Reflections and Ethnographic Insights from Ten Years of Virtual Cycling on Zwift: A Longitudinal, Lived Perspective on Community, Access, and Life Transitions

Daniel Harrison
Northumbria University
Newcastle upon Tyne, United Kingdom
daniel.b.p.harrison@northumbria.ac.uk

Abstract

This paper presents a situated reflection on over a decade of Zwift use, combining more than 5,000km and 200 hours of personal activity with an ethnographic study of over 1,000km of community group rides during the COVID-19 pandemic. Rather than describing a path of athletic improvement, this work examines how engagement with virtual sports platforms is shaped by shifting routines, life transitions, health, and caring responsibilities. Group rides provided structure, support, and social connection, yet also revealed persistent barriers of access, flexibility, and technological complexity. By foregrounding the lived realities of both use and non-use, the findings contribute to SportsHCI by illustrating how participation in digital fitness is not simply related to motivation or performance, but an ongoing negotiation with everyday circumstances. This work highlights the need for flexible, inclusive, and enjoyable platform design, where community, adaptation, and fun are recognised as central to continued engagement.

CCS Concepts

• :; • **Human-centered computing** → Human computer interaction (HCI); Empirical studies in HCI;

Keywords

Zwift, Virtual Exercise, Cycling, SportsHCI, Community

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1 Introduction

Virtual exercise platforms have become a central part of contemporary fitness, enabling people to train, compete, and connect from the comfort of their own homes. Of these, Zwift stands out for its reach and immersive, multiplayer environment, supporting both cycling and running. While previous HCI and SportsHCI research has explored the design and adoption of such platforms, often focusing on short-term engagement, performance metrics, or specific user groups, there remains limited understanding of how these technologies are integrated, adapted, or abandoned as people's lives and circumstances shift [6, 7, 10].

This paper addresses this gap by presenting a situated, longitudinal reflection on over ten years of Zwift use. The paper draws from two distinct sources: a retrospective analysis of personal engagement and non-engagement with the platform from 2015 to 2025 (over 5,000km and 200 hours of activity), and a structured ethnographic study of community group rides during the COVID-19 pandemic (totalling more than 1,000km). Rather than following a linear path of progress, this work explores how Zwift became woven into everyday routines, shaped by changing roles, household moves, parenthood, professional demands, health, and motivation. Through this dual perspective, the paper makes three contributions:

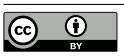
- A situated, longitudinal reflection on how life transitions and platform developments shape temporal use and non-use of virtual fitness platforms.
- Insights into the lived experiences of community participation and support, particularly during periods of isolation and disruption such as the COVID-19 pandemic.
- A critical analysis of the barriers and enablers to inclusive and continued engagement with virtual exercise platforms, contributing to conversation around equality, diversity, inclusion and participation in SportsHCI.

By foregrounding lived experience and longitudinal practice, this work complements and extends existing research on digital sports technologies, arguing for a more nuanced, human-centred understanding of engagement and community.

2 Related work

Engagement in physical activity is widely recognised as a key contributor to physical and mental wellbeing, but maintaining an active lifestyle across life's changing circumstances can be challenging for many, especially those with multiple competing responsibilities. Digital exercise platforms such as Zwift, Peloton, and TrainerRoad are promising tools that combine convenience, engaging experiences, and community to support ongoing participation from home. Their ability to offer structured training with social interaction and virtual accountability, presents both opportunities and challenges that are of increasing interest to the HCI and SportsHCI communities.

The growth of these platforms has transformed the landscape of at-home exercise, enabling users to train, race, and socialise in immersive virtual environments. These systems combine elements



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of personal informatics, gamification, and social presence, presenting new opportunities to support motivation, accountability, and habit formation. Zwift, in particular, distinguishes itself through its virtual worlds and range of user-generated and platform-curated events, supporting both structured workouts and more informal, community-oriented participation.

2.1 Virtual Platforms and Exergames

As digital platforms have matured, their ability to support diverse experiences has become increasingly apparent. Unlike single-purpose apps, these contemporary 'exergames' blend flexible training modes with rich, social environments. Peloton's broadcast-model, for example, uses instructor-led classes and real-time leaderboards, fostering a sense of togetherness, competition, and direct comparison [8]. While effective for some, this structure may limit engagement for users whose interests lean towards sociality, leisure, or episodic use. In contrast Zwift offers a persistent, multiplayer world that accommodates multiple forms of cycling, from solitary free-riding to structured workouts, community group rides, and peer-organised races. This approach places leadership and social scaffolding in the hands of the users - ride leaders and sweepers coordinate pacing and community norms, often aided by other community-members who help new riders navigate technical and social complexities [2]. This more flexible design allows users to mix and match their engagement: joining scheduled group rides, exploring the world independently, forming impromptu groups, taking part in organised races, or following a scheduled workout.

