit (developed by Mind) should continue to be disseminated to coaches, volunteers and those that support young people's mental health through sport and physical activity.

Action: Sport and activity providers to ensure mental health training (e.g., MHASPA+ eLearning developed by UK Coaching, Mind and first4sport) and resources (e.g., Mental Health and Physical Activity Toolkit (developed by Mind), and Duty to Care Toolkit and Digital Badge (developed by UK Coaching and Mind) are available for coaches and volunteers as part of minimum coaching standards and to support their own mental health.

Supporting those who support others

Those involved in the consultation exercises also discussed the importance of "supporting those who support others", which emphasised findings from Mind's Get Set to Go project whereby peer volunteers noted the importance of having their own support network during stressful periods. The Chartered Institute for the Management of Sport and Physical Activity (CIMSPA) (2020) surveyed 1140 members of their organisation through their Fitness and Active Leisure Workforce State of Mind survey (2020). Findings indicated that 53% of respondents had experienced a mental health problem in the last 12 months (women were more likely to have a mental health problem than men), and 42% would not be honest with an employer if they felt they needed time off work for a mental health problem. Although 78% stated their line manager cares about their well-being, only 20% stated someone directly checks in on their mental health at work. Colleagues at the roundtable discussed the importance of ensuring those that support young people's mental health (i.e., coaches) also have access to their own mental health support: *"We have a duty of care to the coaches and instructors who have been keeping people active during the pandemic … there is added pressure on them to support young people through these challenging times – they also need support".*

Thus, alongside participant mental health, workplaces, sports clubs, and coach and volunteer organisations should focus on employee mental health at all levels. Developing positive management and leadership cultures in relation to mental health and embedding mental health considerations in all workplace policies and practices are important to normalise conversations around mental health in the workplace. Sport and physical activity providers should ensure mental health training (i.e., eLearning developed by UK Coaching, Mind and 1st4sport) and resources (e.g., Mental Health and Physical Activity Toolkit and UK Coaching Duty to Care Toolkit and Digital Badge) is made essential for coaches and volunteers, with mental health holding parity of esteem with safeguarding training and is made available to all those who support individual's mental health. Mental health training is also important for those training work in sport, including through higher education course and physical education teacher training.

Action: Sport for development, sport, and physical activity organisations and workplaces should focus on employee mental health at all levels of the organisation. This includes developing positive management and leadership cultures in relation to mental health and encouraging those in senior positions to role model behaviours supportive of appropriate work-life balance. Normalising conversations around mental health and embedding mental health considerations in all workplace policies and practices are important.

Recommendations

Key Recommendations

In light of our review, we have developed 5 key recommendations. To address these recommendations, we propose a series of associated recommended actions for public bodies, funders, commissioners, and policy makers, as well as actions which are intended to help programme providers and implementors to improve the mental health of children, young people, and adults by promoting movement through physical activity, sport, and sport for development.

1. A **cross-government public mental health strategy** should be developed which recognises the promotion of movement through physical activity, sport, and sport for development for mental health as a collective responsibility of all relevant organisations.
2. The Office for Health Improvement and Disparities to take a strategic lead with DCMS and other partners (including the UK sports councils and Mind) in coordinating the delivery of movement opportunities for positive mental health outcomes whilst tackling deep-seated social and health inequalities. This approach should be replicated at devolved and local level with equivalent stakeholders. Funding dissemination should draw on and continue to include responsive and accessible approaches used during the COVID-19 pandemic. It should also include provision (with policy frameworks, funding, and commissioning models) for direct investment in programmes and interventions that incorporate movement alongside mentoring, talking therapies and other evidence-based actions
3. COVID-19 has exposed the weaknesses of single sector responses to addressing complex mental health problems. **Collaborative cross-sector partnerships** and the involvement of **experts by experience** and **diverse community stakeholders** in the design, implementation, and evaluation of policy and programming should therefore be a key criterion for investment and an ongoing reporting requirement for all investment in movement for mental health
4. The continuation, standardisation and expansion of training, professional development and other support opportunities should be provided for professionals and volunteers working to promote movement for mental health, including health professionals and social prescription link workers.
5. Given the lack of **robust, systematic, and widely reported evaluations** of programmes, **standardised reporting** of diverse programmes and service evaluations which use movement to aid the prevention, treatment, and management of mental health problems should be **prioritised, consistent, accessible, and funded**. Using validated tools and context specific forms of evidence will be needed to identify the different impacts and outcomes of these programmes.

