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The Effect of Covid-19 on Rural Sport: A Case Study of Endurance GB

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Abstract: The Covid-19 pandemic affected virtually every country in the world and many people's lives. This research investigates the effect of Covid-19 on rural sports in the UK, specifically on the equestrian sport of endurance. Maslow's hierarchy of needs is used to determine levels of emotional investment pre, during, and post Covid. Contrary to the upward trend of consumer spending on recreation over the past five years (Statista, 2022), Endurance GB paid membership has declined year on year with a large drop in 2020 as lockdowns hit the UK according to Endurance GB membership data. This was combined with questionnaires sent out to all current Endurance GB members in September 2021. Respondents were asked about how Covid-19 had affected the continuance of their sport. The results showed that 81% planned to join as normal next year but 18% were keeping an open mind and would re-join when things were back to normal. Secondary ride and membership data for 2022 showed that membership was tracking in line with 2019 and early season rides were full, indicating as much enthusiasm for the sport as there was pre-Covid. However, by mid-season memberships had dropped slightly and ride entries were lower than expected. Some membership patterns changed, with a large increase in registered supporters and riders doing pleasure rather than competitive rides. During Covid focus dropped from "belonging" to "safety and security" (Maslow's hierarchy of needs), with the higher needs becoming redundant.

Keywords: Endurance GB; Covid-19; rural sport; equestrian sport

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1. Introduction and Background

1.1. The Impact of Covid-19 on Sports

Covid-19 has had an unprecedented effect around the globe, and one area affected is sport and leisure (Dashper & King, 2021). All types of sports make an important contribution to the well-being of people around the world—emotionally, physically, and psychologically. The effect of lockdowns and no sports have had a detrimental effect on global communities, with the resumption of sports contributing significantly to normality being resumed (Hughes et al., 2020), however, it is widely acknowledged that this is likely to take many months with organisations with more than 25% of ethnically diverse members forecasting longer negative impacts from Covid lockdowns (Barrett & Coleman, 2021).

There is a growing corpus of global research emerging in this area, for example, the USA (DiFiori et al., 2021), Australia (Hughes et al., 2020), and Greece (Madtinos et al., 2021).

The effect is not just at the elite level, but at the grassroots, with the initial lockdown in the UK stopping most indoor and outdoor sports within the country. Sports that did take place did so with no spectators and often a much-reduced number taking part—for example, the London Marathon in 2020 (Grix et al., 2020).

Given the suspension of sporting activities, many sports bodies are concerned about the numbers of people resuming their sport post-pandemic and the challenges faced (Skinner & Smith, 2021). It must be noted that Covid is still in existence in 2023, with new variants causing spikes and short lockdowns worldwide. Given this, it is not known when it will be finally over (Madtinos et al., 2021).

The economic impact of Covid-19 on sports globally is unprecedented, with losses of billions of USD and Euros attributed to professional sports in Europe and the USA (Skinner & Smith, 2021). The impact on grassroots sports was similar with many clubs and societies concerned about the future, despite the contradiction that exercise became more important during lockdowns. Many governing bodies are reacting in different ways to the pandemic (Skinner & Smith, 2021). Several

sports are run by volunteers (this is true at the grassroots in particular), often as part of the national governing body (as with Endurance GB) and within complex structures. Even before the pandemic, many sporting communities and clubs were challenged by recruiting not only members but volunteer officials for the sport (Staley et al., 2021). Since the initial UK lockdown in early 2020, member recruitment has been front of mind for many sports officials as they work hard to return their sports to the pre-covid level—particularly at the grassroots level (Grix et al., 2020).

The return to organized sport (particularly amongst the young) was mooted to be slow due to restricted interactions with peers during lockdown and the increase of online activity (particularly gaming) during the same period. Non-organized sporting contexts are more likely in the short to medium term for the youth cohort particularly (Teare & Taks, 2021).

Sport is a vitalizing force that brings people together, producing a sense of uplift and engagement with others, forming like-minded communities (Grix et al., 2020). The lack of this engagement, coupled with the economic difficulties brought about by Covid-19 (particularly amongst the lower socio-economic groups) means that grassroots sports will find it difficult to come back to pre-Covid heights, and the participants and communities may find it hard to engage at their former levels (Grix et al., 2020). Outdoor spaces, closed to many during lockdown are a vital part of health and well-being, and help people to identify who they are by the sports and leisure pursuits undertaken in those spaces (Dashper & King, 2021), compounding the lack of engagement and community since closure. Although many are now fully open, the return to pre-Covid engagement levels is slow as some people have lost the habit of taking part in regular organized sports in these outdoor spaces (Dashper & King, 2021).