Bentvelzen et al. [2], emphasise the breadth of user goals and highlight how the platform can serve both serious athletes and those seeking more relaxed, community-based rides. They also point to gaps in onboarding and support for newcomers, noting how complex technical ecosystems and unwritten social rules can be barriers. This complexity is similar to other livestreamed group fitness settings, where technological friction and lack of social scaffolding may discourage less-experienced or less-confident users [8]. Zwift's flexibility can be both a benefit and a drawback: the ability to ride or run with at different intensities, times, and in different social settings can supports habit formation and broad participation, but can also lead to difficulties with group cohesion.

2.2 Community and Social Identity

The social features and support embodied in fitness apps and virtual exercise platforms is increasingly understood to be fundamental to continued participation. Beyond tracking individual progress, platforms such as Zwift enable users to build shared identity and community through events, rituals, and mutual support [15]. These social experiences are frequently distributed across multiple platforms - including Facebook, Discord, and Strava - which supplement in-game chat with spaces for pre-ride banter, announcements, and post-ride reflection.

The infrastructure underpinning these communities are essential for inclusion, motivation, and belonging. Richards et al [14] demonstrate how 'mid-life adults', use Zwift not only to maintain fitness but also to affirm group membership and shared identity, even without traditional club structures. Building on this, Reed et al. [13] show how Zwift users appropriate the platform for purposes beyond performance, using group rides for relaxation, playful interaction, and emotional support. These findings resonate with broader HCI research, which has foregrounded the importance of social support, peer learning, and the affective dimensions of technology use [3].

At the same time, the reliance on community-led infrastructure can introduce barriers, particularly when coordination depends on unofficial tools, or where digital literacy and privacy concerns become relevant. Elvitigala et al. [6] argue for a shift towards inclusive, context-sensitive design that accounts for users' differing needs, backgrounds, and capabilities. The roles of ride leaders and sweepers, and the use of third-party platforms, can be both enabling and constraining: vital for social cohesion, yet potentially intimidating or exclusionary for new and returning riders.

2.3 Inclusivity, representation and barriers to engagement

Recent literature in HCI and SportsHCI has placed further emphasis on inclusivity and representation on virtual exercise platforms. Reed et al. [13] describe how Zwift's open-ended structure allows users to construct their own meanings, foregrounding leisure, sociality, and self-expression alongside athletic goals. Elvitigala et al. [6] similarly highlight the need for platforms to move beyond metrics of retention or raw performance, and instead support episodic, flexible, and socially meaningful participation.

However, significant barriers to engagement persist. Access to compatible hardware, stable internet, and appropriate space remains unequally distributed, while ongoing financial costs, technical demands, and the need to manage multiple devices or accounts can further restrict participation [1, 4]. Research on technology non-use, abandonment, and episodic engagement shows that life transitions, such as becoming a parent, experiencing ill health, or moving home, can disrupt participation, often leading to periods of non-use or difficulty returning [1, 7, 10]. However, other recent work has called for explorations into the design opportunities that life transitions can bring to technologies [11]. Recent academic work increasingly advocates for reimagining digital fitness not as a pursuit demanding constant use, but as a resource to be flexibly drawn upon as life allows [2]. Design strategies that reduce barriers to re-entry, foreground fun and social connection, and validate the full spectrum of engagement - use and non-use - are critical for supporting genuine ongoing inclusion.

3 Method and positionality

This paper is grounded in two related methods: a longitudinal reflective analysis of more than ten years of personal engagement with Zwift; and a structured ethnographic study conducted during the COVID-19 pandemic. Together, these approaches offer a rich, situated account of how use of the platform has been shaped by shifting life roles, infrastructure, motivations, and social contexts. Rather than accounting for all aspects of the platform, this paper provides a situated account of access, participation, community, and engagement over time – within virtual exercise platforms and SportsHCI more broadly.

This research is situated within a growing body of first-person, autobiographical, and autoethnographic work in HCI, that embraces these methods as valuable approaches for understanding lived experience, particularly in contexts where long-term, situated engagement offers insights unavailable through traditional studies [5, 12]. This approach supports reflective, embodied, and critical accounts of technology usage over time, and is thus well suited to the ever-evolving, personal, and social entangled nature of connected fitness.