Associated Recommended Actions

For public bodies, funders, commissioners, and policy makers:

- Public bodies, funders and programme implementers should transparently report on how local communities and experts by lived experience are involved in the design, implementation and evaluation of policy, funding and programming using movement to support mental health
- Funders and commissioners of movement-based programmes and interventions supporting mental health should include, as a key criterion for investment, evidence of effective cross-sector partnership working. This is particularly relevant to the health and social care, sport and physical activity, and voluntary and community sectors
- To develop better relationships and encourage cross-sector working, dedicated funding should be provided to support the development of local hubs which bring together primary, secondary care services with VCSE organisations to support mental health through movement
- In line with the COVID-19 mental health and wellbeing recovery plan, all stakeholders should explore the developments of a policy tool which will allow policy makers to examine the impact of their proposals on mental health
- Funders and commissioners seeking to support movement and mental health and wellbeing outcomes should prioritise place-based funding models and base investment decisions on index of multiple deprivation scores and other health inequality data
- To encourage standardised reporting of programme theories of change and outcomes, accessible guidance on design and evaluation (including the integration of non-traditional forms of evidence) should be provided by funding bodies and commissioners
- Government should include an analysis of the workforce capacity to promote movement for mental health and wellbeing as part of reporting requirements set out in the revised Health and Social Care Bill
- The promotion of movement for mental health and wellbeing should be a pillar of work, with ring fenced budget, within the framework of the new Office for Health Improvement and Disparities
- The Chartered Institute for the Management of Sport and Physical Activity (CIMSPA) should embed mental health into its higher education professional standards. Mental health training should also be a mandatory part of CIMSPA's Continuing Professional Development activities with members required periodically to refresh that training
- Mental health training should be a mandatory part of physical education teacher training and other programmes which trained people to work at all levels of sport, physical activity, and sport for development
- There is a developed and convincing evidence base for the mental health benefits of physical activity and exercise, but we do not yet have such evidence for community sport, physical activity, and sport for development. Investment therefore needs to be made in research which generates evidence on how mental health outcomes might be achieved through community sport, physical activity, and sport for development

For programme providers and implementors:

To ensure parity of esteem between physical and mental health, and to maximise the contribution of physical activity, sport, and sport for development to the promotion of good mental health, and prevention and treatment of mental health problems in a post COVID-19 landscape, several sector-specific actions are warranted:

Primary care

- All actions should be underpinned by insight from experts by lived experience
- Healthcare providers should use place-based models of investment which better reflect the mental health needs of local communities and neighbourhoods
- Issues of inequality (i.e., those living in poverty, those with long-term health conditions, and culturally and ethnically diverse populations), and capacity and resource (i.e., transport, accessibility, and wider system) should be the focus of social prescribing activities and programme and intervention design, delivery, and evaluation
- To reduce the 'postcode lottery' of availability and accessibility of localised community programmes and accelerate cross-sector working, referral pathways from primary care to community physical activity, sport, and sport for development programmes must be strengthened. These can be achieved by increasing the number of appropriately resourced and supported link workers, educating the primary care workforce on movement for mental health, and increasing availability of evidence for primary care professionals to ensure appropriate and effective programmes are available to the recipient
- To improve awareness of the benefits of moving for mental health, primary care providers should recommend staff to undertake training, for example The Royal College of General Practitioners (RCGP) Physical Activity toolkit as part of the 'Moving Healthcare Professionals' (Sport England and Public Health England) online training. Accessing these kinds of practical resources to encourage discussions around movement for mental health in routine care is also needed

Secondary care

- While people are under secondary care, to maximise benefits of physical and mental health (parity of esteem) people with mental health problems should be supported – where appropriate - to discuss and engage in opportunities to be physically active including the barriers, facilitators, and motivations for doing so
- Given the negative impact of COVID-19 on mental health, improvements in mental health and movement literacy should be made through relevant, responsible, clear, and evidence-based messaging. Organisations might usefully consult the Digital Marketing Hub delivered by the Chartered Institute for the Management of Sport and Physical Activity (CIMSPA) and supported by Sport England to support this messaging and to encourage people to become active
- Increase opportunities for educational provision on the benefits of movement to staff within the cross-sector response. To increase movement literacy, secondary care service staff should be encouraged to engage in relevant education opportunities such as Active Hospitals Continuing

Professional Development as part of the Moving Healthcare Professionals training (Sport England and Public Health England), including the Active Hospitals physical activity toolkit

- As part of the Care Programme Approach or discharge plan, secondary care mental health workers should provide opportunities to engage with VCSE organisations which promote movement for mental health to facilitate more effective, sustainable, and supportive transitions from secondary care to local community mental health settings

