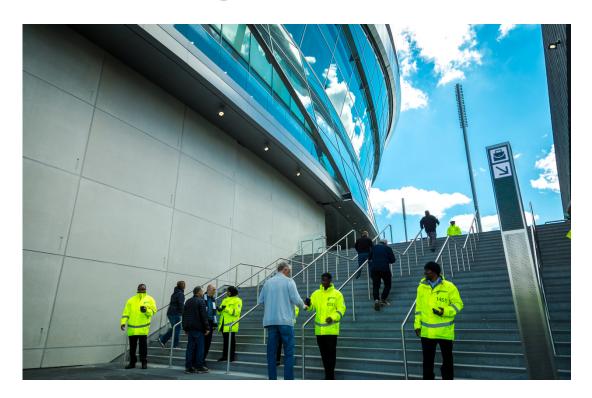
Natcen Social Research that works for society

Neurodiverse sports fans

Safety, accessibility and experiences when attending live events



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Executive summary

This report presents the findings from qualitative research aimed at understanding the experiences of neurodiverse fans when attending live sporting events. The research was commissioned by the Sports Grounds Safety Authority to inform work being conducted by Level Playing Field to update the Accessible Stadia Guidance. A key aim of the research was to better understand the access requirements of neurodiverse sports fans and how these related to questions about maintaining a safe environment within stadia and grounds.

Neurodiverse sports fans

Neurodiversity is a term used to describe the natural diversity of cognitive functioning found within the human population. While people vary in their preferences for the words they use to describe themselves and their experiences, for the purposes of this report, we use 'neurodiverse conditions' to refer to some of the neurological differences that contribute to neurodiversity and result in people experiencing the world in different ways.

Throughout the research, we refer to neurodiverse sports fans to differentiate them from neurotypical fans. Twenty-four people took part in qualitative interviews and focus groups. Neurodiversity within the group of participants arose from: autism; attention deficit hyperactivity disorder (ADHD); dyslexia; dyspraxia; and Tourette's syndrome. Due to the diversity of conditions, people had different characteristics and requirements, including for example, physical and verbal tics; hyperactivity; difficulties with balance and perception of space; sensory sensitivity, such as to light, sound, touch, or smell. Sensory processing difficulties were also common. These could lead to sensory overload which left people feeling exhausted, stressed, anxious or experiencing a change in baseline behaviours (sometimes referred to as 'meltdowns').

Types of sports

Experiences at a range of different types of sports were included in the research, with the most common examples being football, rugby, cricket, and tennis. Among the participants, attendance was more regular and frequent at football. Regularity of attendance at sports events varied – from those who had never attended, those who attended occasionally, through to regular, season ticketholders. Participants had correspondingly differing levels of confidence in attending, from feeling confident in familiar home-game environments, to lacking confidence in attending any live sports events. Confidence increased where people were familiar with the venue, had support from family, friends or a companion/carer, or where they knew certain facilities or tools would be in place to support them.

Key findings

Booking tickets. There were differences in terms of what venues offered when booking tickets. Complimentary tickets for companions were available from some venues but participants were not always eligible, and companions' seating was not always next to the neurodiverse individual. Requests for certain seats, such as at the end of a row to allow extra space or for people to change sensory environment if needed, were not always met. Participants wanted an easier process of booking, with a single accessibility scheme that recognised individual requirements operating across sports. This would reduce the need to repeatedly explain or justify their access requirements.

Information provision ahead of the day. Familiarity and routine were key factors in improving confidence. It was common for people to report being confident attending home games but feeling unable to attend away games. As a result, being able to plan and prepare for all aspects of the experience improved confidence. Participants wanted more information available in different formats in advance of events, covering: what to expect in terms of arrival and transport; security checks and what could be brought into the venue; layout and seating; and who they could speak to for help.

Arrival. Arriving at the venue early was a strategy that many adopted to help them feel more familiar and comfortable in the environment and to avoid queues and crowds. Being physically close to other people can be overstimulating and could lead to a rise in anxiety particularly for those with physical tics or balance issues. Many aspects of arrival could contribute to a stressful experience, including having to spend a long time looking for parking, having negative experiences with staff during bag searches or being challenged when trying to use accessible entrances. Participants wanted greater availability of accessible parking or more drop off locations nearer the venues. They also felt there should be more accessible entrances available with consistent staffing, so that staff learnt to understand neurodiverse spectators. These facilities should be more widely advertised.

Staffing. Experiences with staff at venues overall was mixed, with some reporting negative encounters arising from stewards' lack of understanding. Where participants had received support from a disability access or liaison officers, this was generally positive as these staff members were approachable and understanding. Participants felt that staff, particularly stewards should receive training to be more aware of, better understand and support neurodiverse fans.

Venue design. Participants reported negative experiences where venues had narrow concourses and gangways or closely packed seating. Being able to pick appropriate seating, or for season ticketholders, always having the same seat, improved this. Neurodiverse fans interviewed often relied on support from other people to find their way around venues, but they raised concerns about signage that was out of date, hard to see or interpret. While participants recognised that it was difficult for older stadia to change layouts, they suggested that new stadia should be built with wider, more spacious concourses, gangways, and seating. Signage could be improved using pictures, colours, and larger text.

Facilities. Participants had mixed experiences of making use of facilities at venues. Toilets and refreshment stands could be difficult where there were long queues, meaning that some fans avoided using these facilities. Participants suggested having accessible sections of refreshment counters and a greater availability of disabled toilets to help reduce queuing time. Participants were supportive of the provision of sensory rooms for neurodiverse children and for those with more complex needs but noted that there were limitations as they were usually only available to a small number of people, were often reserved for children rather than adults and sometimes had restricted viewing. Participants advocated having more quiet spaces closer to seating areas that could be accessed by a variety of people without prior booking and could be used as a space to moderate anxiety or stress.

Safety. Many of the factors that improved participants' overall experience also made them feel safer while attending live events. These included accessible/open seating and accessible venue design, support from family or friends, and a strong presence of trustworthy staff who understood the requirements of the range of fans. Participants' feelings of safety related to not feeling 'trapped', being able to leave in case of sensory overload, and feeling that adequate support was in place.

Engagement from clubs/venues. Finally, participants wanted greater engagement from clubs and venues with their neurodiverse fans, through a 'neurodiversity champion' to understand the requirements among the supporter base. Participants also felt that clubs/venues could do more to raise awareness with other spectators.

1 Introduction

This report presents the findings from qualitative research to improve understanding of the experiences of neurodiverse fans when attending live sports events. For the purposes of this report, we refer to neurodiverse sports fans to differentiate them from neurotypical fans. Neurodiversity within the group arose from: autism; attention deficit hyperactivity disorder (ADHD); dyslexia; dyspraxia; and Tourette's syndrome, although it is recognised this is not an exhaustive list. While people vary in their preferences for the words used to describe themselves and their experiences, for the purposes of this report we use 'neurodiverse conditions' to refer some of the neurological differences that contribute to neurodiversity (ADHD Aware, 2018).

