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Exploration of the COVID-19 mental health implications in elite disabled athletes

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ABSTRACT

The COVID-19 pandemic influenced the way individuals conducted their lives, with consequences relating to mental health deterioration. Whilst researchers explored this outcome in the general population and athletic populations, less focus was on athletes with disabilities. The aim of this study was to investigate how the pandemic influenced the mental health of elite para-athletes in the United Kingdom. Nine elite-level athletes with disabilities participated in semi-structured interviews. Three broad themes were interpreted from the data using reflexive thematic analysis, two themes reflected the negative impact of COVID-19 on mental health and one theme reflected positive outcomes of the pandemic. Athletes explained that losing face-to-face interactions and delays in major sporting events were significant factors in their mental health decline. This population group reported different challenges to able-bodied communities. Differences included increased susceptibility to contract the virus, difficulties in communication where face masks and online interactions became necessary and perceptions of vulnerability relating to shielding protocols. Finally, positive outcomes related to the additional time to recover, to prepare for major events and time to reassess their values. Exploring experiences of a pandemic on this population group warrants further exploration to enhance the effectiveness of mental health support services in para-sporting organisations.

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The coronavirus disease 2019 (COVID-19) resulted in worldwide illness, causing many deaths and significant disruption to daily life (Busch et al., 2022). The global spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) revealed diversity in each country's response, with the implementation of a variety of guidelines, restrictions, and lockdowns (Facer-Childs et al., 2021). The United Kingdom (UK) reported the first case of COVID-19 on 30 January 2020, followed by a lockdown from 24 March which was partially relaxed on 10 May 2020 (Dropkin, 2020). In these early stages, concerns around susceptibility to be infected by the virus were at an all-time high, with case numbers and deaths growing exponentially (Dropkin, 2020).

There is a growing awareness that COVID-19 influenced the psychological wellbeing of individuals on a global scale, with researchers indicating that the general population experienced anger, frustration, boredom, financial loss, confusion, and post-traumatic stress symptoms during the pandemic (Brooks et al., 2020; Lestari & Setyawan, 2021). To develop understanding regarding this potential change in wellbeing, several studies focused on investigating the effects of COVID-19 on the mental health of the general population. For example, Williams et al. (2020) held virtual focus groups in the early stages of the first UK lockdown to investigate the social experiences and effects of COVID-19. Participants identified themes of loss, criticism of government communication, adherence and uncertainty around social reintegration and the future. Efforts were also focused on comprehending the diverse experiences of individuals within distinct population cohorts, including US college

students, those with pre-existing mental health conditions, and ethnically diverse families, encompassing children with developmental disabilities (Burton et al., 2021; Neece et al., 2020; Son et al., 2020). One such study, conducted by Burton et al. (2021) explored how adults with pre-existing mental health conditions coped during the pandemic and identified several pandemic-related factors that contributed to deteriorating mental health, such as changed routines and uncertainty. Participants used coping strategies, such as perceived social support, to maintain mental health. Son et al. (2020) investigated the effect of COVID-19 on the mental health of American college students using a combination of qualitative and quantitative methods. Findings demonstrated that during the pandemic 91% of the participants displayed increased stress and anxiety, 44% of the participants identified an increase in depressive thoughts and 8% of these individuals reported thinking about suicide. Although these studies provided a short-term understanding of the influence of COVID-19 in relation to the negative impact of COVID-19 on these population groups, longer term implications were limited due to the prolonged uncertainty and ongoing changes of the pandemic.

Athlete mental health

The pandemic also prompted research exploring the mental health of athletes, particularly following the postponement of the Olympic and Paralympic Games (e.g., Holmes et al., 2020; Kubosch et al., 2021; Poucher et al., 2021). The postponement of these major events was reported to have a widespread

negative impact on the physical and psychological health of athletes at both individual and societal levels (Ng, 2020; Wu et al., 2021). The lack of certainty around the timing of competitions, when to train for peak performance, and the competitive disadvantages perceived by many athletes led to concerns about athlete mental health, warranting further investigation (Kubosch et al., 2021). As a result, studies by Facer-Childs et al. (2021) and Simons et al. (2021) explored the impact of COVID-19 on able-bodied athletes' mental health. Facer-Childs et al. (2021) reported significant disruptions in social interactions, physical activity, and sleep patterns in response to the associated COVID-19 lockdown periods and major event postponements. Simons et al. (2021) investigated longitudinal adjustment disorder in relation to lockdown phases in Australian athletes. The observed psychological distress was based on cognitive models, which suggested that an intolerance to insecurity and uncertainty may exacerbate symptoms in athletes susceptible to this disorder due to increased worrying (Da Silva et al., 2020; Purcell et al., 2020; Thielsch et al., 2015). Exploration regarding the importance of social support and social connectedness was also an important topic in athletes' mental health. Graupensperger et al. (2020) stated that during the pandemic, student athletes who received social support and engaged with teammates reported positive mental health and well-being. Team athletes reported being less affected by the pandemic than individual athletes (Kubosch et al., 2021). These findings were immediately integrated into efforts to support athletes and promote mental health screening, which addressed several mental health consequences of the pandemic. Taken together, results from these studies are valuable to implement support; however, they cannot be applied to athletes worldwide due to the varying guidelines and protocols implemented by each government and cannot be generalised to other sports. As seen from the published research, most investigation has focused on the effects of the pandemic on mental health in able-bodied athletes, and although some research has included athletes with disabilities, the influence of the pandemic on para-athletes is underdeveloped (Bundon et al., 2022).