Community provision

- Since COVID-19 has amplified and widened existing mental health inequalities, the resourcing, delivery, and evaluation of services must be made available at a scale and intensity proportionate to those who needs them most, which is consistent with the principle of proportionate universalism. Providing everyone with a fair and equal opportunity to live a long, healthy life (i.e., the promotion of health equity) should be central to all policies and practices intended to support mental health, including through the promotion of movement.
- To challenge pre-existing and COVID-19 accelerated health inequalities, care providers, programme designers and programme implementors should implement differential pricing models (based on deprivation and other health inequality data) and work with locally trusted and culturally appropriate activity providers to engage diverse communities (e.g., faith based, youth clubs, community hubs as well as gyms and sports clubs)
- Because COVID-19 has reinforced the significance of social inequalities for mental health, a more sustained focus on the causes and consequences of these inequalities and their social determinants (i.e., the conditions in which people are born, grow, work, live and age) is *urgently* needed
- Mental health and community partners (e.g., local government, voluntary organisations, and sport and health bodies) should work together to shape the design, delivery and evaluation of policy and programmes that use physical activity, sport, and sport for development to promote mental health in neighbourhoods, places, and across systems nationally
- Providers should demonstrate and report on the involvement of experts by experience and a diversity of community representatives when shaping the design, delivery and evaluation of those programmes
- Providers should commit to the standardised reporting of the intended and unintended outcomes of their work for mental health (e.g. through the Sport for Development Coalition's standard measurement framework). This standardised reporting should include appropriate validated tools which address mental health and wellbeing (e.g. ONS-4, WEMWBS) and other context specific forms of evidence (e.g., interviews and case studies with key stakeholders). Providers should make evidence of their effectiveness and impact publicly available via an open access repository to improve the availability and accessibility of existing evidence for all providers
- Programme providers should understand and recognise the potential challenges of encouraging people who exercise compulsively and experience body image concerns to ensure messaging is both clear and safe to those who receive it. Programme providers should engage in relevant

training opportunities (e.g., Mind's physical activity and mental health toolkit, webinars, and e-learning) to support their practice.

- Workplaces should focus on employee mental health at all levels of the organisation. This includes developing positive management and leadership cultures in relation to mental health and encouraging those in senior positions to role model behaviours supportive of appropriate work life balance. Normalising conversations around mental health and embedding mental health considerations in all workplace policies and practices are important
- Programmes should develop blended or hybrid delivery of online and in-person services with support available for those transitioning back to in-person sessions. Alternative methods and support should be available to those who experience digital exclusion and digital poverty
- Sport for development, sport and physical activity organisations should promote and make available mental health training and resources (e.g., MHASPA+ eLearning developed by UK Coaching, Mind and first4sport, UK Coaching Duty to Care Digital Badge) for coaches and volunteers as part of minimum coaching standards and to support their own mental health
- Organisations should integrate peer support and peer mentoring into community schemes to enhance community engagement wherever possible, and ensure peer support workers are appropriately trained and supported (including financially and in relation to their own mental health)

For academic researchers:

- Undertake more theoretically and methodologically robust research which helps provide evidence of the effectiveness and impact of community physical activity, sport, and sport for development programmes in generating mental health outcomes. These principles should apply also to research conducted in primary and secondary care.
- Ensure the findings of research are translated in clear, understandable, and practical ways which inform the policies and practices of community partners. Where possible, these translated research findings should be made freely and publicly available
- Work in partnership with relevant community partners to assist the delivery, monitoring and evaluation of programmes intended to produce mental health outcomes

We welcome the opportunity to work with partners on how best to implement these recommendations and actions in a timely way.

Appendix
List of participating organisations

Submissions of case studies, evidence and learning

- Access Sport
- Active Partnerships (North East, Suffolk, Susses, Hertfordshire, South East, Bedford and Luton, We Sport)
- Albion in the Community
- Association of Colleges Sport
- Chartered Institute for the Management of Sport and Physical Activity (CIMSPA)
- Community Leisure UK
- Durham University
- Edge Hill University
- Empire Fighting Chance
- English Football League (EFL) Trust
- English Partnership for Snooker and Billiards
- Everton in the Community
- Intelligent Health
- Lawn Tennis Association (LTA)
- London Youth
- Loughborough University
- Nottingham Trent University
- Off the Record
- Red January
- Stonewall
- Street League
- UK Coaching
- We Care NW
- Youth Sport Trust (YST)

To review submissions visit: https://www.sportfordevelopmentcoalition.org/moving-mental-health-submissions

Roundtable attendees

- Active Partnerships
- Activity Alliance
- Alliance of Sport
- Chartered Society of Physiotherapy
- CIMSPA