Ensuring all spectators, including those with neurodiverse conditions can enjoy attending sports safely is a key part of widening inclusion in the sporting sector. To this end, the Football Stadia Improvement Fund and the Football Licensing Authority produced the Accessible Stadia Guidance in 2003. While this guidance, and the Supplementary Guidance produced by Sports Grounds Safety Authority (SGSA, 2015), drove improvements to accessibility and inclusion in the sector, it focused primarily on the access and inclusion requirements of disabled people who use mobility aids. The guidance is also strongly focused on physical stadium design and infrastructure, with less emphasis on services, such as ticketing or stewarding and the overall supporter experience. More recent guidance, such as the Accessible Supporter Guide (English Football League, 2019), has focused on the spectator journey and reasonable adjustments that could be made at different stages.

Level Playing Field are updating the Accessible Stadia guidance to better reflect the accessibility requirements of a wider range of disabled people, including those with neurodiverse conditions, across the spectator journey. As part of this project, the SGSA convened a stakeholder workshop on the possible coverage and focus of the future guidance. One outcome of the workshop was agreement that the revised guidance must be evidence-based and that it should seek to cover gaps in the existing guidance, particularly in relation to the needs of neurodiverse sports fans.

While there is growing evidence base on the way in which neurodiversity affects experiences in the workplace (for example the CIPD guide, 2018) and certain other public spaces, there is currently little published research on neurodiverse experiences with sports specifically (Double, 2019). As a result, SGSA commissioned NatCen to conduct research to better understand the accessibility requirements of neurodiverse sports fans and how these related to questions about maintaining a safe environment. This research will help inform the updating of the Accessible Stadia Guidance.

1.1 Research aims

This project had the following aims:

- To explore the accessibility requirements of neurodiverse fans; including how their condition(s) affect(s) them, their experiences of attending sports events, and the support they require to ensure a safe experience.
- To establish what can be done to improve their experiences when attending stadiums in the future; including by exploring lived experiences of what works well that is already in place, any barriers faced, expectations and future aspirations.

1.2 Methodological approach

The research adopted a qualitative approach designed to generate rich insights into the accessibility and inclusion requirements of neurodiverse sports fans and to explore issues from participants' point of view.

Fieldwork took place in late February 2021 and was conducted online via video call or over the phone as a result of the ongoing COVID-19 restrictions. The qualitative research consisted of two online focus groups, one with neurodiverse sports fans and one with companions/carers or guardians of those with neurodiverse conditions. These groups were supplemented by a further eight in-depth interviews. Those who participated in interviews were offered the option of paired interviews. In total 24 people participated in the research. This was made up of 16 neurodiverse sports fans and 8 carers/guardians of people with neurodiverse conditions.

Recruitment was carried out through Level Playing Field, several sports organisations, and within organisations that support those with neurodiverse conditions and used an opt-in approach. For full details of the methodological approach see Appendix A.

1.3 Structure of the report

The report begins with an overview of the people who took part in the study, including the neurodiverse conditions represented and the types of sporting events attended. Chapter 3 explores experiences before the events, including getting to and entering the stadia. Chapter 4 then moves on to discuss participants' experiences at the stadia. Finally, Chapter 5 explores people's overall experiences and confidence and their suggestions for how things could be improved.

The report avoids giving numerical findings, since qualitative research cannot support statistical analysis. This is because purposive sampling seeks to achieve range and diversity among sample members rather than to build a statistically representative sample. However, the research does provide in-depth insight and explanation into the range of experiences, behaviours, views, and suggestions. Wider inference can be drawn on these bases rather than on prevalence.

Verbatim quotations and case illustrations are used to illuminate the findings where relevant. In quotes and case illustrations, information about neurodiverse conditions and sports events has been provided. However, names have been changed, and other identifying information has been removed in order to protect participants' anonymity. Shorter phrases or terms that participants used is also used throughout the text and presented in single quotation marks.

2 About neurodiverse sports fans

This chapter describes the participants of the research including the types of neurodiversity that were represented across the sample and how they manifested in people's lives. It also presents an overview of the sports events that participants attended.

2.1 About the participants

The neurodiverse sports fans that participated were aged between 18 and 49. The carers/guardians that took part included people caring for children (under 18-year-olds) as well as people providing care and support for young adults. Participants' day-to-day activities had been affected by the COVID-19 lockdown, but the research included people who were: working full time; studying at university or college; as well as those not currently working or studying. In addition to being sports fans, participants were also actively engaged in a range of sports activities whether as a participant, or through volunteering in various ways with local sports associations.

2.1.1 Neurodiversity

Neurodiversity is a term used to describe the natural diversity of cognitive functioning found within the human population. There are a wide range of neurological differences that contribute to neurodiversity and result in people experiencing the world in different ways and any requirements that arise from that. Figure 1 provides an overview of the range of conditions reported by participants plus the requirements experienced.

Figure 1 Neurodiverse conditions and requirements of participants in this research.

Attention Deficit Hyperactivity Disorder (ADHD)

- · Difficulty focusing or concentrating
- Difficulty sitting still
- Hyperactive excess energy from over-stimulation
- Social anxiety

Autism

- Sensory processing difficulties leading to sensory overload (lights, smell, movement, touch)
- Physical tics and stimming (involuntary or voluntary repetition of movements or sounds)
- Difficulties interpreting social cues or communicating
- · Change in baseline behaviours (referred to as shutdowns/meltdowns) or panic attacks
- Feeling anxious in social situations and unknown environments

Dyslexia

- · Difficulties with reading and spelling
- Difficulties pronouncing certain words (e.g., sports players' names)

Dyspraxia

- Difficulties with proprioception (perception of body in space)
- · Difficulties with balance and coordination

Tourette's Syndrome

- · Verbal and physical tics more pronounced when stimulated
- · Sensory sensitivity
- · Anxiety

Experiencing multiple conditions – both multiple neurodiverse conditions plus a range of other mental and physical health conditions – was a recurring theme across the

sample. Other conditions experienced by participants included: speech impediments and communication and learning difficulties; obsessive compulsive disorder; ultraviolet sensitivity; hypermobility; irritable bowel syndrome, and rare genetic disorders. Some of these conditions could lead to people having difficulties standing or walking for long distances and could mean that they required other accessibility adjustments.

Sensory processing difficulties were found across participants. These could lead to sensory overload which left people feeling exhausted, anxious, or experiencing changes in their baseline behaviour (sometimes referred to as 'meltdowns'). Sensory overload could be triggered by particularly strong smells, bright or flashing lights, loud and unexpected noises, close contacts when in crowds. This could be particularly challenging in new and unfamiliar environments. Some people also reported that environments which required them to sit still or keep quiet could be challenging as it required supressing physical tics or stims (involuntary or voluntary repetition of movement or sounds).

There were a range of different techniques and strategies that participants adopted to try to manage their condition across different environments many of which were used when attending sporting events (discussed further in Chapter 4). Participants used tools, such as ear defenders, to adjust their sensory input. Those with ADHD and anxiety took medication. Others adopted strategies such as using breathing or distraction techniques. Support from family and friends was also key to participants being able to regulate and adjust when in unfamiliar environments.

2.2 Sports types and frequencies

A range of sports were represented across the sample, with football being the most frequently cited, followed by rugby, cricket and tennis. There were also examples of a range of other live sporting events (see Figure 2). Participants had often attended multiple different live sporting events.

Across the sample, there were different levels of attendance at events, from season ticket holders to people who had never attended live sports events. In between were participants who attended semi-regularly but less frequently and those who only attended sports on the odd occasion.