Disability

A "disability" can be defined as a restriction or lack of ability (resulting from an impairment) to perform an activity within the "normal" range considered for humans (World Health Organisation, 1980, p. 143). Several authors have raised concerns about the impact of COVID-19 on disabled people's health, wellbeing, access to resources and funding, yet research conducted to investigate the provisions made for disabled people, especially in sport, is scarce (Ng, 2020; J. A. Smith & Judd, 2020). Examples of implications explored in disabled participants external to sport include how blind individuals have increased susceptibility to contracting the virus in public places because they rely on touch, the deaf community encountering challenges associated with lip-reading because of the use of face masks and the increased risks associated with contracting the virus in individuals using medications or with chronic conditions (Jalali et al., 2020; Kubosch et al., 2021).

Although these implications are not directly related to mental health, the consequences of these experiences may create the foundation for psychological challenges faced by disabled members of the wider community.

The work of Kubosch et al. (2021) and Busch et al. (2022) indicated that athletes with disabilities encountered different influences throughout the pandemic on able-bodied athletes. Kubosch et al. (2021) used questionnaires to gather information about sport participation, physical and mental health, occupation and personal impacts of the pandemic in preparation for the Tokyo Paralympics. The findings reported that 56% of the athletes worried about their social contacts, 50.5% about social cohesion and almost half of the athletes had the opinion that people with disabilities were affected differently by the pandemic than able-bodied people (Kubosch et al., 2021). Busch et al. (2022) conducted a longitudinal study exploring how German Paralympians coped in comparison to the general population across different lockdown phases. Findings suggested that athletes scored significantly higher scores for anxiety, insomnia and depression during lockdown phases when compared to non-lockdown periods. The highest stress levels were reported in the final measurement, which marked the final six months of preparation before the postponed Tokyo 2020 Games (Busch et al., 2022). These studies highlighted the importance of assessing athletes' mental health during the pandemic to identify wellbeing issues and propose countermeasures.

Urbański et al. (2021) and Patatas and Winckler (2022) conducted additional research into the effect of COVID-19 on elite disabled athletes. Urbański et al. investigated the effect of COVID-19 in Poland during the preparation phase of the Tokyo Paralympic Games and reported that 12% of the athletes suspended their training completely and all athletes reduced weekly training time by almost half during this phase. This study had a psychophysiological focus which indicated that the decline in training time negatively affected the psychology of these athletes. Patatas and Winckler (2022) also investigated the impact of postponing the Tokyo Paralympic Games but used a mixed-method approach of collecting quantitative data through online surveys given to Brazilian athletes, and qualitative data via semi-structured interviews with coaches. Participants reported a series of advantages, such as having time to heal and spend time with family, and disadvantages, such as uncertainties and increased anxiety in response to social comparison to opposition in different countries. Although the qualitative accounts did not directly reference mental health and only explored experiences from a coach perspective, this study highlighted the importance of investigating both the negative and positive influences of the pandemic (Patatas & Winckler, 2022).

Considering the research suggesting that athletes with disabilities may be more susceptible to difficulties during the pandemic and recognising that the experiences of this population group have only received limited research interest, the aim of this study was to examine experiences that athletes with disabilities may have experienced during the pandemic. Focus is needed to rearticulate contemporary ideas about disabled people in sport and elicit discussion surrounding the adequacy of existing support services available to this high-level minority group (Fitzgerald et al., 2022).

Method

Philosophical orientation

The exploration of the mental health impact of COVID-19 was framed through an interpretivist paradigm, which can be used to develop a rich understanding of a subjective experience (Jones, 2014). Ontological relativism and epistemological constructivism were adopted to examine the lived experiences of elite athletes with disabilities. This standpoint enabled the interviewer to interpret the subjective accounts of participants, leading to exploration of a variety of perceived realities of the COVID-19 pandemic, whilst being aware of the mental health impact from a disabled athlete's perspective.

Participants

Participants were nine athletes (two females and seven males aged between 19 and 43 years) who matched the eligibility criteria of (a) aged 18 years or over, (b) actively competitive elite athletes when the pandemic began, (c) with a disability and (d) British citizens. An elite athlete was defined as an individual who had competed at high-level events such as the World Championships or Paralympics and had experienced sustained success at this level (Swann et al., 2015). Each participant had planned to compete in various elite-level competitions, such as the Tokyo 2020 Paralympic Games prior to the postponement or cancellation of events. Participants engaged in a range of sports including tennis, powerlifting, swimming, and rugby. This allowed for inclusion of experiences in athletes in both individual and team sports during periods of isolation (Morgan et al., 2019).

The sample included a range of disabilities (e.g., cerebral palsy, spina bifida, dwarfism, oculocutaneous albinism and transverse myelitis) where seven participants reported having congenital disabilities and two participants who acquired their disability during adulthood. The samples were non-exclusive on race, class or gender. All participants were assigned a pseudonym to conceal their identity, as shown in Table 1.

Procedure

Following institutional ethical approval from the School of Health and Rehabilitation Sciences being granted, criterion-based purposive sampling strategies using online platforms such as LinkedIn and Twitter were used to advertise the study to recruit participants across a 12-month period following COVID restrictions being lifted in the UK.

Participants responded to the study after reading the advertising flyer available on social media platforms that was shared by athletes and governing bodies to reach a wide network of varied participants. Following initial interviews, snowball sampling was used to contact potential participants across a range of sports.