- Comic Relief
- Dame Kelly Holmes Trust
- Department of Digital, Culture, Media and Sport
- Department of Health and Social Care
- Durham University
- Edge Hill University
- EFL Trust
- Exercise Professionals for Mental Health
- Laureus Sport for Good
- Local Government Association
- London Youth
- Loughborough University
- Mind
- National Academy of Social Prescribing
- Rethink Mental Illness
- Richmond Group
- Royal College of Psychiatrists
- SAMH
- South West London & St Georges Mental Health NHS Trust
- Sport and Recreation Alliance
- Sport England
- Sport for Development Coalition
- Sport in Mind
- Sport Wales
- Sported
- Sporting Equals
- Stonewall
- StreetGames
- UK Coaching
- ukactive
- University of Oxford
- West Midlands Combined Authority
- Youth Sport Trust

Expert by Lived Experience Representatives

- Access Sport
- Activity Alliance
- Dame Kelly Holmes Trust
- Mind
- Rethink

References

Aughterson, H., Baxter, L. & Fancourt, D. (2020). Social prescribing for individuals with mental health problems: a qualitative study of barriers and enablers experienced by general practitioners. *BMC Family Practice*, 21(194).

Bambra, C., Lynch, J. & Smith, K. (2021). *The Unequal Pandemic: COVID-19 and Health Inequalities*. Bristol: Policy Press.

Bambra, C., Riordan, R., Ford, J. & Matthews, F. (2020). The COVID pandemic and health inequalities. *Journal of Epidemiology and Community Health*, 74, 964-968.

Biddle, S., Ciaccioni, S., Thomas, G. & Vergeer, I. (2019). Physical activity and mental health in children and adolescents: An updated review of reviews and an analysis of causality. *Psychology of Sport and Exercise*, 42, 146–155.

Campion, J., Javed, A., Sartorius, N. & Marmot, M. (2020). Addressing the public mental health challenge of COVID-19. *The Lancet Psychiatry,* 7 (8), 657-659.

Carey, G., Crammond, B. & De Leeuw, E. (2015). Towards health equity: A framework for the application of proportionate universalism. *International Journal for Equity in Health*,14, 1–8.

Centre for Mental Health (2020) *Covid-19: Understanding Inequalities in Mental Health During the Pandemic*. London: Centre for Mental Health.

Chen, S., She, R., Qin, P., Kershenbaum, A., Fernandez-Egea, E., Nelder, J.R., … Cardinal, R.N. (2020). The medium-term impact of COVID-19 lockdown on referrals to secondary care mental health services: a controlled interrupted time series study. *Frontiers in Psychiatry*, 1-11.

Coles, E., Anderson, J., Maxwell, M., Harris, F.M., Gray, N.M., Milner, G. & McGillivray, S. (2020). The influence of contextual factors on healthcare quality improvement initiatives: a realist review. *Systematic Reviews*, 9(94), 1-22.

Daly, M., Sutin, A.R. & Robinson, E. (2020). Longitudinal changes in mental health and the COVID-19 pandemic: evidence from the UK Household Longitudinal Study. *Psychological Medicine*, 1-10

Department of Health and Social Care. (2019). *UK Chief Medical Officers' Physical Activity Guidelines*. London: Department of Health and Social Care.

Department of Health and Social Care/Javid, S. (2021). The hidden costs of COVID-19: the social backlog. Available online at: https://www.gov.uk/government/speeches/the-hidden-costs-of-covid-19-the-social-backlog

Douglas, M., Katikireddi, S.V., Taulbut, M., McKee, M. & McCartney, G. (2020). Mitigating the wider health effects of covid-19 pandemic response. *The British Medical Journal*, 369,1-6

Duncan, C., Weich, S., Fenton, S-J., Twigg, L., Moon, G., Madan, J., Singh, S.P., … Bhui, K. (2018). A realist approach to the evaluation of complex mental health interventions. *The British Journal of Psychiatry*, 213(2), 451-453.

Elme, R., Harvey, J., Brown, W. & Payne, W. (2010). Does sports club participation contribute to health-related quality of life? *Medicine and Science in Sports & Exercise*, 42(5), 1022-1028.

Faulkner, G. & Tamminen, K. (2016). Youth sport and mental health. *In*: K. Green and A. Smith (eds) *The Routledge Handbook of Youth Sport*. London: Routledge, pp. 406–424.