As football featured most prominently in participant accounts, findings throughout the report are usually focused on attendance at football. Certain features of the experience at football events were similar across other stadia-based events (such as rugby). However, where there were key differences between experiences at different sports, these are made clear in the text.

Fiaure 2 Types of sport and regularity of attendance by participants. **Football** Semi/regular attendance including season ticket holders **Tennis** Mix of attendance at home and away games Occasional attendance Rugby Other sports Occasional attendance: golf, snooker, darts, ice hockey, basketball, netball, NFL, events at the 2012 Olympics and Cricket **Paralympics** Regular but less frequent attendance

3 Experiences before and after events

This chapter explores the experiences of neurodiverse fans before and after sports events, including buying tickets, planning trips, as well as experiences of travel to venues, entry and exit. Throughout we explore factors that improved or diminished experiences.

3.1 Buying tickets

Being able to efficiently buy tickets and make specific event-day requests is key to improving fans' experience from the outset. People chose to book tickets online via venue or ticket websites and over the phone depending on their preference or condition. For example, participants with communication difficulties tended to book their tickets online. In contrast, those who found it difficult navigating websites or who wanted to make specific requests booked their tickets over the phone. Having an option of different booking modes was therefore important.

Experiences of booking were mixed: some fans had no issues while others faced difficulties. Difficulties buying tickets included that some websites were vague and hard to navigate making it difficult to make special requests. When booking by phone, participants reported that some staff had a negative attitude, were impatient and not understanding of neurodiverse conditions. Good booking systems included ones with a disability/accessibility specific booking section on the website, or a designated disability access telephone support line. Furthermore, having an understanding, friendly and accommodating customer service team, who break down explanations and get to know their customers' requirements helps the booking process.

3.1.1 Special requests

There were three main types of booking requests, which are outlined in Figure 3 and described in turn below. Whether participants made a special request at the time of booking and the type of request made, was dependent on the individual, their specific preferences and requirements.



Companion ticket. An additional ticket for a companion/carer was commonly requested when booking a ticket for a child, an adult with more complex requirements, or by those who felt more comfortable attending with someone else. Having someone with them was important to provide support and make the person attending feel safe. However, sports clubs had different policies on responding to requests for companion/carer's tickets, meaning it was not always possible to get one, or to get one

for free. In some instances, participants reported not being eligible to receive a free companion/carer's ticket due to clubs having a 'tiered' disability booking system. In these cases, participants reported that only physical/visible disabilities qualified for free companion tickets and those with neurodiverse conditions had to pay for this.

Accessibility ticket. A regular accessible ticket was requested by participants for use of wheelchair spaces, disabled spectator areas, or easy access and amenity seating and entrances, plus one-to-one support from staff. Once again, eligibility criteria for these tickets varied. While some got them for free through their sport clubs, others did not qualify, for example due to only receiving the lower rate of Personal Independence Payment (a disability living allowance that is made up of two parts both of which are available at two rates).

Specific ticket. Having a seat in a specific area or location within general allocation stands was repeatedly raised as a way to provide space or a sense of familiarity. For example, an end of an aisle or front row seat could help prevent feeling 'trapped,' or assist the ability to stand up and get away easily in the case of anxiety, panic, tics or stims. Additional room around seating or fewer stairs to reach seats helped fans who experience difficulty with balance and/or mobility. This was important for fans who did not want to or did not feel the need to sit in a disabled spectator area.

"Sitting at the end of a row makes me more comfortable, I don't have to be sandwiched in between people around me." (NDF27, adult with dyspraxia and sensory processing disorder, attends tennis and football)

Other participants who regularly attended sport events, including season ticket holders, requested to sit in the same seat each time (for home games) or with their own crowd (for away games) to help manage anxiety and make the experience feel more familiar.

Booking staff's lack of awareness and understanding of neurodiverse conditions acted as a barrier to obtaining the seating needed, with prior bad experiences sometimes stopping individuals from making a specific request at all. Participants reported difficulties explaining to staff the difference between 'need' and 'want', for example when requesting a front row seat. One participant explained how these requests are 'an accessibility necessity not desire'. It was more difficult to make requests at top-league, popular matches (such as in rugby and football), in comparison to at lower leagues. This was because stadiums were busier, seats were assigned and there was more competition over tickets.

Participants who did not make requests either felt they did not need additional support, or required it but did not think it would be provided. A perception that support was only available to those with a physical disability and not for those with a neurodiverse condition was also a reason for not making requests.

Knowing whether a specific request would be met affected the likelihood of attendance. Participants said that a negative response to their requests (either directly from staff or an indirect perception) put them off attending, especially if they were in two minds about going to new sports events. Seating requests were usually met where fans had a season ticket. However, this was less likely for one-off events/matches, even if individuals had booked over the phone. Similarly, companion/carers' seats were not always provided or allocated next to the individual they were attending with, for example if disabled sections were full. The impact of this on safety is discussed in Chapter 4. Where seating requests were not met, participants reported asking other spectators or stewards to switch, but this was not always possible, particularly when events were at full capacity.

3.2 Information ahead of the day

Having sufficient information and support in advance of the event is beneficial for all fans, but especially for neurodiverse individuals. Participants spoke about wanting to know exact detail of events to help plan their day, reduce stress, anxiety, and increase confidence when attending. This is important for all participants but particularly for those with autism, or when going to unfamiliar venues such as away games or one-off events.

Information participants wanted in advance included:

- **How to get there** including travel information, routes, parking information and how to get to venues from car parks.
- What to expect upon arrival including event timing, what food/drinks and personal items they could bring in, venue and seating layout.
- Who to talk to/where to go if there are issues e.g. a Disability Liaison or Access Officer.

When accessing information, participants were both reactive, relying on venues/event organisers to send them information, and proactive, conducting their own research either through the club/venue websites, maps and image search, or using interactive seating maps and 'view from my seat' websites.

While experience of receiving information in advance was broadly positive, and participants gave examples of where they were satisfied with the support provided, there was still scope to improve services. Venues were criticised for having outdated websites, and either not providing enough information at the time of booking or promising to provide more closer to the time and failing to deliver. This was reported by both participants who booked standard tickets and those who requested additional support.

There was limited experience amongst participants of venue familiarisation visits/tours ahead of event day. However, it was suggested these would help make fans feel more comfortable attending, especially for new or unfamiliar events.

Case illustration 1: NDF31, adult with dyslexia and autism, regular attendee of football matches. Mike gets anxious going to new places out of his routine. However, when he attended the London 2012 Olympics, he received lots of information in advance on travel, what to expect, what to bring, where to find his seats and where to go for assistance. This helped his planning, reduced anxiety, and made it an enjoyable, relaxed experience.

3.3 Getting to and from venues

Travelling can be a stressful experience for neurodiverse fans and participants rarely travelled to and from events alone. Having routine throughout journeys helped reduce anxiety and stress. Where routine was not possible, information provision in advance was important, as discussed above.

3.3.1 Transport mode

Participants who travelled by car included venue season ticket holders, and families with neurodiverse children or adults who had low confidence travelling by public transport, mainly due to barriers outlined in Figure 4 below. Public transport (train, tube,

bus, coach) was typically used by participants going to away games and by those who were familiar taking it for other means (e.g., for commuting).

The research revealed four key factors that impacted experiences using public transport, as shown in Figure 4. Enablers to using public transport were generally factors that helped people overcome the barriers they experienced.