Following a written informed consent, one-to-one semi-structured interviews were conducted to explore participant experiences (Sparkes & Smith, 2013). Interviews were conducted virtually via Microsoft Teams for a confidential and secure encrypted connection, in the privacy of the respective homes of athletes. This enabled free discussion around sensitive issues and allowed more flexibility for interview scheduling (Janghorban et al., 2014). All the interviews were recorded and lasted between 45 and 90 minutes. Before the interviews ended, key areas from the interview were identified for each participant to highlight any areas that needed further elaboration, and to provide time to reflect on how the pandemic overall influenced their mental health. This was important to provide athletes with time to acknowledge the effect that the pandemic had on their mental health. All data were anonymised when being transcribed verbatim by the researcher and encrypted using password protection. Revealing participants' specific sport or disability was also likely to jeopardise anonymity, and thus data have been altered to protect the identities of participants.

Interview

In each interview, the researcher invited each participant to explore the psychological, social and physical impact of the COVID-19 pandemic using a semi-structured interview guide to facilitate discussion. Rapport building questions were used initially to develop a comfortable environment. These were followed by broad topic questions to introduce the thoughts and feelings involved during the pandemic, before specific events were discussed. These were questions such as, "Can you describe your initial thoughts and feelings upon the first lockdown being introduced?" and "Can you tell me about how you managed the postponement of the major events?" Topics relating to the athletes' mental health, coping during the lockdown phases, social support, changes to their training regimen and how they managed their time in place of hours usually spent in sport were then discussed. Although the interview was semi-structured, participants were encouraged to direct the conversation to topics that they felt were important to the study and to their experience.

Table 1. Participant details.

Participant pseudonym	Brief description
P1	Female, congenital disability, individual sport, lived with spouse and child.
P2	Male, congenital disability, individual & team sport, lived with parent.
P3	Male, congenital disability, team sport, lived with live in carer.
P4	Female, congenital disability, individual & team sport, lived with spouse.
P5	Male, acquired disability, individual & team sport, lived with spouse.
P6	Male, acquired disability, individual sport, lived with friend.
P7	Male, congenital disability, team sport, lived with partner.
P8	Male, congenital disability, individual sport, lived with parents and sibling.
P9	Male, congenital disability, individual & team sport, lived with spouse.

Data analysis

Reflexive thematic analysis was chosen to identify, analyse, and report themes interpreted from the data (Braun & Clarke, 2006; Creswell & Poth, 2016). The reflexive non-linear method of analysing data enabled flow across themes and the back-and-forth nature of reviewing the researcher's interpretations (Braun et al., 2016). The six stages suggested by Braun and Clarke (2019) created a framework of analysis which allowed the researcher to reflect on the data and ensure analysis was conducted rigorously (Braun & Clarke, 2006). The lead author immersed herself in the data following transcription of all interviews. Throughout the analysis, process strategies were implemented to maintain reflexivity, which included reflective journaling and noting how participant engagement influenced the interview content. This encouraged the author to consider bias given the author's experiences in the disability sport sector, which could influence the data and shape the research process. The authors had also examined the nuanced dynamics of internalised ableism and stigma during the report to prevent these behaviours upon discussing the tensions in people with disabilities and the dichotomy created within the disability community related to chronic conditions (Wendell, 2016). Upon familiarisation with the data, findings in similar research studies enhanced the author's understanding from a theoretically driven standpoint, but the identification of themes were primarily created using an inductive approach (Trainor & Bundon, 2021). Phrases made by participants became codes, and similar codes were grouped together to form themes. These themes were reviewed using refinement, allocation and reorganisation to structure the overall analysis. Throughout the analysis process, the second author played the role of critical friend questioning coding regarding participant beliefs and experiences, particularly around the concept of loss and the role of family regarding how themes sat together in terms of several parts of one theme or separate entities. This discussion went back and forth several times until both authors agreed to the existing coding analysis.

To determine the importance of each theme, the quality of supporting quotations was reviewed, and the potential to combine or divide themes was revised. Aligning with the work of Braun and Clarke (2022), overarching themes and sub-themes were titled to explain the content of the data and the significance of the findings in relation to the research question. Naming of the themes went through various iterations as data

was constantly compared leading to a consensus. Discussion and feedback between authors led to a refinement of representative quotes.

Establishing rigour

Several criteria were used to establish rigour within this study. In keeping with a relativist orientation, the authors do not align with a criteriology approach to the development of rigour but choose certain criteria that align with the current research aims to enhance research quality (Braun et al., 2016). Credibility through member reflection was adopted, which reflects attempts by the authors to accurately represent participants' stories (Schinke et al., 2013). At the conclusion of each interview, the first author provided a summary of the discussed points, which allowed for a collaborative approach between researcher and participant to discuss how the participant felt this reflected their thoughts and feelings.

Reflexivity in thematic analysis was deemed a significant criterion to evaluate the data. Using this approach means the authors are aware that researcher subjectivity is involved in the meaning making process. Braun et al. (2021) suggested that acknowledging personal bias encourages reflexivity and so reflective journaling was used following each interview to draw attention to potential bias. Finally, transparency was included as a criterion that encourages the researcher, when interpreting the data, to think critically about this interpretation. A critical friends approach involved the second author challenging and discussing the generation of themes conducted by the first author (B. Smith & McGannon, 2018).

Results

Data were organised into an overarching theme-theme-subtheme framework. These overarching themes included loss, disability-specific challenges and positive reflections of the pandemic. Within these categories, themes and subthemes were organised to provide an overview of participants' experiences during the pandemic. These are displayed in Table 2.