Given these considerations, it is understandable that some people ended their memberships in sports and societies, or at least reduced time within their chosen activities (Grix et al., 2020). However, this short-term view could potentially lead to the demise of several societies and sports, precluding the return to pre-Covid levels of engagement and competition. Therefore, there are several challenges that entities face (especially at the grassroots level) post Covid-19. These include financial, community, re-engaging activities for volunteers and participants, and a focus on the community rather than training/competitive aspects (Staley et al., 2021). Rural communities are likely to have longer-term benefits from Covid-19 as new behaviors caused by the pandemic (such as working from home) remain in some form (Phillipson et al., 2020) and this could be a positive boost to rural sports organisations as members have more time to interact with their sports and pastimes.

1.2. Hierarchy of Needs

Sport is based on a series of motivations and constructs, including risk-taking, physical fitness, self-esteem, competition, achievement, and self-actualisation (McDonald et al., 2002). A number of these constructs are evident amongst the higher levels of Maslow's hierarchy of needs, namely "love & belonging", "esteem" and "self-actualisation" (Maslow, 1968). According to McDonald et al. (2002), the community side of sport, social interaction, and acceptance by peers as well as family and friends being present can motivate participants to improve their performance (McDonald, 2002).

There is an argument that during Covid, these levels became much less important and difficult to attain given lockdowns, and therefore the lower levels of "physiology" and "safety" became paramount for the population. It was hard to get to shops for food and clothing, and health security was top of mind. It was therefore difficult to move upwards in the hierarchy as the lower levels were not met, affecting people's behaviours (Stowe et al., 2022).

This correlates with Dashper and King (2021), Grix et al. (2020) and Staley et al. (2021) as behaviour patterns are slow to change back to pre-Covid levels, and people's attitudes change towards the situation, allowing them to start to think more about the esteem and self-actualisation levels of the hierarchy again. Love and belonging were engaged throughout Covid as people were in family "bubbles" or were concerned about family members who were not with them (Stowe et al., 2022), however, it can be argued that some of the friendship ties were loosened, particularly within the sporting context as focus changed during lockdowns.

1.3. The Research Question

This research aims to understand how Covid has affected membership numbers for rural sports as well as engagement with the sports. There are a wide number of rural sports, whether team or individual. Equestrian sports are predominantly rural by their very nature and within equestrianism there are a number of disciplines. Given this, endurance was chosen as a typical example of a rural sport that engaged widely with the environment and had a membership almost exclusively within rural areas in the UK. Therefore, this study investigates the impact of Covid on endurance riding in England and Wales (this is the area covered by Endurance GB), predominantly the attitude and behavioural changes from members during and post-pandemic. Maslow's hierarchy of needs is used to aid the examination of motivational factors for sports participants in this period.

1.4. Endurance Riding

Endurance is an inclusive equestrian discipline where riders of all ages, ethnicities, abilities, and orientations compete equally on horses and ponies of all types and breeds. This is done across natural terrain courses between 16 and 160km in length (usually in one day) in a test of condition and stamina (Valev, 2015). Training horses to compete over these distances takes time and effort and must be done correctly for the welfare of the horses (Fleming et al., 2013). Although fully inclusive, as with most equestrian disciplines, there is a majority of females competing although males are represented to a lesser degree (typically there are around 80% females to 20% males competing in equestrian sports (Wolframm & Meulenbroek, 2012)).

Taking equestrian sports and general horse riding within the UK, a major study by the British Equestrian Trade Association in 2019 shows that although the steady decline of riders overall, appears to be recovering, there is a large drop in horse numbers (Jones, 2019) and it is within this backdrop that the study takes place.

The lockdowns and restrictions on travel and time to exercise during the worst of Covid often impacted training, and this was exacerbated by a lack of competitive events. Riders often chose not to train to lessen the risk of accidents and the knock-on effect on the already overstretched NHS (see research results) – particularly in the initial lockdowns. As training is often done alone, the risk of getting or spreading Covid-19 was small but access to suitable open spaces was often curtailed (Dashper & King, 2021), both for training and events themselves which were canceled during lockdowns, with some landowners (such as Natural Resources Wales and the Forestry Commission—both important venue owners for Endurance GB) closing their properties to organised sport in 2020 and most of 2021. Other issues included changes to legislation at short notice which resulted in entry limits being imposed and entries being rejected from people in local lockdowns, often at short notice before events.

During this period, many owners were restricted to simply caring for their horses, particularly if they were in livery stables out of the small travelling radius imposed by the government during lockdowns. Affordability was also a consideration as well as the breakdown of the support network around caring for the animals (veterinarian, farrier, etc.) (Ward et al., 2021). The lack of normal positive interactions between owners and their horses led to negative wellbeing for people and time with their horses was valued more when lockdowns eased. The use of social media changed as those who did ride did not post their rides as normal, as they were aware that many either could not ride or had chosen not to because of potential accidents and NHS impact (Ward et al., 2021).