Figure 4 Barriers and enablers to using public transport.

Barriers Enablers

Service Space Support Strategies

Delays, last minute changes, long waits, traffic.

Crowding, enclosed spaces, no seating, long queues.

Travelling with friends/family for directions, reassurance.

Familiarity, distraction techniques and coping tools.

These factors played a role in inducing or managing stress, anxiety, sensory overload, and impacting confidence when travelling. Difficulties with the journey, such as multiple transport changes, no guaranteed seating, or an unfamiliar route, could be reasons not to attend events (such as away games and other sports).

3.3.2 Parking

Parking was a key factor that could act as a barrier and/or enabler to the experience of those who drive to events, and in some instances could prevent attendance altogether. The location of parking was important; participants emphasised how parking close to the ground allowed them to get into venues quickly, without stress.

"We need to park as close as possible. Every little stress builds up to a sensory overload when they get there, starting with the journey." (NDF41, carer of child with autism, ADHD and dyspraxia, regularly attends football and cricket)

The lack of availability of parking spaces posed a significant challenge. Spending a long time finding a space which could cause stress after what can be a long journey was a recurring theme. Some participants booked accessible parking to help, however these spaces were often sold out for the season or full upon arrival, with participants unclear whether spaces were occupied by blue badge holders or not. In other instances, accessible parking required additional charges by venues, and some participants were not aware whether they were eligible to use accessible parking. The limited availability of 'drop-off' spaces for neurodiverse or disabled fans to use was also raised.

3.4 Entering and exiting venues

Participants had mixed preferences for timing their arrival to, and exit from, events. It was common for people with a range of requirements to arrive at venues early. Arriving early allowed people to: find parking spaces and seating; avoid large crowds and queues; calm down after journeys; become familiar with the venue; and make the most of entertainment or gift shops. In contrast, there was less consistency with how people timed their exiting. Participants reported both leaving early or late to avoid crowds. However, many were torn as they did not want to miss events, but equally did not find it easy waiting late/standing around due to their condition.

Once people arrived at the venues, their experience entering and exiting was affected by two factors: their experience queueing and their experience with security.

3.4.1 Queuing

Difficulties queueing were reported across the interviews, in particular by those who had problems standing or standing still for long periods, or being in close proximities with others (for example, those with physical tics). Participants who did not experience difficulties with queuing felt this was because they arrived or left early and had support from friends, family, or carers.

When entering venues, some events and/or sports were found to be more problematic, than others. For example, participants who had attended a tennis event said the queues were long and challenging to manage, especially if you turn up without a prebooked ticket. The need for a separate place to stand, with space away from crowds was discussed, especially if accessible entrances were not offered, or people were not made aware of them.

When leaving venues, there were no specific exits for disabled spectators which could make the experience stressful and tiring. Queues and large crowds were particularly challenging post-event, both to get out of grounds and to get onto public transport. In addition, rowdy behaviour from other fans was more likely outside the venue making people feel stressed and uncomfortable.

3.4.2 Security checks

Staff behaviour during security checks could be a source of stress and anxiety for neurodiverse fans. While participants reported both positive and negative experiences, the main issues experienced were with bag searches and using accessible entrances. This was due to a lack of staff awareness and understanding, and was primarily reported by those attending football events.

- Bringing items into venue/bag search: Clubs/venues had different rules on what
 spectators could take in making it difficult to plan/prepare for events. Participants
 reported intensive bag searches, with questioning over food and drink (including
 sealed drinks); medication (including being asked to show prescriptions); and large
 bags. This was significant as bringing in certain items could be important to help
 people regulate their senses and cope with the environment (see Chapter 4). This
 confrontation and feeling of 'being targeted' induced feelings of stress and anxiety.
- Using accessible entrances: Participants encountered difficulties using accessible entrances at football matches due to not having a visible disability and having to justify their requirements. In one instance, this resulted in the individual being separated from their family.

Across sports, positive experiences with security were dependent on staff training and the ticketing system. For example, one participant who had attended a cricket match said the security staff were trained in people skills, searches were not rushed and were conducted in a polite manner. Others who attended football matches had their ticket 'stamped' to indicate they have a disability and experienced no issues.

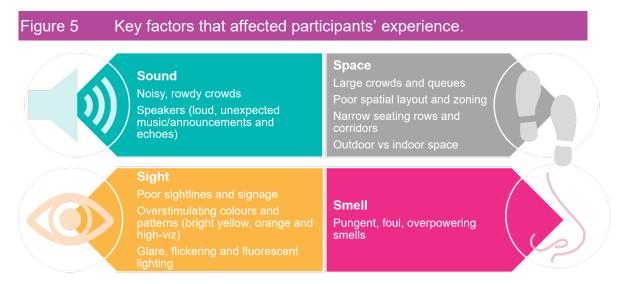
Case illustration 2: NDF13, parent of neurodiverse children, who also suffers from fibromyalgia. When supporting their team at an away football match, Jo was questioned by security about why her children had to go through an accessible entrance with her. Jo had difficulty explaining that they needed a separate, quiet entrance due to their neurodiverse conditions. This caused the children to get upset and stressed out before the game, which was meant to be a fun experience.

4 Experiences at stadia

This chapter focuses on participants' experiences during the sports event and at venues themselves. It firstly explores positive and negative experiences with venue design, facilities, staff, and other spectators, including factors affecting experiences. It then examines the forms of support and strategies that improved experiences, before touching on participant's overall perceptions of safety.

4.1 Sensory experience

Participants mainly had positive experiences when attending sports events. However, experiences depended on a range of factors that are discussed throughout this chapter. A recurring theme was that the sensory environment at events impacted an individual's ability to cope, their overall enjoyment, and in turn, attendance – as has been found in other research (Law et al., 1996; Connelly and Rodgers, 2019). While every individual is unique, across the sample there were four key factors that could trigger sensory overload and result in negative experiences (see Figure 5).



Experiencing the high-sensory environment of a live sport event late in the day/in the evening or attending a long event impacted people's ability to manage sensory stimulation, and in some instances stopped individuals attending altogether. For example, those with ADHD reported losing focus and becoming restless over lengthy periods or as they became tired.

4.2 Experience of venue design

Once within the venue, the design affected not only how easy or comfortable participants were finding their way around, but also their interaction with the game. Barriers centred around the layout, sightlines, and wayfinding, which are discussed below.

Narrow concourses and gangways that fill quickly, closely packed seating and multiple steps were accessibility issues reported by participants who struggle in crowds, with spatial awareness, balance, and mobility. Challenges with the positioning of seating and subsequent sightlines were also raised. Obstruction by goals/posts, cameras, hoarding and other spectators, but also seating that is high up, is more likely to distract neurodiverse spectators, such as those with autism, disrupting concentration and making it difficult to track the event.

Difficulties navigating around new, unfamiliar venues were experienced where signs were difficult to interpret (for example due to using Roman numerals), difficult to locate or out-of-date. People often rely on support from another person for wayfinding, however, concerns were raised over signs that were hidden or blocked, in high-stimulating colours with small writing, or pointing to the wrong location. This could cause distress and worry, particularly for fans with learning difficulties or dyslexia.

Examples of positive, supportive venue designs provided by participants included venues which have wide concourses inside and outside, multiple entrances to allow for crowd dispersion, plenty of leg/manoeuvre room in front of seats, and lots of obvious, large signage.