Ferguson, H., Swann, C., Liddle, S. and Vella, S. (2019). Investigating youth sports coaches' perceptions of their role in adolescent mental health. *Journal of Applied Sport Psychology,* 31 (2), 235-52.
Firth, J., Solmi, M., Wootton, R. E., Vancampfort, D., Schuch, F. B., Hoare, E., ... & Stubbs, B. (2020). A meta-review of "lifestyle psychiatry": the role of exercise, smoking, diet and sleep in the prevention and treatment of mental disorders. *World Psychiatry*, *19*(3), 360-380.
Ford, T., Vizard, T., Sadler, K., McManus, S., Goodman, A., Merad, S., … MHCYP Collaboration. (2020). Data resource profile: Mental health of children and young people (MHCYP) surveys. *International Journal of Epidemiology*, 49(2), 363-364
Goodridge, D., Westhorp, G., Rotter, T., Dobson, R. & Bath, B. (2015). Lean and leadership practices: development of an initial realist program theory. *BMC Health Service Research*, 15(362), 1-15.
Gorczynski, P., Gibson, K., Clarke, N., Mensah, T. & Summers, R. (2020). Examining mental health literacy, help seeking behaviours, distress, and wellbeing in UK coaches. *European Physical Education Review*, 26 (3), 713-726.
Graupensperger, S., Sutcliffe, J. & Vella, S.A. (2021). Prospective associations between sport participation and indices of mental health across adolescence. *Journal of Youth and Adolescence*, 50, 1450-1463.
Griffiths, M., & Armour, K. (2014). Volunteer sports coaches as community assets? A realist review of the research evidence. *International Journal of Sport Policy and Politics*, 6(3), 1-21
Hamer, M., Stamatakis, E., & Steptoe, A. (2009). Dose-response relationship between physical activity and mental health: the Scottish Health Survey. *British Journal of Sports Medicine*, 43, 1111-1114
Harden, S.M., McEwan, D., Sylvester, B., Kaulius, M., Ruissen, G., Burke, S.M., Estabrooks, P.A., & Beauchamp, M.R. (2015). Understanding for whom, under what conditions, and how group-based physical activity interventions are successful: a realist review. *BMC Public Health*, 15(958), 1-18
Haycock, D., Jones, J. & Smith, A. (2020). Developing young people's mental health awareness through education and sport: insights from the Tackling the Blues programme. *European Physical Education Review*, 26(3), 664-81.
Her Majesty's Government (2015). *Sporting Future*. London: Her Majesty's Government.
Her Majesty's Treasury (2021). Wellbeing Guidance for Appraisal: Supplementary Green Book Guidance. London: Crown Copyright.
Holmes, E.A., O'Connor, R.C., Perry, H.V., Tracey, I., Wessely, S., Arsenault, L., … Bullmore, E. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *The Lancet Psychiatry*, 7, 547-560.
Hu, M.X., Turner, D., Generaal, E., Bos, D., Ikram, M.K., Ikram, M.A., Cuijpers, P., & Penninx, W.J.H. (2020). Exercise interventions for the prevention of depression: a systematic review of meta-analyses. *BMC Public Health*, 20(1255), 1-11.
Hurley, D., Swann, C., Allen, M.S. & Vella, S.A. (2020). A qualitative evaluation of a mental health literacy intervention for parents delivered through community sport clubs. *Psychology of Sport and Exercise*, 47, 1-11.
Jahrami, H., BaHammam, A. S., Stubbs, B., Sabah, A., Saif, Z., Bragazzi, N. L. & Vitiello, M. V. (2021). Eight-week high-intensity interval training is associated with improved sleep quality and cardiorespiratory fitness in patients with depressive disorders. *Sleep and Breathing*, 1-10.