Within endurance riding the bond between horse and rider is important as riders spend many hours riding across all terrains (both in training and competition), and mutual trust is a factor in success (Wolframm & Meulenbroek, 2012).

Endurance is by its nature a rural sport and most participants live in rural areas across the UK, many with their own facilities to keep their horses at home (68% of UK horse owners keep their horses at home, and owners are happy to travel up to 2 hours each way to compete, returning on the same day (Boden et al., 2013)). Covid, therefore, had the opportunity to have a large negative effect on endurance riding, not only in the UK but internationally.

2. Methodology

Data was collected from members and used alongside secondary data provided by Endurance GB. This dataset included ride entries over 5 years, membership statistics, and trends pre and during Covid. The 2022 membership re-joining and rides data was important in understanding behavioral versus attitudinal information.

Primary data was gathered from a questionnaire sent out to members in September 2021. A representative sample of 141 responses from 1103 members was collected. This data was both quantitative and qualitative. Both primary and secondary datasets were analysed using Excel and Power BI and the qualitative data was used to correlate trends and provide thick description. In March 2022 three short informal interviews were held with long-term Endurance GB members and riders to gauge their interest for the coming year.

This is a piece of reflexive research as the author is an endurance rider and member of Endurance GB, therefore anecdotal and observational data were also used from social media posts (Facebook) and interactions with fellow riders to extend secondary and primary data.

Therefore, the phases of the study were:

Secondary data collection and analysis. Outputs used to develop questionnaire.

Survey sent out to all Endurance GB members in September 2021, responses analysed.

Informal interviews were held with competitors during the first Post-Covid event in the midlands.

Anecdotal and observational data were gathered during competitions over the 2022 and 2023 seasons.

Further analysis of 2022 and early 2023 membership data to track behaviour and attitude from members.

3. Data Analysis

3.1. Membership Data

The full membership of Endurance GB has been slowly declining since 2017 from 1715 to 1303 in 2021, against a trend of increasing consumer spending on recreation and sport in the UK, which rose from £7.6bn in 2005 to £12bn in 2019 (Satista, 2022). However, in the same period, supporter membership (free) increased from 1482 to 3935 (see Table 1). Paid members can enter competitive and graded rides, but registered supporters (registered on the Endurance GB website but not paid members) can only enter pleasure rides on a temporary day membership (unless taking part in offers such as “Try Before You Buy” where they can try out up to 2 graded rides before joining as a full member).

Full (paid) memberships dropped by 15% at the onset of Covid (2020) and a further 2% in 2021—against a year-on-year drop of 5% between 2018 and 2019. Covid certainly had some effect on paid membership, but it was temporary as can be seen in the next section below. The large increase in registered supporters gives the Endurance GB marketing team the opportunity to deliver campaigns to convert these to full members.

Table 1. Summary of Membership Data by UK Region (England and Wales) from 2017 to 2021.

Full (Paid) member regional summary						
	2017	2018	2019	2020	2021	2021%
Wales	100	88	132	84	80	6.10%
South	660	618	603	492	465	35.70%
Midlands	528	523	456	443	478	36.70%
North	427	416	378	316	280	21.50%
	1715	1645	1569	1335	1303	
Supporter/Club member regional summary						
	2017	2018	2019	2020	2021	2021%
Wales	93	47	115	163	308	7.80%
South	749	416	882	895	1324	33.60%
Midlands	382	171	608	845	1335	34%
North	258	215	507	613	968	24.60%
	1482	849	2112	2516	3935	

Source: Endurance GB 2022.

Different areas of the country were affected by different local Covid restrictions as well as reliance on sensitive landowners such as Forestry England. Some regions (e.g. Midlands) were not as impacted as others and actually grew their paid membership over the course of the pandemic. Others were badly hit with restrictions (e.g. Wales who lost most of their ride venues). Some of the regional committees had many vulnerable households within their members and were limited in what they could offer, with the loss of competitive events. All of these adversely affected membership numbers.

The half-yearly paid membership figures from 2021 and 2022 (earlier years and 2023 were not available) show that there was a year-on-year growth for associate members, in particular junior members (which doubled). Full members had also grown in all areas apart from young riders which was 11% down on the previous year. Junior full members had also doubled. This is encouraging for the future of the sport although Junior numbers are less than 5% of Senior rider membership (the highest category in numbers). Veteran rider numbers (over 60 years of age) are around 50% of Senior rider numbers (203 Veterans and 571 Senior—total 774 full members over 25 years of age), which shows the skew towards older riders within the sport (Young rider numbers are around 13% of Senior rider numbers). When viewing subscription revenues, those of 2022 are £12,000 (rounded) above the 2021 half-yearly figure but £20,000 (rounded) below the pre-Covid 2019 half-yearly figure.