4.3 Experience with facilities

The toilets and refreshments available form an integral part of the event-day experience, impacting fans' comfort and satisfaction. However, there is scope to improve the services.

Issues with toilet facilities related to cleanliness, design, and availability, all of which contributed to anxiety or could trigger sensory overload. Participants gave examples of toilets that were dirty or foul smelling; provided limited space within cubicles, around sinks, and entrances/exits; or had long, tightly packed queues. Accessible toilets often served as a solution to these issues, although were limited in numbers, with participants reporting having to walk long distances from seats. In addition, some toilets were locked, requiring a Radar key or staff to open; and on occasions participants were not allowed to use them due to 'not appearing disabled'. It is worth noting, not all participants were aware they could get a Radar key for having a neurodiverse condition.

The nature and extent to which participants engaged with refreshments, and their associated experiences varied. Participants could be grouped into those who either bought food and drink from facilities provided (buyers) or brought their own (bringers).

- Buyers: Participants who bought refreshments at the venue found long queues
 and crowds an issue, but this did not prevent them from using facilities. Factors that
 helped included multiple lanes to disperse queues, contact free payment and
 understanding staff to support those who are 'not good with money'.
- **Bringers:** Participants who brought their own food and drink did so due to feeling either unwilling or unable to interact with facilities. This included those who lacked patience, confidence, or an ability to stand in queues or crowds. Bringing their own food and drink could also add to event familiarity (see 4.5.2 below). However, this group reported issues with bringing items through security (see Chapter 3).

4.4 Experience with spectators and staff

Interaction with other spectators and staff occurs throughout the event, including when taking public transport, entering and exiting venues (as discussed in Chapter 3), and within the stands and concourses. Experiences interacting with staff and other spectators could significantly affect enjoyment and attendance.

4.4.1 Spectators

The atmosphere created by other fans and their behaviour could affect neurodiverse fans. Other spectators being rowdy, loud, and having strong smells, leaving no space

in crowds or queues, as well as jumping when celebrating which blocks sightlines, were all issues for sensory processing and could increase anxiety. Participants had mixed experiences with one-to-one interactions with other spectators. Negative experiences were when other fans were rude and intimidating (e.g., through staring or mocking a participant's tics), drunk, or lacking understanding of their condition. While those reporting a positive interaction said people were patient, kind, helpful and understanding.

4.4.2 Staff

Staff can be a vital source of information and support for neurodiverse fans, and participants stressed the impact they have on their overall experience.

"They [staff] are the difference between making someone's day or ruining someone's day." (NDF1, adult with autism, regularly attends multiple sports).

While there were both positive and negative experiences, there was a tendency to discuss negative interactions, particularly with stewards and security. Negative experiences were primarily reported by football fans and down to two key reasons:

- **Staff behaviour:** People felt staff could be unhelpful, uncaring, intimidating, and impatient. This can be worse in larger venues and at high-profile matches, potentially as they are more focused on controlling large groups of rowdy fans.
- Staff awareness and understanding: A lack of awareness of non-visible and neurodiverse conditions was a recurring theme. Participants found staff did not understand triggers, such as personal-space invasion and loud noises; uncontrollable or 'awkward' reactions, such as tics, panic attacks or changes in baseline behaviour (also known as 'meltdowns'). There were examples of people with autism being removed from an event as a 'meltdown' was mistaken for drunken or troubling behaviour. There were also concerns over a lack of awareness of individual requirements or how to handle situations. For example, that someone with dyspraxia may have difficulty with stairs, or someone with autism may have difficulty asking for help or approaching strangers.

Case illustration 3: NDF32, parent of a young adult with ADHD, autism, and sensory issues. Caroline described her experience at a football match where a steward told her son (21 years old) off for being in the disabled section as he 'didn't look disabled'. When Caroline explained that her son has autism the steward replied with 'Oh, is he going to lash out at me then?'. They put in a complaint to the club whose response was that her son should have been wearing a Sunflower Lanyard (a method for people with non-visible disabilities to show they may need extra support). This response was seen to deflect from the inappropriate behaviour of the staff member and participants highlighted that not everyone feels comfortable being obliged to visibly disclose their condition through wearing a lanyard.

Staff who were friendly and approachable, patient, calm and understanding created positive experiences for fans. Season ticket holders and regular attenders who got to know stewards were more likely to report positive experiences. Staff at other sports such as tennis, athletics, and cricket, were perceived to show greater understanding and be more approachable than those at football. Further differences in event experience between sports are outlined in Box 1 below.

Box 1: Differences across sports and events.

- Sports have differing sensory experiences. Sports that have a calm, family focused atmosphere are less likely to induce sensory overload than sports where the atmosphere is loud, 'rowdy' and/or where spectators drink excessively.
- Shorter events or matches are easier to manage, for example as seen in football, rugby and T20 cricket.
- Venues where the event is not just contained to the main stadium but offer spaces for spectators to move to and change environment if needed are supportive, for example where there are other activities happening outside, as seen in cricket and tennis.
- The nature of some sports act as a barrier to attendance, for example, as a tennis spectator you must be quiet during points. This is a challenge for fans who find it difficult to sit still or be silent, such as those with Tourette's.
- Football was often highlighted as having an environment that would provide challenges for some neurodiverse fans compared to quieter and less populated venues. A group of participants commented that the availability and attitude of staff/stewards during the matchday caused some issues. However, other participants complimented certain clubs for their proactive approach in supporting their neurodiverse fans, in comparison to other sports.

4.5 Forms of support and coping strategies

Having appropriate levels of support on event-day helped neurodiverse fans attend events and facilitated positive experiences. Support was accessed in a variety of forms which are discussed in the section below, including from: staff and other companions; tools, techniques, and facilities to manage sensory stimulation.

4.5.1 Support from staff and companions

Neurodiverse fans sought assistance with directions and queries from staff when at unfamiliar venues. Participants emphasised the importance of having support from someone who deals specifically with disabled and/or neurodiverse fans, such as a disability access or liaison officer. Those who had experience receiving support from access/ liaison officers, felt they were approachable and understanding. One individual spoke about how the liaison officer helped calm them down from a panic attack when security staff were not able to, which eventually allowed them to return to watch the game.

Having support from a companion who knows the individual, such as a relative, friend, carer or personal assistant was raised as a crucial way of helping neurodiverse fans attend sporting events, particularly when attending away matches and new venues. Companions provided support throughout the event by reducing panic and anxiety, managing interactions with other spectators, and helping with wayfinding. Many participants could or would not be able to attend without this form of support. Others felt that they may be able to attend alone if they were familiar with the event and venue.

4.5.2 Tools and facilities

Participants used a range of methods to manage sensory stimulation, anxiety, to make them feel more comfortable attending, and to improve accessibility. Some of the methods are summarised in Table 1, though what works is unique to each individual.

Table 1 Tools and coping strategies that facilitated participants' experience.