Loss

Three themes relevant to loss during the pandemic were discussed during participant interviews. Participants discussed

Table 2. Commonly reported themes.

Overarching themes	Themes	Sub-themes
Loss	Loss of social interaction Loss of purpose Loss of family members	Difficulties transitioning to virtual interactions Challenges of social distancing/isolation Changed training conditions
Disability-specific challenges	Health implications Difficulty with COVID-19 guidelines	The postponement of major events Susceptibility to catching the disease
Positive reflections	Perceived benefits of postponing major sporting events Perceived benefits of lockdown periods	Respiratory susceptibility Perception of vulnerability Masks Hearing Judgement from others Time away from pressure Time to relax Reassessment of the value of sport Reassessment of the value of relationships

influential factors during the pandemic such as loss of social interaction, loss of purpose in relation to a decline in motivation and progress due to lockdown periods and major event postponements and loss of loved ones as a result of contracting the virus.

Loss of social interaction

Throughout the lockdown periods, participants talked about the difficulties associated with changing from face-to-face interactions to virtual interactions. These athletes explored the difficulties of this shift, alongside the effects of social distancing on relationships, and how social isolation negatively influenced mental health.

Difficulties transitioning to virtual interactions. The shift from face-to-face interactions to virtual interactions was negatively perceived by participants. Coaching using virtual platforms within the sports team was suggested to be “a bit pointless” (P1) when compared to the impact of face-to-face coaching, and upon reintegration, participants noticed a longer lasting effect in that “people lost a bit of social skills” (P3). This shift of communication further elicited an alteration to connectedness in coach–athlete relationships, with one participant stating how “it was nice to know that someone was there, but I didn’t really feel like they were able to add any value from the other end of a phone like they could in person” (P5).

Challenges of social distancing/isolation. Social distancing measures during lockdown meant increased physical distance from family and friends, where various difficulties associated with isolation and social distance from loved ones were reported. Even though there was a clear recognition of the struggle, participants felt pressure to cope, and displayed discomfort when identifying loneliness because of living in isolation: “I feel a bit daft for saying ... but I felt lonely” (P3). Some athletes endured compulsory confinement upon returning from overseas sporting events in the early stages of the pandemic. One athlete reported that the confinement made him go to special lengths to get out, he resorted to, “telling them I need to go to hospital because I needed to get out of that one room” because isolating was “an absolute living hell” (P6).

Interestingly, the long-term impact of social distancing represented difficulties in the sporting environment:

You didn’t have that complete social interaction and it just wasn’t quite the same. We were all pretty close, and then it did feel a little bit distant and a little bit weird. Even when we could meet up, you weren’t allowed to like shake hands or like, get in anyone’s personal space, which was all just a bit weird. (P5)

Social disconnectedness and isolation were particularly acute in the accounts of individuals living on their own or with only one other individual, and particularly in an individual who mentioned that they lived in a less densely populated town, who could “go for a walk for three hours and not even see anybody” (P5).

Loss of purpose

Loss of purpose was discussed during interviews in relation to a sense of decreased motivation, sporting progress and time away from their sport. The sense of losing one’s purpose

appeared as an outcome of the inability to train as normal and to a larger extent the postponement of major sporting events.

Changed training conditions. Initial negative feelings elicited a sense of self-doubt among participants, making athletes question their purpose within their sport, for example, “what’s the point?” (P3) and “do I even want to do this anymore?” (P4).

Participants experienced a loss of access to training facilities, face-to-face coaching, and time with teammates as a consequence of lockdown periods, which left athletes feeling “fed up, annoyed, irritated” (P4) and that “all progress I had made when lockdowns were lifted could have been lost again” (P8). The mental health consequences of lockdown periods were significant, “I don’t like to use the word depressed, but I was pretty damn close because I finished [training] and had no purpose. Nothing to do” (P5). The influence of lockdown periods on ability to train negatively influenced participants’ mental health, with a focus on how lockdown periods made athletes feel negatively towards themselves and their situation:

I think everyone was a bit on edge, the calendar was a mess, and things were moving all the time. I got exhausted looking at it. I had no idea what I was doing, I literally have never felt so bewildered and lost, ever. I was like, I don’t know what I’m doing. (P4)

It all just went quiet. That was what I couldn’t deal with. I was just losing my chance of being something. It is one of the big problems I have now, I struggle to identify myself with anything wheelchair related, but the [sport] has given me this reason to live. (P6)

This change to how the individuals identified themselves without sport was a perspective that para-athletes appeared to find particularly difficult.

The postponement of major events. The postponement of the Tokyo 2020 Paralympic Games, among the cancellation of many major sporting events negatively influenced participants’ mental health. Evident consequences included a decrease in motivation, with one athlete stating “it was very tough emotionally, ... I had tears in my eyes, it was hard to realise I had to keep going” (P9). Athletes were left asking themselves “is anything going to go right?”, “what are we doing this for?” and “what’s the point?” (P3). The cancellation of major events made athletes question their ability to engage in pursuit of an ambiguous target, with emphasis on the rarity of this event occurring: “I was a bit gutted because we’ve been working towards something for four years and you only get one chance to compete every four years if you’re in the Paralympics” (P3). The wait for the event to be held again was also a key aspect that negatively influenced mental health, for example, “I checked out because it was just too long, it was just too long to go another whole year, I cannot do this for another year, it was just too much” (P4).