Although marketing has been in place for many years there was a renewed effort from Endurance GB in the aftermath of Covid, but this did not start until March 2022 so does not affect the

2022 membership data above. It was expected that the campaigns in place would increase the 2023 subscription revenues and stop the downwards trend of paid members (see Table 1 above) but early indications show that there was still a small decline in memberships in 2023.

3.2. Ride Data

There were 106 rides in the calendar for 2020. These were a mix of Federation Equestre Internationale (FEI), national and group rides. 47 of these were cancelled due to Covid lockdowns and the other 59 went ahead but with very limited entry numbers. In 2021 there were 159 rides in the calendar—134 went ahead and 25 were cancelled. Again, few of those that went ahead were full (attained the maximum riders allowed at the venue), despite the calendar being almost back to normal. 2022 had 98 rides to the end of June (mid-season) with 85 going ahead and 13 being cancelled. There are a further 58 rides from July to the end of the season with 3 being canceled (as at end of June). Rides that have closed their entries are not full as at the access date of 30th June of the ride calendar (For example, Cirencester, a major ride over 3 days, hosting the inter-regional championships closed with only 60% of expected riders, including 86 withdrawals at late notice (ride entry data)). The ride cancellations in the calendar were not always directly attributed to Covid but often due to a lack of entries, bad weather, or lack of volunteers. Indirect Covid reasons include loss of venues, at times due to them being sold during the pandemic. In 2023 there was a full calendar, but some rides were cancelled due to lack of entries or difficulties with venues—however, this was a “normal” number.

Many horses were still not fully competition fit in 2022 due to the previous years’ lockdowns and cancellations—particularly those competing at longer distances where a long interruption in training has a bigger impact (observational data). Previous Endurance GB research has shown that it takes around 4 years of training for a horse to get to FEI level, so a 2-year gap in training is a big setback. Those able to maintain fitness over the pandemic were more successful. Some horses competed at shorter distances than usual to regain fitness and can be seen starting to get back to their “normal” ride distances in the second half of 2022 (observational data). However, the FEI competitors are taking longer to get back to full fitness therefore FEI rides are lacking entries in the first half of 2022 with non-completions from some who do enter (Endurance GB data), this carried over into 2023.

Trend data from 2012 to 2022 (for the first 2 months of each season) shows that there is an overall slow decline in riders competing each year (see Figure 1 below) after a growth between 2013 and 2015. The large drop in 2020 and 2021 is due to Covid but the numbers have risen in 2022 almost to where they would have been expected to be without Covid. This shows that not only are rides being held again, but that riders feel that they and their horses are fit enough to enter after a long break. Note that rides early in the season tend to be shorter distances (usually up to about 50K) so horse and rider fitness is easier to achieve.

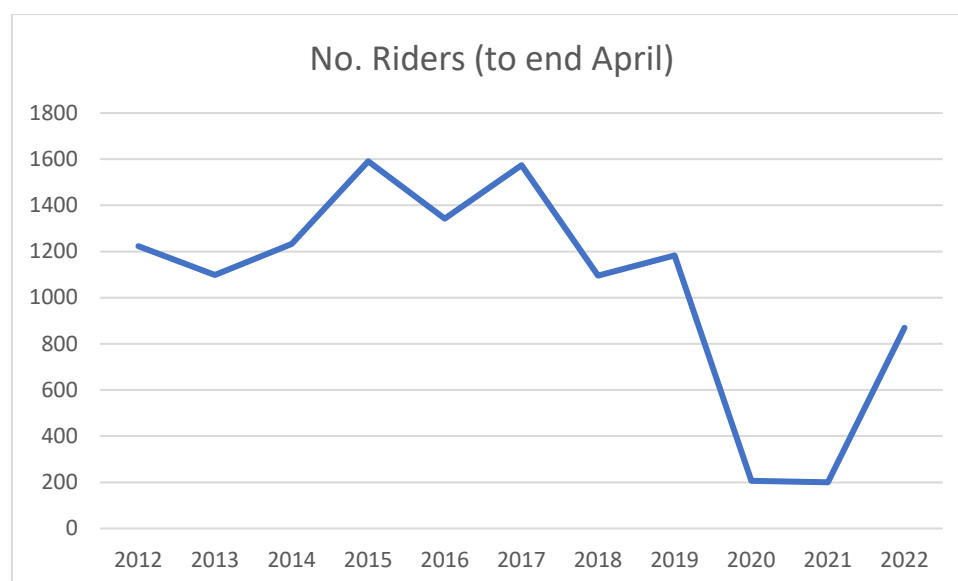


Figure 1. Number of riders in England and Wales competing in March/April each year.