Method	Description	How they help
Sensory equipment and calming techniques	Headphones (standard or noise cancelling), earplugs and dark glasses	Minimise surrounding sound or light to manage sensory overload or focus on the event. Some listen to music, radio, or commentary.
	Fidget toys (tangles, chewies), iPad/book, other home comforts	Provide tactile input to help to feel safe, secure, and comfortable attending. Use to relax/calm down or 'zone out'.
	Breathing and/or mindfulness exercises	To calm nerves, reduce stress and anxiety.
Food and drink	Bring own	To provide a sense of familiarity, feel safe and secure. To prevent interaction with queues/crowds.
	Staff collection/service (if sitting in accessible or hospitality area)	Prevents interaction with crowds, queues, bringing own food.
Disability ID	Individual cards or ticket stamps indicating a certain condition or requirements	Helps get through accessible entrances or receive support without having to 'explain self'.
Viewing screens	Large screens within stadium or on own device	Visual representation to support verbal announcements/updates – e.g., photos matching names-to-faces or additional written on-screen announcements converting speech to text (e.g., 'take your seats' and 'quiet please').
Seating	Specific seating request (see Chapter 3)	Help familiarity and comfort, reduce anxiety and stress, provide space or a 'get out'.

Break-out areas and sensory rooms

In addition to the above, the ability to have an area to go to moderate sensory overload or anxiety was important for participants. Spaces that support this could come in a variety of forms:

- Sensory rooms: Sensory rooms are specially designed environments that provide individuals with a space to support sensory regulation and help reduce anxiety through the use of calming equipment and strategies (Jones, 2019). As has been found in other research (Connelly and Rodgers, 2019), a group of participants felt sensory rooms were beneficial, particularly for neurodiverse children or adults with complex needs. However, limitations of sensory rooms were raised, including having restricted viewing, being away from the main event, and being only bookable by one family or for the whole event. Adult fans highlighted that where sensory rooms were available, they were primarily aimed at children, leaving neurodiverse adults with limited facilities due to safeguarding concerns.
- Quiet rooms: Other participants did not feel they required a full sensory room, but instead wanted somewhere quiet, close to their seats that they could go to for a break, as and when needed. Participants felt this could be more easily provided by venues than sensory rooms, but fans stressed the importance of being made aware

of this facility in advance. Where such facilities were not available, participants reported finding quiet spaces in the concourse or using toilets to calm down during events.

• Fan zones: Neurodiverse fans used fan zones not only for entertainment, but as a breakout or change of scene. It was felt these should be made available to all fans (both home and away), provide viewing screens to continue enjoying the event, and be indoors or covered. In addition, this support was important for sports that have long matches, breaks or rain delays (such as cricket and tennis).

Overall, venues that make efforts to provide tools and strategies, such as sensory bags, disability passports and sensory rooms, and showed their support for neurodiverse fans were praised by participants.

4.6 Perceptions of safety

Feeling safe, and being able to react and exit appropriately in case of emergencies, is important for all spectators. For neurodiverse fans, feeling safe also related to not feeling 'trapped', being able to leave in case of sensory overload, and feeling that adequate support is in place. There were no emergency incidents reported, however, participants acknowledged they may become overwhelmed in the event of an emergency.

Several factors that supported positive experiences more generally also supported feelings of safety:

- Accessible/ open seating: sitting at end of an aisle or having sufficient leg room or the option to stand.
- Accessible venue design: doors into concourses being open and wide.
- A strong presence of friendly, trustworthy staff/stewards for crowd management and to follow instructions.
- Having family, friends and/or companions/carers present for support. However as mentioned in Chapter 3, it was important for these individuals to be sitting together. If they were sitting in separate locations due to limited seat availability, this could have an impact on their perception of safety, ability to react calmly and get out in emergencies.
- For regular attenders to the same event sitting in the same areas, getting to know the stewards and evacuation plans.

5 Reflections on attending live sports events

This chapter explores participants' overall feelings of confidence in attending live sports events as well as their perceptions of what may change as a result of the pandemic. The second half presents participants' suggestions for improvements that could help more neurodiverse fans attend events or have a better experience in the future.

5.1 Confidence attending events

There were a range of confidence levels among participants in the research. Some described themselves as very confident in certain circumstances, such as attending home grounds. Others described their confidence as mid to low, for example when attending less familiar venues, and another group completely lacked confidence and so did not attend events. Levels of confidence attending events was affected by a range of factors including familiarity and routine, the environment, and having the tools or facilities for support.

As discussed in Chapter 4, routine and familiarity across all aspects of the experience were important elements that boosted confidence. As a result, participants talked of being more confident attending home games where they know the venue or grounds, what to expect, and in some cases the staff.

"Once I've been somewhere, I usually feel confident to go again because I know it, I've explored the area around it." (NDF27, adult with dyspraxia and sensory integration dysfunction, regularly attends football and tennis)

Parents and guardians also described how routine around the time-of-day of events and travel as important for building confidence of those they cared for. By contrast, away games were harder and invoked more anxiety, which sometimes prevented attendance.

Having certain tools or knowing there were facilities available also improved confidence. People described feeling more confident knowing that they could take ear defenders with them into a venue or knowing there was a quiet space to go to or that their seating request would be met. If people knew about certain elements of the environment – for example that there would be smaller crowds – this was also seen to boost confidence.

Support from friends and family when attending was also critical for people's confidence, with some participants feeling that they would be unable to attend alone.

5.1.1 Expectations post-COVID-19

During the fieldwork period, attendance at live events was suspended due to the COVID-19 pandemic. However, the question of how and when spectators would be able to return to live events was being discussed. While this was not a focus of the research, participants did comment on this, and reflected on how it may affect their confidence.

Views on this were mixed, with some people feeling this could lead to some positive changes, while others were more worried. Those who were optimistic about the return to stadia speculated that with requirements for social distancing there would be fewer people attending and that therefore issues of crowding would be less acute. This could present a good opportunity to familiarise and build confidence. In addition, people were

hopeful that given the need for social distancing, seats would all be allocated, and stewards would be enforcing rules on other spectators which, it was hoped, would lead to better behaviour. Participants also felt this presented an opportunity to raise awareness more generally of the needs of other spectators.

Those who were more concerned about the return to live events raised three issues. Firstly, people were concerned that they would need adequate information about what exactly to expect – in terms of rules around distancing and queueing and what facilities would be open. This was in order to re-establish a routine. Others were also concerned about having lost familiarity with the venue after a year of non-attendance. Finally, concerns were also raised in respect to club finances and the implications of that for the spectator experience. There was a worry that clubs would no longer prioritise or be able to afford support for disabled fans or those with neurodiverse conditions.

5.2 Suggestions for improvements

Suggestions for improvements were made across the whole of the spectator journey: from those related to ticketing and information provision before the match, to the day itself. More generally suggestions were also made about how clubs could engage with neurodiverse fans (see Figure 6 for summarised suggestions).

A cross-cutting theme was the feeling that there was a need for a set of national standards in terms of the support provided to neurodiverse fans across the spectator journey and across sports. Participants were happy that this research was being conducted by the Sports Grounds Safety Authority and Level Playing Field as they saw this as a step towards developing such standards.

Figure 6 Participants' suggestions for improvements.

Before the event

- Improve booking systems to recognise neurodiverse requirements and facilitate seating requests
- Improve information available to help planning (videos, 3D maps, virtual tours)

On the day

- Provide more facilities for neurodiverse fans (quiet spaces, separate entrances, queue-jumps at bars)
- Liaison or support officers available on the day
- Raise awareness among other spectators of different needs of nonvisible conditions
- Provide training to stewards and staff

Club engagement

- National standards for support
- Recognise and engage with neurodiverse fans
- Embed 'neurodiversity champions' within clubs

5.2.1 Ahead of the event: ticket booking and information provision

Participants made several suggestions related to improving ticket booking systems and information provision ahead of the event day.