Questioning their purpose within their sport led to some athletes terminating their sporting careers because of event postponements, with some athletes directly stating that if Tokyo 2020 was not postponed, “then I would have continued to play until Paris” (P5) and “I would have stuck to what my original plan was, go to Tokyo, retire after” (P4).

Loss of family members

Death was another reported element that influenced the mental health of athletes. The significance of family relationships

meant the negative influence on athletes' mental health was substantial:

I lost my nan really early on to COVID. After that it couldn't get much worse for me. She was my favourite person in the world, and I hate to admit it, but I was always her favourite. So, it hit me hard. After that I stopped caring about the whole COVID thing. In my head it couldn't get any worse. (P6)

Disability-specific challenges

Participants reported how disability-specific challenges influenced their mental health because of the unique health implications of contracting the virus but also the psychological impact of shielding protocols implemented for many of these athletes. Throughout the interviews, the perception of vulnerability, negative experiences with COVID-19 guidelines, health implications, and lack of understanding by others appeared important to these participants.

Health implications

Health implications associated with the athletes' disabilities were key challenges for these athletes. The athletes' disabilities increased their fear of contracting the virus, and the long-term health implications related to respiratory susceptibility which could directly affect their ability to compete:

It's a respiratory virus and you know I need my respiratory system to play. So, if I'd have got scarring that probably would have ended my career to be honest. (P3)

The implications associated with the athletes' disabilities placed pressure on participants to be some of the first members of the population to receive COVID-19 vaccinations, which in turn extended the negative impact of COVID-19 not only on their mental health but physical health too:

I had three injections in the space of like a six-month period and I could just sometimes tell my body was just like "I don't want any more". You always get that immune system flare up after an injection, it always gives you a little twinge or something. (P2)

Anxiety surrounding the worst-case scenarios should they contract the virus, was evident because of their disability:

It's the little things, like I can't lay on my back for example, because it's agony, so that was one of the concerns like what if I'm like conscious but can't communicate and on my back and in pain, my head was going to all the extremes. (P4)

As part of the shielding protocol, athletes received letters "constantly" which was noted as "tough and quite scary having that constant reminder [that the athlete was vulnerable]" (P9). The negative perception of being labelled as "vulnerable" was long-lasting, "I don't like the word vulnerable. It still plays in my head a bit" (P4) and this significantly affected mental health: "I was just totally like a rabbit in the headlights. I was a mess for a good few weeks and I just was beside myself" (P4).

Difficulty with COVID-19 guidelines

Managing COVID-19 guidelines was viewed in a negative manner relative to their disability and ability to participate within society. Participants with hearing impairments faced challenges when transitioning to online coaching, but also when

convening in public settings due to mask wearing. Participants explained:

I really struggle because I'm deaf, I read a lot of body language and lip reading, and we did do group video calls and things, but I wasn't very engaged at all if I'm honest. Yeah, it's hard for me to stay engaged on virtual meetings. (P7)

Other people wearing masks produced specific difficulties for these athletes in environments external to sport, "I would just have to wait until we're outside because I can't hear you. It was rather isolating" (P7). Another athlete noted the impact of using "proof" of their disability as an escape of judgement from mask exemption, as influencing mental health:

I couldn't really wear a mask, because no matter what I did, my glasses would fog up, so I started using my symbol cane a lot more which I felt really uncomfortable with at the time. To make sure people knew I wasn't just wearing sunglasses and not wearing a mask. Keeping a distance from people was almost impossible for me, as I had to have someone next to me in public to know where I was going all the time. (P8)

A lack of understanding and judgement by others during the pandemic was a subtheme of disability-related challenges. Those with hearing impairments often had to ask people to take their masks off to help them lip-read, but that felt like a "confrontation every time" (P7). Due to hearing impairments not being as visible as other disabilities, athletes also felt judged by strangers who failed to acknowledge why mask exemption was required:

A lot of people still wear masks, and also if I'm with deaf people, or if I'm with people and they're not wearing masks, you feel like "oh why aren't they wearing a mask?" but I don't want to wear a label on my head saying that I'm deaf. (P7)

Positive reflections of the pandemic

Despite the various negative influences of the pandemic on athletes with disabilities, positive outcomes were also evident. Positive reflections of the pandemic included subthemes related to the benefits of postponements of major events and a reassessment of values, allowing athletes time to recover, and establish the importance of their sport, relationships and priorities upon time away from routines.

Perceived benefits of postponing major sporting events

Every participant interviewed encountered a postponement or cancellation of a major sporting event, with many experiencing the postponement of the Tokyo 2020 Paralympics. Athletes had time to work on their strengths and improve their confidence for future competitions such as the Tokyo Paralympics that were held one year later. One athlete stated that the extra year meant coming back "fitter, stronger, mentally, more robust. So, going into Tokyo, I felt bulletproof" (P2).

Time away from pressure. The postponement of major sporting events provided athletes with extra time to prepare for the delayed competitions and time away from the pressures an elite athlete would regularly experience. A sense of relief upon the postponement of major sporting events was evident in athletes who suggested that the event was "a weight on the shoulders that you don't necessarily want or need, and it's nice

to not have it" (P3) and that having "no external pressures, nobody beating down on me because everyone was in the same boat. It was probably a point in my life where I was most content" (P6).

Athletes also noted the opportunity to reflect on team achievements in response to major sporting events being postponed, such as one athlete suggesting "we won golds, but we made mistakes, so like you look at those mistakes and try to make them better" (P3), and various athletes admitting that "we made lots of developments that we wouldn't have made if we'd had Tokyo in 2020" (P2).