Source: Author’s own work from trend data (2023 unavailable)

3.3. Demographic Survey Data

Of the 141 respondents, there were 129 females and 10 males with 2 preferring not to give their gender. Nine of the males were 45 and over and so were 80% of the females (correlating with the secondary membership data regarding ages as the survey was open only to people 18 and over so Junior riders were precluded). 85% of respondents were from England, 16% from Wales, and 1 each from Scotland and Northern Ireland. Three respondents did not give regional information. Eighty-three respondents were in full or part-time work and 44 were retired. The remainder were in education, volunteering, or home makers. Household incomes had largely remained the same or increased during the 2 years of Covid (80%).

There were 92 full-riding members, 9 life members, 18 associate members, and 6 non-riding members. The remainder were supporters (7), lapsed (6), or other (3), and of these, only 3 had held a paid membership. Of the paid members 59% had been members for 5 years and above with a further 8% holding memberships for over 20 years. 23% had held their memberships for less than 5 years. The remainder did not say. This data was from September 2021 and 77% planned to rejoin within a month of the reminder coming out, and a further 9% when they entered their first ride. Only 3 people said they would not renew, but 5 declined to answer. 91% of households had one or two full members.

Only 3 respondents did not have their own horse. 72% had between 1 and 3 horses and a further 15% had 4 or 5. The Welsh respondents mainly kept their horses at home (82% with 18% in livery) whilst the English respondents had a more even split with 59% kept at home and 41% in livery. Regarding the number of horses each respondent used for endurance, 109 had one or two in training and 13 had 3. Five had 4 and one each had 5, 6, or 7. Eight respondents had no horses doing endurance and 3 respondents did not have a horse. 40% of horses owned had some Arabian blood (pure or part bred) and this increased to 57% amongst those doing endurance.

89% of respondents were currently riding in endurance at different levels: 29% Pleasure Riding, 21% Novice, 20% Open, 22% Advanced, and 7% International (under FEI rules). Advanced Riders compete at 80km or above and International 100km and above. The other levels range from around 20km to 65km distance. 33% of riders only rode up to 30km, 32% 31 to 44km; 19% 45 to 79km; and 16% 80km and over. This correlates with distances offered at rides as the majority of national rides offer up to 45km, with major rides offering a full range of national rides (22 to 80km) but very few offering FEI level rides, and most of these are in the East of the UK (Suffolk, Lincolnshire, etc.).

94% of respondents have a competitive ride within 50 miles of where they live, however, many riders (58%) regularly travel up to 100 or 150 miles to compete, with 25% of riders saying they would travel over 200 miles if necessary. The top three favorite rides were Red Dragon in Wales (12%), Kings Forest in Suffolk (10%), and Golden Horseshoe on Exmoor (8%). Red Dragon and Golden Horseshoe are considered to be “true” endurance rides given the hilly terrain and often difficult weather conditions encountered. Fourteen percent of respondents did not have a favorite ride.

Crews are mandatory for longer distances (they meet the rider at different points on the ride, offering drinks and food to both horse and rider and “sloshing” the horse with water to cool it down) but not for shorter distances (40K and under). However, 48% of respondents had a regular crew (covering all distances ridden), and 59% of these were spouses/partners. Other family members and friends made up the other 41%. 45% of riders often rode without a crew. Crews also help with the horses at the venue and can drive there and back, allowing the rider to concentrate energy on the ride.

This demographic data showed a spread of riders, horses, and events across England and Wales and paints a fairly healthy picture of memberships and support for the sport.

3.4. Covid Survey Data

66% of riders competed in between 1 and 10 events in 2019 before Covid; this dropped to 50% in 2020 and rose to 69% in September 2021 with a further 69% planning between 1 and 5 rides before the end of the 2021 season (mid-October).

Covid altered the training of horses in different ways. 40% of riders reported little or no change, 26% reduced their riding and 13% did not ride in the first lockdown in case they got hurt and negatively impacted the NHS. 18% stopped training as there were no events. Covid impacted in other ways as riders could not travel their horses to train, could not visit livery yards, or hire training facilities. A small number had time to ride more (3%), and others (8%) changed the way that they trained (riding more at home, schooling, safer rides, and so on). A further 4% did not ride as much due to shielding or having Covid themselves. Finally, 6% of members work in the NHS and during Covid were too busy to ride as they worked longer hours.