Processes for booking disability tickets could be made easier. Suggestions for improving booking systems included having a special ID number for buying online so that staff could see an individual's requirements or having a single accessibility card which worked across sporting organisations. One participant highlighted the example of

an <u>accessibility card</u> which is available through all cinemas as an example of how this could be done. Clubs could do more to make fans aware of support, such as disability tickets that are available. Accessible booking phone lines should also not charge premium rates. Ensuring neurodiverse fans are able to select specific seating would also encourage attendance.

More information available in different formats on venue or club websites ahead of the game would facilitate more people to attend (see Chapter 3). Suggestions included providing videos of where to go, how things work and what to expect in terms of entrances, queuing, security and seating. Participants also suggested that things like a virtual tour, being able to do a 'view from the seat' or 3D maps would help fans visualise and prepare themselves for what to expect. This sort of information would be useful for both parents and carers, and fans themselves who like to plan. Where support such as disability tickets or designated entrances were available, participants felt this could be more widely promoted. Physical familiarisation tours, including with travel to and from the venue, were also felt to be useful.

5.2.2 On the day: facilities, staff and support, raising awareness

Participants made suggestions for improvements to the event day experience itself. Providing more facilities for people who have different requirements was key to improving event day experiences. This begins at arrival, where there was felt to be a need for more accessible parking spaces and drop-off points as well as specific entrances staffed by the same people so that they could get to know fans. Providing large, easily interpretable, colourful signs would help wayfinding, as could providing directions to seats or the venue layout on or with tickets.

Venues incorporating large, open spaces with multiple entrances/exits for crowd flow, space in front of or between seating, and opportunities to stand made for more positive experiences. In addition, areas that provide the option to sit or stand were helpful for those who experience issues with pain or focus. Participants recognised that not all venues would be able to provide facilities such as sensory rooms, however, they suggested that the provision of spaces that were separate and quiet would help. In relation to this, participants highlighted how alcohol-free areas must be kept alcohol-free so that they do not become rowdy and noisy. They also suggested that clubs could provide fans ear defenders on loan. Facilities could be improved by having separate areas of refreshment counters for people who have accessibility cards to avoid having to queue or having the option of having refreshments brought to the seats of neurodiverse fans. In addition, neurodiverse fans should be made aware of how to apply for a Radar key to facilitate use of accessible toilets.

Participants also felt more specific support could be available to neurodiverse fans, either in the form of disabled supporters' associations or in the form of neurodiversity or disability liaison or access officers who could be available on match days. It was suggested that these officers could have a list of people attending with neurodiverse conditions and know where they are sitting in order to make stewards in those areas aware. Attendance at away games would be particularly facilitated with the support of liaison or support officers. Another suggestion involved setting up an assisted buddying scheme which would set a trained buddy up with a neurodiverse fan and support them to attend and familiarise with the experience.

Training and awareness-raising

Overall, participants felt that staff and stewards should have more training of non-visible conditions to improve understanding and awareness of neurodiverse conditions. Participants felt this training should involve neurodiverse fans directly.

"Knowledge is key, the training of stewards is the way forward, they are on the grounds with the fans, and sometimes the treatment, even to fans without disabilities is not acceptable." (NDF36, carer of child with ADHD and Tourette's, attends football and ice hockey)

There were different views about the ways that people could signal to staff that they may have additional requirements. Some participants suggested having an accessibility card, or a sticker, or something on people's tickets that could be shown to staff. Some participants had experience of the Sunflower Lanyard but suggested that not everyone would want to wear this as they may find it stigmatising.

Raising awareness with other spectators of the fact that different fans had different requirements would also improve experiences. Participants suggested that this could be done with infographics highlighting how the venue was inclusive and that different spectators had different requirements as well as including signs that not all disabilities were visible.

"It's the unseen side of things... Stewards don't notice the difference and people around you don't know the conditions ... Educating people that this is an unseen and invisible illness... Some clubs do really well, and others do really poorly." (NDF32, carer of young adults with autism, ADHD and learning difficulties, regularly attends football)

5.2.3 Club Engagement

More generally, there was a view that clubs could do more to understand and engage with their neurodiverse fans to make them feel included. Participants suggested that clubs could collect more information about neurodiversity among their fans to realise the prevalence and develop greater understanding and awareness of the requirements. Participants were keen to engage with clubs to have their voices heard but were also keen to feedback positive experiences to clubs.

"It's about awareness, engaging and us feeling like their voices are heard, and this doesn't always feel like this has happened." (NDF38, carer of young adult with ADHD and learning difficulties, regularly attends football)

"It's just trying to include as many people as possible really and just making organisations aware that a disability might not be something you can physically see but it might still be there and have a detrimental impact if not acknowledged and dealt with in the right way." (NDF27, adult with dyspraxia, attends football and tennis)

To improve engagement, a specific suggestion was to introduce neurodiverse champions within clubs or organisations to promote awareness and drive change across the organisation.

"Any sport should be accessible for people with a neurodiverse condition, if many sports had a neurodiverse champion, who understands the basic needs of someone who may be autistic, dyspraxia and dyslexic, ...and understand the challenges in accessing and watching that sport then that would be so helpful." (NDF10, adult with autism and dyspraxia, attends multiple sports)

6 Discussion

This chapter presents the conclusions from this qualitative research involving focus groups and in-depth interviews with neurodiverse sports fans and their parents or carers. The study aimed to better understand the accessibility requirements of neurodiverse fans and establish what can be done to make reasonable adjustments and improve their experiences going forward.

There is clearly a growing interest in, and recognition of the requirements of neurodiverse fans and many venues and organisations are already making steps to adapt and improve their provisions¹. However, the high level of interest in this study, both from fans but also from other organisations, suggests that this is still an underresearched topic, despite recent research activity².

Support and provision for neurodiverse fans

Although participants reported many positive experiences attending live events, there were also areas where participants' experiences could be improved, and there is scope for further support. While every participant was unique in their requirements, their experiences were shaped by the facilities and support made available to them. It was apparent that provision currently varies significantly across clubs and sports. Differences in what was available to people when booking seats, the ability to use accessible entrances, the behaviour of staff and the venue design itself all affected confidence in being able to attend events. These differences encouraged or discouraged attendance at specific events or venues. Participants were also keen to highlight examples of where they felt clubs were providing positive support.

The research highlighted differences in provision available for neurodiverse adults and children. For example, while many clubs have introduced sensory rooms that have been seen as the gold standard and benefitted many families, these facilities tended to be aimed at neurodiverse children. Adult participants in the study felt these facilities were not always appropriate or available to them. Venues should therefore consider taking steps to provide other quiet areas close to seating to facilitate inclusion for all ages.

Participants were conscious of the financial constraints that venues and sports clubs may currently be facing, but nevertheless, highlighted how smaller adjustments could have significant positive impacts. For example, allowing those who are neurodiverse to arrive early or bring in their own food/drink, offering aisle or front row general allocation seating upon booking, and providing an alternative to queuing at refreshment counters could be relatively straightforward changes to implement.