Perceived benefits of lockdown periods

The pandemic also appeared to give athletes time to reflect and allowed some to recognise the importance of sport itself, relationships in sport and external to sport and the importance of other life aspects such as time to process major life events, and time to be at peace with decisions to retire from sport as a consequence of the pandemic.

Time to relax. Participants expressed positive emotions, such as feeling "happier" (P4) and "able to just chill out" (P2) in relation to an athlete's usually "hectic" schedule becoming less busy and "suddenly very clear and open" (P2). One athlete reported countless positive reflections of times during the pandemic where they felt "pretty burnt out" to the point where "I was just like I can't be bothered with this, and then thankfully COVID hit" and saw lockdown periods as a chance to "catch my breath and sort of reset" (P2). This time to reflect enabled the athlete to recover from burnout, feel less pressured, and to reflect on life aspects that they had not previously had the chance to. For this participant, personal circumstances meant lockdown periods were viewed as a chance to "get used to everything before the world pressed play again" and gather their thoughts: "I never had the chance to process it [participants' divorce] and I can properly let go here and just figure out what I'm doing, I just needed to process stuff on my own" (P2).

Reassessment of the Value of Sport. A widely observed positive reflection of the pandemic, was the realisation of the value that sport holds in these athletes' lives. Returning to sport after lockdown periods elicited a sense of being "extremely grateful more than ever to be a part of it" (P9). For another participant who endured a longer time of not competing due to further injury, expressed returning to their first major sporting event as being "the only competition I've ever gone to and probably will ever go to, feeling happy to just be there" (P6). The postponement and lockdown phase of the pandemic also gave athletes time to reassess and feel grateful for their involvement in sport:

I think sport just gives you a lot of confidence. I love what I do and having teammates, that all have different disabilities, and seeing how they manage it and the confidence they have. I'm pretty confident in my own skin, even though I do get treated differently in certain circumstances. But whatever I do, I'm comfortable with myself and I know who I am, so I don't need to prove it. (P3)

Within the perceived benefits of the pandemic came time to consider direction and the value sport played in one's life. Positive reflections on life away from sport clarified life-changing decisions;

COVID made me feel more comfortable with my decision because of how much I didn't miss playing. I felt amazing, not one part of me regretted it and never have since, and that just showed the timing was right. I felt the weight of the world come off my shoulders and I felt free. Which was something I hadn't felt for a really long time. (P4)

Reassessment of the value of relationships. During lockdown periods, many athletes spent extended periods of time with loved ones and thus strengthened relationships with individuals external to their sport:

It's quite eye-opening because in that scenario you suddenly realise who you really want to talk to and who you really want to gain support from and be supported by, so it opened my eyes to like who really mattered and who I really mattered to as well. (P4)

This was emphasised by athletes who reflected on time away from others during social distancing measures, such as one athlete who explained "when you're under that restriction, where you can't do it, you realise sort of how important it is to actually spend time with friends and family" (P5).

For some athletes, the living arrangements and amplification of time spent with others external to their sport enhanced significant relationships:

I suppose it solidified my actual relationship really, I got an engagement out of it. We loved being together because it was amazing and something that we've never had and probably never going to have again, so we just embraced it. (P4)

While discussing the reintegration of teams and the reintroduction of face-to-face interactions, one participant reported appreciation for physical aspects of non-virtual communication which had been missed during social distancing, "It's something I really value, like that physical touch with people I love. And that was the best feeling when that came back" (P4).

It was not only personal relationships that were suggested to be enhanced but the enhancement of team relationships was also prevalent during lockdown periods through the adjustment to virtual communication, an otherwise negative change because of social distancing:

We're not a central squad so having these different solutions meant COVID probably helped. We actually got to know each other better over Zoom than we had done meeting each other face-to-face over the last 15 years. (P2)

Overall, elite-level British para-athletes interviewed in this study encountered a variety of negative consequences on their mental health, but also positive reflections of the COVID-19 pandemic which have elicited an understanding of why unique experiences of individuals within this minority group may differ from one another, but also from other populations in existing literature.

Discussion

The aim of this study was to explore the mental health experiences of COVID-19 from the perspective of elite-level para-athletes. Existing research in this population group is sparse, with most of the research conducted being either quantitative methods, related to specific disabilities (e.g., see Chiu et al., 2021), or with participants from countries other than the UK

with contrasting government responses to the pandemic (e.g., see Hu et al., 2021). The inclusion of qualitative data from British para-athletes introduces the opportunity to spread awareness of the unique perspectives and experiences of this minority population, and the influences, both negative and positive, of COVID-19. Although the findings from this group of athletes indicated that COVID-19 produced several negative influences on the mental health of para-athletes, some specific positive attributes were reported because the pandemic provided athletes with time to stop, evaluate and recover from the intense world of elite sport. Several of the presented themes were similar to those reported in previous research (e.g., Facer-Childs et al., 2021; Simons et al., 2021), but unique themes associated with disability-related challenges were discussed that have not previously been reported in the literature.