Covid did not affect the majority of members re-joining in 2021 with 80% joining as normal (comments included “if we don’t join there won’t be a sport to come back to after Covid”). Five

people said they would join in 2022 or after Covid. Two joined for the insurance cover. Sixteen people said that Covid affected their membership and had not re-joined as there was no point. Comments from these riders included— *“I have lost my competitive spirit”* and *“I can’t get my horse fit so am not bothering coming back into the sport”*.

Covid affected 68% of the respondents as far as endurance is concerned. The main reasons were fewer events (31%), so training was reduced and therefore horse and rider fitness levels dropped. This resulted in a loss of motivation to ride which affected overall intentions to join and compete in 2022. However, 90% of respondents planned to rejoin in 2022 with only 3% saying they would not, and 7% were undecided. A small percentage of respondents were staying involved with the sport by volunteering but not riding and others were downgrading just to pleasure rides or fun rides (non-Endurance GB) (2% for each category).

Respondents were asked for further comments on how Covid had affected their endurance and only 53% answered. 16% appreciated the way that Endurance GB had handled the pandemic, but others were unhappy about the lack of rides (4%) and felt let down (4%). One respondent appeared to take a balanced view, commenting: *“Covid has brought out the very best and the very worst in people. The vast majority of members have been very understanding and have really pulled out all of the stops to support the organisation in whatever way they can. I am concerned that some of the areas of the country most badly affected (e.g. Wales, the North) will take longer to recover as their ability to hold rides was decimated by the impact of the virus on their local areas. There has also been a terrible impact on international competition, and some of the people affected haven’t seemed to understand at times that this is completely outside of EGB’s control. There is also a small pocket of people who think it is all an over-reaction and that EGB should have ignored all the government restrictions and carried on regardless”*.

3.5. Interview Data

The interviewees had been endurance riders for over 20 years and members of Endurance GB since its inception with few or no breaks. All are advanced riders, and one has competed internationally for Britain. Until 2020 all competed regularly within the UK. All are women over 50 years of age and from a single regional group in Wales (an area with many restrictions during Covid and few rides).

Interviewee one terminated her membership at the end of 2019 (pre-Covid) citing that she wanted a season’s break to *“just enjoy my horses”* but was planning to come back in some way after that. However, she had enjoyed riding her horses with no pressure to compete so much that she was now not planning to rejoin Endurance GB again unless as an associate member to enable her to do pleasure rides but not competitive rides.

Interviewees two and three carried on their full membership throughout the pandemic period and were planning a full season in 2022 having re-joined as full members.

Interviewee two completed her first ride in early March 2022 and did not enjoy it, saying that it seemed a lot of trouble to get ready and compete and then be disappointed if the hoped-for grading did not materialize. Especially as her much-loved horse had tried so hard for her. So, it was better not to compete anymore and just spend as much time as possible riding her horse in a more relaxed way. She did say that she may change her mind later *“as I have spent so many years competing and have a young horse that is almost ready for competition”*. This interviewee has re-joined in mid-2023 after another year’s break.

Interviewee three had her “dream ride” planned for 2022 and was in full training but has simply decided that she does not want to compete any longer. She withdrew entries for planned rides and gave up competing but carried on with pleasure rides and supporting the sport, organizing her first ride in 2023.

The almost two-year break from competition was given as a reason by all three women for not carrying on. They had gotten out of the “habit” of training and competing and wanted just to enjoy riding their horses with no pressure. Interviewees two and three carried on their full membership for 2022 despite not riding and re-joined in 2023. Interviewee one was dissatisfied with Endurance GB when she decided not to re-join in 2020 and the competitive break has not changed her views.

Two other women in the author’s regional endurance group moved from full to supporter memberships to carry on with pleasure rides rather than competitive rides, also citing the break from competitive riding and training due to Covid as the driving force. These are also mature women who have been in the sport for many years.

The interviews were deliberately chosen from one regional group and the largest demographic in Endurance GB (mature women). Although the views are not generalizable, they indicate the mindset of long-term members and the impact that their decisions will have on a single regional group. In the interviewees’ case almost 17% of their regional group left.

3.6. Other Impacts Due to Covid

In addition to the findings from this research, according to Endurance GB's response to the British Equestrian Foundation (BEF)'s request for information on the impact of Covid on the sport, there have been negative impacts on the workforce, both volunteer and paid. Many of the volunteers (especially ride stewards) are mature, vulnerable to Covid, and uncomfortable about attending events even in the aftermath making some face-to-face events impossible to organize. However, those at events worked hard to ensure the safety of attendees from Covid. Further issues were the availability of vets and the ability of first aiders to renew their certificates.