John, A., and Mansfield, L. (2018). *Street Games: Safe, Fit and Well – Case Study Research*. London: Brunel University.
Johnson, S., Dalton-Locke, C., San Juan, N.V., Foye, U., Oram, S., Papamichail, A., … Rains, L.S. (2021). Impact on mental health care and on mental health service users of the COVID-19 pandemic: a mixed methods survey of UK mental health care staff. *Social Psychiatry and Psychiatric Epidemiology*, 56(1), 25-37
Jones, J., O'Keeffe, H. & Smith, A. (2019). Tackling the Blues: a sport and education based mental health programme for children and young people. In G. Breslin and G. Leavey (eds) *Mental Health and Well-Being Interventions in Sport: A Case Study Analysis*. London: Routledge.
Keyes, C.L.M. (2002). The mental health continuum: from languishing to flourishing in life. *Journal of Health and Social Behavior*, 43, 207-222
Keyes, C.L.M. (2007). Promoting and protecting mental health as flourishing. A complementary strategy for improving national mental health. *American Psychologist*, 62(6), 95-108.
Kinnafick, F.E., Papathomas, A. & Regoczi, D. (2018). Promoting exercise behaviour in a secure mental health setting: Healthcare assistant perspectives. *International Journal of Mental Health Nursing*, 27(6), 1776-1783.
Korge, J. & Nunan, D. (2018). Higher participation in physical activity is associated with less use of inpatient mental health services: cross-sectional study. *Psychiatry Research*, 259, 1-4.
Lion, A., Vuillemin, A., Thornton, J.S., Theisen, D., Stranges, S. & Ward, M. (2018). Physical activity promotion in primary care: a Utopian quest? *Health Promotion International,* 34, 877-886.
Little, M. & Kinnafick, F. (2021). *Quantitative Evaluation of an Exercise Referral Scheme for inactive older adults*. Degree of Masters in Sport and Exercise Psychology Dissertation Project. Loughborough: Loughborough University.
McManus, S., Meltzer, H., Brugha, T., Bebbington, P. & Jenkins, R. (eds) (2009). *Adult Psychiatric Morbidity in England 2007: Results of a Household Survey*. London: NHS Information Centre for Health and Social Care.
Mazzer, K. & Rickwood, D., (2009). Community gatekeepers' advice to young people to seek help from mental health professionals: youth workers and sport coaches. *International Journal of Mental Health Promotion*, 11 (2), 13-23.
Mazzer, K. & Rickwood, D. (2015a). Mental health in sport: coaches' views of their role and efficacy in supporting young people's mental health. *International Journal of Mental Health Prom*otion *and Education*, 53 (2), 102-114.
Mazzer, K. & Rickwood, D. (2015b). Teachers' and coaches' role perceptions for supporting young people's mental health: multiple path analyses. *Australian Journal of Psychology*, 67, 10-19.
Marmot, M. & Allen, J. (2020). Covid-19: Exposing and amplifying inequalities. *Journal of Epidemiology and Community Health*. 74(9), 681-82.
Marmot, M., Allen, J., Boyce, T., Goldblatt, P & Morrison, J. (2020). *Health Equity in England: The Marmot Review 10 years on*. London: Institute of Health Equity.
Marmot, M., Allen, J., Goldblatt, P., Boyce, T., McNeish, D., Grady, M. & Geddes, I. (2010). *Fair Society, Healthy Lives: The Marmot Review*, London: Institute of Health Equity.
Mind. (2017). *Get Set to Go Programme Evaluation Summary*. London: Mind.

Kinnafick, F., Rogers, E., Adams, E., Tweed, L. & Coates, J. (2021). *Evaluation of Mind's Sector Support Programme*. London: Mind.
Marsh, S. (2021). Doctors warn of 'tsunami' of pandemic eating disorders. https://www.theguardian.com/society/2021/feb/11/doctors-warn-of-tsunami-of-pandemic-eating-disorders
Mind. 40 per cent of all GP appointments about mental health. 2018 https://www.mind.org.uk/news-campaigns/news/40-per-cent-of-all-gp-appointments-aboutmental-health/]
National Health Service (NHS) UK. (2020). Guidance on social distancing. Available: https://www.gov.uk/government/publications/covid19-guidance-on-social-distancing-and-for-vulnerable-people/ guidance-on-social-distancing-for-everyone-in-the-uk-and protect
NHS Digital (2021). The Mental Health of Children and Young People in England, 2020. London: Crown Copyright.
National Health Service (NHS). (2021). Children and young people with an eating disorder waiting times. https://www.england.nhs.uk/statistics/statistical-work-areas/cyped-waiting-times/
O'Connor, D.B., Aggleton, J.P., Chakrabarti, B., Cooper, C.L., Creswell, C., Dunsmuir, S., … Armitage, C.J. (2020a). Research priorities for the COVID-19 pandemic and beyond: A call to action for psychological science. *British Journal of Psychology*, 111, 603-629.
O'Connor, R.C., Wetherall, K., Cleare, S., McClelland, H., Melson, A.J., Niedwiedz, C.L., … Robb, K.A. (2020b). Mental health and well-being during the Covid-19 pandemic: longitudinal analyses of adults in the UK COVID-19 mental health and well-being study. *The British Journal of Psychiatry*, 21, 1-8
Office for National Statistics (ONS) (2020) *Suicides in the UK: 2019 Registrations*. London: ONS.
Oliver E.J., Dodd-Reynolds, C., Kasim, A. & Vallis, D. (2021). Inequalities and inclusion in exercise referral schemes: a mixed-method multi-scheme analysis. *International Journal of Environmental Research and Public Health*, 18, 3033. https:// doi.org/10.3390/ijerph18063033.
Pawson, R., Greenhalgh, T., Harvey, G., & Walshe, K. (2005). Realist review – a new method of systematic review designed for complex policy interventions. Journal of *Health Services Research & Policy*, 10(1), 21-34.
Pierce, M., Hope, H., Ford, T., Hatch, S., Hotopf, M., John, A., … Abel, K.M. (2020). Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. *The Lancet*, 7, 883-892.
Propper, C., Stoye, G., & Zaranko, B. (2020). The wider impacts of the coronavirus pandemic on the NHS. *Fiscal Studies*, 41(2), 345-356.
Public Health England (PHE). (2020) COVID-19: mental health and wellbeing surveillance report. Available from: https://www. gov.uk/government/publications/COVID-19-mental-health-and-wellbeing-surveillance-report.
Rogers, E., Papathomas, A., & Kinnafick, F.E. (2021). Inpatient perspectives on physical activity in secure mental health setting. *Psychology of Sport and Exercise*, 52, 1-22.
Quirk, H., Crank, H., Harrop, D., Hock, E., & Copeland, R. (2017). Understanding the experience of initiating community-based physical activity and social support by people with serious mental illness: a systematic review using a meta-ethnographic approach. *Systematic Reviews*, *6*(1), 1-9.