Loss

The negative impact of major event postponements and lockdown periods created a sense of loss, a key theme in the present study. Participants indicated that feelings of social disconnection and loneliness were central experiences which significantly influenced mental health. Throughout the interviews, participants talked about missing the company of friends and family, the impact of social distancing and their negative experiences of shifting from in-person to virtual interactions. The negative effect of social disconnection on mental health is a well-documented impact of COVID-19 in different populations such as able-bodied athletes and disabled athletes from a range of countries where lockdown was imposed (Facer-Childs et al., 2021; Kubosch et al., 2021). Facer-Childs et al. (2021) recruited able-bodied elite and sub-elite athletes who classified social interactions, physical activity, and sleep patterns as significantly disrupted. The quantitative findings linked decreased training frequency to poorer mental health, however, did not explicitly link the disruption of social interaction with mental health outcomes. In the present study, social interaction was discussed in relation to being forced to change to communicating virtually. Participants, who were already predisposed to communicating differently due to their disability, interpreted this change as damaging to their mental health. Disabled athletes in this study seemed to experience a particularly negative influence due to the lack of social and in-person connections, which may have differed from able-bodied individuals. In this study, a loss of physical touch, the ability to practice sport with teammates in a realistic in-person competition setting and the building of in-person companionships with teammates during times of pre- or post-training were aspects of the pandemic that this population particularly found to negatively influence their mental health. Further to this, the judgement that individuals with invisible disabilities experienced presented an interesting aspect of further differences in the mental health impact to individuals with visible disabilities. This comparison warrants further exploration.

One relevant finding from this research was the importance of support in high-level sporting organisations. Participants reported that when they used the psychological support services offered within sporting organisations, it was highly influential in aiding them to cope with adversity; however, several

athletes also sought psychological support from external free services provided to British athletes to address external pressures. This highlights that support within British sporting organisations exists, but to what extent this caters to the needs of this specific population requires further exploration.

One interesting finding relating to social connection was highlighted; although the participant group interviewed competed across a range of individual and team sports, each individual reported training as a team in their respective sporting environments. Mental health impact from social disconnection in athletes who participated in individual sports was similar to those in team sports, which is contradictory to the findings of Fiorilli and colleagues (2021) who reported higher levels of distress in individual sport athletes than team sport athletes. It may be that in participants interviewed, social connection and interaction were more important and so maintained to a greater level throughout the pandemic. Future research exploring how social connection and social interaction within individual and team sports may fluctuate and potentially contribute to differences in mental health among this population. These initial findings indicate that increased feelings of social connection while training as a team, even in individual sports, may improve athletes' mental health suggesting that sporting organisations could integrate social connection within sporting environments.

Athletes found that uncertainty surrounding future events, decreased motivation towards training and a change in routine contributed to their loss of purpose throughout the pandemic. These findings amplified the effect that time away from sport during lockdown periods and the stress that event postponements had on increasing anxiety levels, as previously recognised by Busch et al. (2022). Participants appeared to experience a shift in their athletic identity when access to their usual training regimen was stopped in lockdown periods. The shift in athletic identity reported by participants exacerbated mental health issues, which may be explained by Hu et al. (2021) who suggested that athletes with disabilities measure their mental and physical empowerment, alongside their well-being, through sport participation and thus gain a strong sense of athlete identity. This recognition potentially explains why para-athletes may have experienced increased negative influences by not training during lockdown periods in comparison to able-bodied athletes. Understanding the role of athletic identity for this population group warrants future research to determine potentially smoother pathways for para-athletes undergoing time away from sport in terms of injury and transitions.

The loss of family members due to contracting the virus was the third subtheme. Each COVID-19 death was estimated to have affected nine family members, with bereavement causing profound mental health effects (Simon et al., 2020), yet the personal accounts of those affected have not been extensively explored. Although all participants did not experience this loss, those who did experience the loss of a loved one delved into the effects of not only bereavement during times of uncertainty but also anger towards the pandemic, and emphasis on the lockdown periods exacerbating these negative emotions: which are novel findings from this research.

Disability-specific challenges

Disability-related challenges such as the athletes' vulnerability to contracting the virus and the implications government shielding protocols had on participants were reported to negatively influence mental health in this study. These findings support previous research (e.g., Jalali et al., 2020; Kubosch et al., 2021) which has reported that various aspects of the pandemic had contrasting influences on various minority groups. Disability-related challenges reported in this study included the long-term implications of catching the disease for athletes who were susceptible to respiratory issues, the social pressure to have vaccinations in response to being labelled as vulnerable and the necessity to perform behaviours to prevent judgement from others. Participants elicited feelings of anxiety, fear and frustration, which were mental health consequences of the pandemic that were unique in this population.

Participants elaborated and reported in this study that the preventative measures of mask wearing and judgement from others were influential in deteriorating mental health in this population. Individuals with hearing impairments suggested that mask wearing made communication difficult, for example, individuals with cochlear implants could not rely on lip-reading, and individuals who use sign language could not fully understand due to covering facial expressions (Garg et al., 2021). This loss of ability to socially connect and its negative impact on mental health was evident in the present study and provides reason for why the introduction of masks with clear windows to see the wearer's mouth was vital to prevent exacerbating social disconnection in the disabled population (De Hahn, 2020). The present study explored this concept and not only found the difficulties of mask-wearing on lip-reading, but also how online meetings for athletes who had hearing impairments caused lack of engagement and an extension of the feelings of isolation, these were contradictory negative outcomes of virtual interactions as found by Peterson (2022) who suggested that this in fact alleviated anxiety for those with disabilities from being present in public with an illness that can be "stigmatising".

Positive benefits

Throughout the study, noticeable positive outcomes of the pandemic were evident in relation to the time it gave participants to step away from the pressure and the expectations of being a para-athlete. These benefits included the time that was available to them in relation to the postponement of major events and not being able to train as normal due to lockdown.