The measures put in place around Covid security enabled Endurance GB to be one of the first equestrian disciplines to hold international competition in the UK under the extremely complex Digital, Culture, Media and Sport (DCMS) and FEI Elite Sport Covid Rules (according to Endurance GB's chairman).

During the 2023 season the impacts due to Covid lessened, with the volunteer workforce becoming more comfortable about supporting the sport on the ground at events. The rides still have security measures such as hand-sanitizer but the spectre of Covid has now largely disappeared (observational research from an EGB director).

4. Discussion

Undoubtedly Covid has had a negative effect on Endurance GB as it has for other sports worldwide (e.g. [Dashper & King, 2021](#); [Hughes et al., 2020](#)). Endurance is not just about the rider, but also the horse, who must be in the best condition and fitness levels and must be taken into consideration. In addition, there is the crew and as was seen from the data, this is usually a long-suffering partner or spouse, often with little interest in horses themselves (anecdotal/observational data). The entire team needs to be ready for an event and, the rider in particular, comfortable that fitness levels are what they need to be. Once there is a long break during the season and a drop in training levels, motivation appears to decrease, with the result that a small number of riders do not want to start training again. These are mainly older women who have already attained their goals within the sport. As the largest segment of Endurance GB members are mature women who have been members for several years, this finding could be the tip of the iceberg. As both survey and interview data confirmed this, more work needs to be done by Endurance GB to mitigate this attrition.

The ride entry trends show that although there was a large drop in entries in 2020 and 2021 due to Covid, these picked up almost to expected levels once rides appeared on the calendar again. This correlates with the survey findings of members re-joining in 2022 and the number of available rides in the calendar in 2022 and 2023. In the years leading to 2019, there were some international controversies causing a decline in membership (Endurance GB data) contrasting with statistics showing an upward trend in consumer spending on recreation and sport in the past 5 years or so ([Statista, 2022](#)). There is a potential for the ongoing negative change in weather conditions (particularly in the first part of the year) that impact ride entries. Riders are in training during the early part of the year after a short layoff after the previous season, and bad weather negatively affects this and therefore reduces entries for the early part of the season if horses are not riding fit in time. Therefore, climate change is adding to the decline of entries as we see weather patterns change and the ride season staying static.

Boden et al.'s (2013) discussion on distance travelled to rides correlates with the findings from this study. Riders are happy to regularly travel between 100 and 150 miles away (2–3 hours) in a day and compete ([Boden et al., 2013](#)). This tends to be for ride distances of 64K and below, with riders often staying overnight for longer rides to give their horses a rest from travelling before competing. Once the main issue of Covid was over, travel started to get back to normal.

The ability to ride during the Covid periods—both within lockdowns and other periods—was mixed amongst the membership. Many said that there was little or no change but the ability to travel horses to training grounds and visit livery stables undoubtedly impacted competition preparation for many. Add to this the riders themselves falling ill with Covid, worrying about doing so—or not wanting to ride in case of injury and putting strain on the NHS ([Ward et al., 2021](#)), and horse and rider fitness were often negatively impacted.

One of the main findings from this study is that there is an imbalance in demographics within the sport that is not Covid related. As with many equestrian sports, there is a large majority of females ([Wolframm & Meulenbroek, 2012](#)) and 80% are over the age of 45. This is a very imbalanced portfolio and, according to Endurance GB data, attrition rates of members rose in 2023 as the break in training caused by Covid has broken the “competing habit” for some—particularly those aged 55 and above. The doubling of junior members, albeit in low numbers, is encouraging but the drop in young riders (age 14 to 25) is a concern for the longer-term future of the sport. This relates to research across a variety of sports which shows that adolescents often drop out if they feel sport isn't enjoyable anymore or that there is too much training. For example, in the US there

is around a 35% annual dropout rate from all sports for teenagers (Crane & Temple, 2014). Although not the subject of this study, further research in this area on equestrian sport and in particular endurance would be beneficial for the longevity of the sport.

Applying Maslow's hierarchy of needs to the findings and discussion in Table 2 shows how during and immediately post Covid Self Actualisation and Self Esteem for endurance riders were non-existent and there were many negative implications and changes for the lower levels of the hierarchy. For people who are competitive, this arguably has contributed to them taking a break or giving up completely as they are not fulfilled in their sport as simply belonging to it does not allow satisficing behavior on their part.

Table 2. Maslow's Hierarchy of Needs applied to Endurance Riding in the Covid era. (Negatives in italics).