Quirk, H., Hock, E., Harrop, D., Crank, H., Peckham, E., Traviss-Turner, G., . . . Copeland, R. (2020). Understanding the experience of initiating community-based group physical activity by people with serious mental illness: A systematic review using a meta-ethnographic approach. European Psychiatry, 63(1), E95. doi:10.1192/j.eurpsy.2020.93

Samaritans. Coronavirus and people with pre-existing mental health conditions. (2020). Available from: https://www.samaritans.org/about-samaritans/researchpolicy/understanding-our-callers-during-COVID-19-pandemic/coronavirus-andpeople-pre-existing-mental-health-conditions

Shore, C.B.; Hubbard, G.; Gorely, T.; Polson, R.; Hunter, A. & Galloway, S.D. (2019). Insufficient reporting of factors associated with exercise referral scheme uptake, attendance, and adherence: a systematic review of reviews. *Journal of Physical Activity and Health*, 16, 667–676.

Shur, N.F., Johns, D., Kluzek, S., & Peirce, N. (2020). Physical inactivity and health inequality during coronavirus: a novel opportunity or total lockdown? *BMJ Open Sport & Exercise Medicine*, 6:e000903. doi: 10.1136/bmjsem-2020-000903

Shvedko, A.V., Thompson, J.L., Greig, C.A., & Whittaker, A.C. (2018). Physical Activity Intervention for Loneliness (PAIL) in community-dwelling older adults: protocol for a feasibility study. *Pilot & Feasibility Studies*, 4(187), 1-21

Sidhu K. Improving access to psychological therapies: an idea that's failed to deliver. BMJ Opinion, 21 Oct 2019. https://blogs.bmj.com/bmj/2019/10/21/improving-access-to-psychological-therapiesan-idea-thats-failed-to-deliver/

Simmons, T. & Kinnafick, F. (2021). What makes an ERS work? An evaluation of an Active Wellbeing programme using the Realist framework. Degree of Masters in Exercise as Medicine dissertation project. Loughborough: Loughborough University.

Smith, A., Greenough, K. & Lovett, E. (2022). The politics and policy of community sport coaching. In B. Ives, P. Potrac, L. Gale and L. Nelson (eds), *Community Sport Coaching: Policies and Practice*. London: Routledge, pp. 7-24. The politics and policy of community sport coaching. *In*: B. Ives, P. Potrac, L. Gale and L. Nelson. (eds). *Community Sport Coaching: Policies And Practice*. London: Routledge.

Smith, A., Haycock, D., Jones, J., Greenough, K., Wilcock, R. & Braid, I. (2020). Exploring mental health and illness in the UK sports coaching workforce. *International Journal of Environmental Research and Public Health*, 17 (24), 9332. DOI: 10.3390/ijerph17249332.

Smith, A., Jones, J., Houghton, L. & Duffell, T. (2016). A political spectator sport or policy priority? A review of sport, physical activity and public mental health policy. *International Journal of Sport Policy and Politics*, 8 (4), 593-607.

Solmi, F., Downs, J.L. & Nicholls, D.E. (2021). Covid-19 and eating disorders in young people. *The Lancet Child and Adolescent Health*, 5(5), 316-318.

Sport England (2021). *Uniting the Movement*. London: Sport England.

Stathi, A., Withall, J., Thompson, J. L., Davis, M. G., Gray, S., De Koning, J., ... & Fox, K. R. (2020). Feasibility trial evaluation of a peer volunteering active aging intervention: ACE (Active, Connected, Engaged). *The Gerontologist*, *60*(3), 571-582.

Street Games (2020). The Experience of the Coronavirus Lockdown in Low-Income Areas in England and Wales. Manchester: Street Games.