This participant group identified perceived benefits of the postponement of the Tokyo 2020 Games; athletes discussed how they used the extra time to recover from an injury, reverse the effects of overtraining and process personal circumstances previously overlooked by their busy schedule. These findings regarding the positive perception of major event postponements support findings by Patatas and Winckler (2022), who suggested that the pandemic gave injured athletes the chance to recover, time to improve skills and reconnect with loved ones. This understanding that time away from sport may allow for recovery leads to concerns around the pressure that athletes may be feeling in

their day-to-day interactions. Hughes and Coakley (1991) initially introduced the concept of the sport ethics. They explained that the sport ethic portrays the archetypal hero who sacrifices personal resources and tolerates pain and risk in the pursuit of excellence. Some athletes are socialised to conform to these unrelenting expectations that prioritise performance in sport over wellbeing (Coker-Cranney et al., 2020). When athletes are in a position where the sport ethic is prized and normalised in their sport environment, there may be a tendency to push boundaries to maintain athletic identity and pursue sporting excellence (Coakley, 2015). These factors may lead athletes to underrecovery, overtraining or burnout (Coker-Cranney et al., 2020). Athletes in this study indicated that having to stop or reduce training led to positive outcomes and gave them a chance to almost come up for air and reconnect with important individuals, indicating that there may be some overconformity to the sports ethic. To our knowledge, limited research has been conducted in this population group in relation to the sport ethics, overtraining or burnout, and this study provides some evidence to suggest that further research is warranted.

Perceived benefits of lockdown periods

Lockdown periods taught many of these athletes to enjoy time away from their sport and consequently value their hobbies and appreciate their sport more upon returning. Having the time to relax and the sense of relief from an elite athlete's usually intense training schedule allowed these participants time to recover from injuries and re-enter competitions with a more positive mindset. Costa et al. (2022) identified the importance of setting goals for aspects other than one's sport. This importance is highlighted in the present study which suggests the need for psychologists to create tools where time away from sport can be utilised to create positive mental attitudes towards competition and create a framework for contingency plans should retirement from sport need to occur.

This study found that participants were more inclined to value relationships, their sport and their prioritisation of other life aspects in reflection of the pandemic. Spending more time with loved ones, spending time away from loved ones due to social distancing and missing physical touch with family members were situations that taught participants to reassess and positively perceive lockdown periods. These aspects complement the findings of Burton et al. (2021) who identified coping strategies such as perceived social support and staying connected with others as better facilitating mental health. These positive aspects have often been reported by athletes following other types of adversity, such as highlighting the increased appreciation of social support from individuals in and out of the sporting environment as a result of time away from sport due to a sport related injury (Rubio et al., 2020). The present study therefore confirms the importance of these relationships and the impact of social support, however, adds a qualitative explanation for how psychological support was implemented for, and evaluated by, this specific population in response to COVID-19.

Limitations

Although there are strengths to this study, it is important to highlight the limitations that highlight sectors warranting

further exploration. In relation to the procedure of this study, the recruitment process may have favoured individuals who more regularly use the internet, a limitation adapted from the work of Williams et al. (2020) when applied to higher risk populations. Thus, this sample may have included more socially connected people who could have different perceptions of socialising and greater resilience in overcoming social challenges compared to athletes who may use the internet less. Whom participants lived with was the breadth of living conditions explored, which meant that other factors that may have significantly influenced their mental health and well-being were not acknowledged, such as whether participants lived in urban or rural areas as investigated by Hubbard et al. (2021). This study was conducted over 12 months after social distancing guidelines were eradicated, so all accounts relied on retrospection and memory of times many people may alter in the pursuit of coping. This study also lacked pre-COVID-19 mental health data which limited analysis, but this was an unavoidable consequence of the pandemic and therefore cannot provide guidance for future research (Jia et al., 2022). The sample was not as ethnically diverse as desired, with only white British and British Asian ethnicities being represented. All participants also lived within the UK, and therefore results cannot be generalised to alternative countries or ethnic groups. Comparison of the effect of COVID-19 on athletes who participated in team sports versus individual sports was highlighted; however, further exploration using athletes who participated in individual sports but did not train as a team may have been an interesting perspective to compare. Future research may seek to recruit a larger and more ethnically diverse sample and compare results from various countries that implemented a range of lockdown protocols.

Future research

Despite these limitations, this study is novel and demonstrates originality through its application of reflexive interpretation in a specific minority group. Future avenues of research may include a broader variety of disabilities, sports, and ethnicities, with the sample recruited via a platform that does not rely on participants using the internet. Longitudinal implications can be taken from the results of this research: in-person connections can increase engagement, a sense of community and vital connections for this population to prevent exacerbating mental health in post-pandemic protocols. These findings also present the necessity for mental health practitioners to create contingency plans with athletes to assess their current and future values in other areas of life than sport and therefore ensure that the retirement process plays less of a negative role on mental health.

Conclusion

This study provides novel insights into the qualitative experiences of athletes with disabilities during the COVID-19 pandemic. Findings concluded similar themes to able-bodied athletes with regard to the implications of disrupted social connections due to social distancing, and the negative impact on training and motivation in the face of major event postponements. However, due

to their disabilities, participants were subject to additional social constraints through shielding and judgement from others and physical constraints in result of health implications where the vulnerability of this population instilled greater fear if they were to contract COVID-19. Further studies on disabled populations should assess the impact on athletes who accessed support services, to further understand the perspectives of a massively overlooked community within many societies.

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