Maslow's Hierarchy of Needs Level	Pre-Covid and 2023	During Covid 2020/21	Post Covid 2021/22
Self Actualisation	Moving through levels. Achieving more than expected. Admiration of fellow members.	<i>No achievements as no competitions. Staying static. Horses losing fitness.</i>	<i>Re-consolidating position from before covid. Lack of achievement.</i>
Self Esteem	Completing events with good results. Horse staying fit. Enjoyment. Kudos. Friendships. Part of subculture. Correct clothing. Teamwork. Horse and rider partnership	<i>No competitions. Horses losing fitness.</i>	<i>Fewer rides and shorter distances as horses not fit.</i>
Love and Belonging	Risk assessments. First aid. Insurance. Horse vaccinations. Vetting. Correct clothing.	Keeping connections digitally. <i>Memberships lapsing. Horses not ridden so bonds lessened.</i>	Re-connecting with friends. <i>Fewer members re-joining.</i>
Safety and Security	Crew stops. Water and Food. Correct clothing. Travel to events and staying over.	<i>Lockdowns. Restricted riding. Protecting the NHS.</i>	Fitness of horse and rider improving. <i>High levels of Covid security. Fewer riding restrictions.</i>
Physiological		<i>Lockdowns. Difficulty buying food. Digital shopping for horse needs. No travel. Wellbeing lessening through no riding.</i>	<i>Travel starting, often long distances as fewer events. Clothing and feed/food purchases back to normal.</i>

Source: Author's own work.

The results show that during the 2023 season, things had returned to normal from the events, fitness, and travel side, even though memberships were still lower than expected. Indications show that this is in line with the overarching decline (see Figure 1) (Endurance GB membership data). Some lapsed members re-joined in 2023 (including 2 of the 3 interviewees) but not all.

The overall understanding gained from this research is that Covid has been an unplanned negative intervention for all types of sports and is likely to shape physical activity and pastimes for the foreseeable future (Teare & Taks, 2021). However, for Endurance GB, although Covid has had an adverse effect on membership and individual events in the short term, this is within the landscape of a gradual decline within equestrian sport (Jones, 2019). However, it now appears to be back on the declining track. This is different from other UK sports (predominantly "urban") where membership fell on average by 60% during Covid with an expectation of a long recovery period (Barret & Coleman, 2021).

Reliance on members aged 45 and over is not healthy for the long-term vision of the sport but is a typical trend over the life of Endurance GB (Endurance GB data). Member retention policies should be adopted along with marketing campaigns to recruit and retain younger members, but the "low-hanging fruit" is still the older demographic. It is likely that younger people get their self-esteem and self-actualisation from other areas in their lives, whereas the older demographic is in a more settled pattern and endurance is a way of keeping fit and active as well as achieving their riding goals.

The large increase in the cost of living/fuel from early 2022 is undoubtedly a factor in lower entry numbers per ride, contributing to the long-term decline. A focus on understanding ride entry trends for every ride (local, national, and FEI) in detail, is suggested. International rider issues (more aligned to Brexit and issues travelling horses abroad) need also to be considered.

Further concentration on the recruitment and retention of junior members through their young rider years is suggested for the Endurance GB marketing and membership teams to combat attrition at the younger end of the member age scale and give longer-term lifetime value to the organisation.

According to Figure 1, not only was there a drop in ride entrants due to Covid (2020 and 2021) but in 2017/18 there was a smaller drop which was the precursor to trend of decline of competitors at early rides (due to the international issues noted earlier). The gradual decline in riders entering Endurance GB rides (see Jones, 2019) may not be able to be reversed in the short to medium term. It is recommended that Endurance GB's marketing function factors this in when undertaking further research and developing member recruitment and retention campaigns.

The removal of Self Esteem and Self Actualisation levels (in Maslow's hierarchy of needs) during Covid, resulting in loss of members should give Endurance GB a focus for design and construction of events. What do each level of members need to attain these levels and how can Endurance GB deliver on this even in times of unforeseen disruptions?

5. Conclusion

This study focused on the effect of Covid on endurance in the UK, and the findings have shown that the negative impact was short-term. More concerningly for the governing body (Endurance GB) is the long-term slow decline in ride entries and membership, which (apart from the change from members to supporters in 2021/2022) cannot be attributable to the pandemic. As can be seen from the section above, further research needs to be undertaken to understand this decline.

Have we, as a population, become so far removed from lower levels of Maslow's Hierarchy of Needs that our Physiological and Safety/Security levels are taken for granted until there is a large-scale disruption such as the Covid pandemic or large-scale conflict? And do we now focus on the Love and Belonging level as the basis of our lives, moving into Self Esteem and Self Actualisation as an acceptance rather than aspiration?

The evidence supplied from this research has posed new questions but will allow more detailed enquiry from further studies in the area.

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