Stubbs, B., Vancampfort, D., Hallgren, M., Firth, J., Veronese, N., Solmi, M., … Kahl, K.G. (2018). EPA guidance on physical activity as a treatment for severe mental illness: a meta-review of the evidence and Position Statement from the European Psychiatric Association (EPA), supported by the International Organization of Physical Therapists in Mental Health (IOPTMH). *European Psychiatry*, 54, 124-144.
Swann, C., Telenta, J., Draper, G., Liddle, S., Fogarty, A., Hurley, D. & Vella, S. (2018). Youth sport as a context for supporting mental health: adolescent male perspectives. *Psychology of Sport and Exercise*, 35 55-64.
Tang, J.W., Marr, L.C., Li, Y. & Dancer, S.J. (2021). Covid-19 has redefined airborne transmission. British Medical Journal, 373, 1-2
The Commonwealth (2020). The implications of COVID-19 for community sport and physical activity. Accessed on: https://thecommonwealth.org/implications-covid-19-community-sport-and-physical-activity
Tierney, S., Wong, G., Roberts, N., Boylan, A-M., Park, S., Abrams, R., … Mahtani, K.R. (2020). Supporting social prescribing in primary care by linking people to local assets: a realist review. *BMC Medicine*, 18(49), 1-15
Tobi, P.,Kemp, P. &Schmidt, E. (2017). Cohort differences in exercise adherence among primary care patients referred for mental health versus physical health conditions. *Primary Health Care Research and Development*, 18, 463–471.
Tweed, L. M., Rogers, E.N., & Kinnafick, F.E. (2021). Literature on peer-based community physical activity programmes for mental health service users: a scoping review. *Health Psychology Review*, *15*(2), 287-313.
UK Government (2020). Prime Minister's statement on coronavirus (COVID-19): 23 March 2020. Available: https://www.gov.uk/government/speeches/pm-address-to-the-nation-on-coronavirus-23-march-2020
Van der Veken, K., Lauwerier, E., & Willems, S.J. (2020). How community sport programs may improve the health of vulnerable population groups: a program theory. *International Journal for Equity in Health*, 19(74), https://doi.org/10.1186/s12939-020-01177-5
Van der Wardt, V., di Lorito, C., & Viniol, A. (2021). Promoting physical activity in primary care: a systematic review and meta-analysis. *British Journal of General Practice*, 71(706), e399-405.
Vancampfort, D., Firth, J., Schuch, F.B., Rosenbaum, S., Mugisha, J., Hallgren, M., … Stubbs, B. (2017). Sedentary behavior and physical activity levels in people with schizophrenia, bipolar disorder and major depressive disorder: a global systematic review and meta-analysis. *World Psychiatry*, 16(3), 308-315.
Vella, S. (2019). Mental health and organized youth sport. *Kinesiology Review*, 8(3), 229-236.
Vella, S., and Liddle, S. (2020). Coaching and athlete mental health. *In*: R. Resende and A. Rui Gomes (eds). *Coaching for human development and performance in sports*. Cham: Springer, 289-304.
Vella, S., Sutcliffe, J., Schweickle, M.J., Liddle, S.K. and Swann, C. (2021). Mental health and childhood participation in organized sport. In R. Bailey, J.P. Agans, J. Côté, A. Daly-Smith and P. D. Tomporowski (eds), *Physical Activity and Sport During the First Ten Years of Life Multidisciplinary Perspectives*. London: Routledge, pp. 101-112.
Vella, S., *et al*. (2021) .An intervention for mental health literacy and resilience in organized sport. *Medicine and Science in Sports and Exercise*, 53 (1), 139-149.

White, R.G., & Van Der Boor, C. (2020). Impact of the COVID-19 pandemic and initial period of lockdown on the mental health and well-being of adults in the UK. BJPsych Open, 6, 1-4
Wilcock, R., Smith, A. & Haycock, D. (2021). Designing community sports-based programmes for men with mental illness: a qualitative study of the Offload rugby league programme, *Mental Health and Physical Activity*, DOI: 10.1016/j.mhpa.2021.100386
Williams, C.Y.K., Townson, A.T., Kapur, M., Ferreira, A.F., Nunn, R., Galante, J., Phillips, V., Gentry, S., & Usher-Smith, J.A. (2021). Interventions to reduce social isolation and loneliness during COVID-19 physical distancing measures: A rapid systematic review. PLOS One, 16(2), 1-28
World Health Organization. (2010). Global Recommendations on Physical Activity for Health. Geneva: World Health Organization.
Xiong, J., Lipsitz, O., Nasri, F., Lui, L.M.W., Gill, H., Phan, L., … McIntyre, R.S. (2020). Impact of Covid-19 pandemic on mental health in the general population: a systematic review. Journal of Affective Disorders, 277, 55-64