Providing more information ahead of the event would also enable people to plan and know what to expect on the day. **Familiarity was a pivotal factor for reducing anxiety and increasing confidence**, and information on how to get there, what to expect at security and with regards to seating was a key element for participants with a range of different requirements. The findings also highlighted that participants were not always aware of what support was available to them, suggesting that more could be done to promote this.

Many of the adjustments that would support neurodiverse fans to feel more comfortable generally would also improve their perception of safety. Having more information available, alongside accessible seating and venue design with spacious gangways and concourses would both improve people's enjoyment and enable them to better respond appropriately in an emergency.

Staff training and awareness raising

Staff and stewards are pivotal in ensuring an enjoyable experience, acting as a source of information and support, from booking tickets, to arrival at the venue and during the game itself. But experiences with staff varied considerably, with some noting positive interactions, for example with disability liaison or access officers, and others describing negative encounters. It was felt that staff are not always aware of and do not understand non-visible conditions, and therefore do not react appropriately. Examples include staff who made inappropriate comments about an individual's stims or a steward who misinterpreted balance issues as a sign of drunken behaviour. In certain circumstances, it was felt that stewards focus too heavily on crowd control, inadvertently contributing to intimidating atmospheres.

Participants therefore felt there was a need for more and better training of staff to ensure appropriate behaviour, support and understanding. Additionally, there was the view that minimum training standards for staff and stewards should be put in place and that training should be designed with the involvement of neurodiverse individuals to avoid perpetuating stigmatising stereotypes. Improving staff and steward training so that staff understand neurodiverse conditions and are able to respond appropriately could also prove critical in the event of an emergency.

There were differing views on participant approaches to disclosing their condition in order to receive support from staff. Some felt that a lanyard – such as the Sunflower Lanyard - could be stigmatising, and that a more discrete accessibility passport/card could be used if needed. However, there was also a call for a single accessibility system recognised across sports to ensure more consistency in support.

It was also felt that clubs could do more to **raise awareness of non-visible conditions more widely among other fans and spectators**. The behaviour of other fans was sometimes problematic, particularly where excessive drinking played a role in creating an intimidating atmosphere.

The importance of recognition and consultation

Finally, it was felt that clubs could do more to recognise and value their neurodiverse fans. Establishing a 'neurodiversity champion' within clubs/venues to consult with neurodiverse fans and champion their views and requirements would support the perception of inclusion and recognition.

Participants appreciated that some sports clubs and venues are already making progress towards providing a more accessible and inclusive experience for neurodiverse fans. Still, the research has highlighted the need for further efforts. Engaging with neurodiverse fans when making these changes would help ensure any changes taken forward are based on lived experiences and feedback from fans and would ensure that all supporters feel valued.

¹ Several clubs have introduced more facilities, such as sensory rooms, for neurodiverse fans and the Centre for Access to Football in Europe recently produce <u>guidance</u> on sensory rooms. ² During the research project, the team became aware of other projects in this space including a project to create a new Building Design standard and research activity taking place at the University of Worcester.

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Appendix A. Methodology

The research adopted a qualitative approach, details of which are set out below.

Recruitment

An informational leaflet and invitation letter were circulated by recruitment gatekeeper organisations and the research was advertised through social media and websites. Each organisation was asked to share opportunities for their fans to take part in the research and circulate the information leaflet and invitation. A full list of the organisations who supported recruitment is detailed in Table 1 below. People who were interested in taking part in the research were invited to opt-in directly by email to the NatCen research team.

Appendix table 1 Recruitment gatekeeper organisations.

Sporting clubs and organisations	
92 Premier League and English Football League clubs	
13 Premiership rugby clubs	
18 First class cricket counties	
Wimbledon tennis (AELTC)	
Governing bodies	
Charities and organisations supporting neurodiverse individuals	
ADHD Foundation	
The Autism Directory	
British Dyslexia Association	
Dyspraxia Foundation	
Tourette's Action	

Sampling

Once participants had opted into the research, recruitment screening calls were made by the research team to ensure people were eligible to take part. These calls captured basic information about participants and provided an opportunity to explore any additional requirements people had in order to take part in the research. To ensure diversity across the sample screening calls collected information on:

- Type of neurodiverse condition.
- Type of sport event attended.
- Frequency of attendance at sports events.

Eligibility was determined based on identifying or being diagnosed as neurodiverse and being a sports fan. As the number of participants was limited, recruitment calls were made on a first come basis and recruitment was closed once the deadline had passed and sample quotas met. A small number of people were screened out on the basis of identifying a mental health condition rather than neurodiverse condition, or in order to enable participation of fans from a wider range of sports.

In total, 24 participants took part in the research, including 16 neurodiverse sports fans and 8 carers/companions of neurodiverse sports fans.

- Of the neurodiverse sports fans: 4 females, 12 males. There were a range of ages captured: 9 participants were aged 18-29, 5 were aged 30-39, and 2 were aged 40-49.
- 8 carers/companions of neurodiverse sports fans. Five participants were carers/guardians of people under the age of 18, while the remaining three were companions caring for young adults. Two carers/guardians also had neurodiverse conditions themselves (ADHD, Dyslexia).

Neurodiversity

The range of neurodiverse conditions covered in the sample is captured below. Many participants identified having multiple conditions – both multiple neurodiverse conditions plus a range of other mental health and physical health conditions. As a result, the numbers below do not add up to 24.

Appendix table 2	Conditions represented acro	ss the sample.
ADHD		6
Autism Spectrum Disorder (including Asperger's)		12
Dyslexia		5
Dyspraxia		8
Tourette's Syndrome		3

Sports Types

Many participants had attended or were fans of multiple sports. The key sports attended by participants are below.

Appendix table 3	Sports types represented across the sample.
Cricket	9
Football	21
Rugby	8
Tennis	3

Participants were also interested in or had attended: athletics, netball, basketball, ice hockey and darts.

Regularity of attendance

Many participants regularly attended certain live sports events. There were fewer participants who had low/no attendance. However, regular attendance was usually only at one type of sport so barriers to attendance to different types of sports events was explored with a range of participants.

Appendix table 4	Regularity of attend	dance.
More than once a mo	onth	18
Once every few months		5
Low/no attendance		1

Fieldwork

Fieldwork took place in late February 2021 and was conducted online via video call or over the phone as a result of the ongoing COVID-19 restrictions. It consisted of two online focus groups, one with neurodiverse sports fans and one with carers or companions of those with neurodiverse conditions. These groups were supplemented by a further eight in-depth interviews. In total 24 people participated in the research. This was made up of 16 neurodiverse sports fans and eight carers/companions of people with neurodiverse conditions.

This design allowed us to offer participants the option of either participating in a focus group or in an individual interview ensuring that those who did not feel comfortable in a group setting were still able to participate. Participants were also the offered the option of a paired interview and subsequently two paired interviews with parents were conducted.

Each focus group lasted 90 minutes while interviews took between 45 minutes and an hour. The topic guide explored their experiences of attending sports events including their travel to and from the event; any difficulties encountered during events; the strategies and services they use to make that experience positive (or negative). With participant permission, all discussions were digitally recorded on encrypted devices.

Interview summaries were typed up from recordings and analysed using NatCen's Framework approach. This provided a systematic approach to organising the data and allows key themes to be explored across different individuals, pulling out key commonalities and highlighting differences.