3.1 Long-Term Reflective Autoethnography

The reflective autoethnographic part of this study spans 2015 to 2025 and is based on over 5,000km and 200 hours of cycling. This draws from an in-depth personal history, supported by Zwift and Strava logs, ride notes (from the author's early use of the technology), screenshots, and posts on social media accounts. Whilst not originally collected for the purpose of *this* research, the author has conducted research within the space of physical activity and digital exercise for almost 15 years, and these materials were revisited for the writing of this paper to construct a narrative of use and non-use across time and life transitions.

The author's use of Zwift started with both personal curiosity and academic interest in mind, especially in relation to Zwift's ability to provide a more engaging home-training experience. Having sporadically used a traditional turbo trainer (along with *The Sufferfest* videos) from around 2009, the author first purchased a "smart" turbo trainer in April 2014 – a Wahoo Kickr – to use with the interactive Trainerroad app. The author then signed up to beta test Zwift in autumn 2014 and was invited to join Zwift during the beta-testing period, in February 2015 – starting a decade-long journey leading to this paper. The author's engagement with Zwift reflected evolving personal and professional circumstances: early use (2015–2017) was linked to more directed training, such as FTP improvement and preparation for real-world events; but following this, Zwift became a way to stay active through academic pressures, poor health and struggles with mental wellbeing, house moves and shared accommodation, and eventually parenthood. At times, Zwift provided structured training and support; at others it provided a social space for staying connected with virtual and real-life friends alike; whereas at others it served as a goal-free space to move, decompress, and avoid going outdoors when mental health, motivation, or time were strained or in short-supply.

Life roles and circumstances influenced use and reflections: from being a relatively fit PhD student with few responsibilities in 2015, to being a full-time academic and parent in his late 30's, in 2025, the author has experienced declining physical activity, increasing demands on time, and changes to contexts which has made longer or more 'sportful' outdoors rides less possible, or even desired. At times Zwift was actively sought out for fitness gains, but often it served as a more of a fallback: an accessible tool for movement when outdoor cycling felt unavailable, undesirable, or unmanageable.

3.2 Pandemic ethnographic study

The second strand of research within this paper is a structured, institutional-ethics approved, ethnographic study that was conducted during the COVID-19 pandemic, spanning from March 2020 to early 2021, including an intensive period until mid-July 2020, with more sporadic participation through to early 2021. This study primarily focused on non-competitive group rides organised on Zwift by a specific UK-based virtual 'club', coordinated through Zwift platform and supported by Discord voice-chat and a Facebook group, and sought to understand how individuals adopted and engaged with Zwift during the pandemic-related lockdown conditions. These rides usually took place at set times of day, providing structure and predictability within the lockdown period.

Data collection involved the author's participation within, and observation of, 2 to 4 scheduled group rides each week, which resulted in more than 70 rides, totalling over 1,000km ridden. Across these sessions, the author logged almost 70 hours of riding and observation, accompanied by more than 100 pages of field notes, screenshots, and reflections. The author adopted a reflexive observer-participant role: riding alongside others while also documenting in-ride interactions, group dynamics, and role Zwift played within everyday routines and community engagement during. Data also included 'live' audio-recorded notes made during rides, and supplementary data through Discord, which enabled text and voice-based interactions during rides, further enriching the observational data.

The analysis followed an inductive thematic approach. Data were coded iteratively to identify recurring tensions and themes around accessibility, onboarding, routine, sociality, and barriers to sustained participation. Particular attention was paid to the experience of newcomers, many of whom had joined the platform for the first time during lockdown, and were grappling with technical onboarding, group ride etiquette, and broader social dynamics.

The study started to come to a natural pause after the birth of the author's child in mid-2020, as shown in the timeline. While a few additional rides were logged following this (up until the eventual end of the study in early 2021), the demands of caregiving, disrupted sleep, and shifting household routines made continued participation impractical. This sudden drop-off in engagement itself highlights the tensions of flexibility, time, and platform accessibility that emerged across the broader study.

4 Findings

The following sections present findings from both the broader longitudinal autoethnographic analysis and the structured pandemic-era study.

4.1 Getting going in group rides: navigating complexity, roles, group norms and culture

Getting started with Zwift, especially to make the most of group rides, was a process of trial, error, and negotiation, with both a technical and a social learning curve. Although it is *relatively* straightforward to start a simple "free ride" on Zwift, fully understanding, and getting the best experience from group rides, is far more complex and requires an advanced setup enmeshed with different technologies – as witnessed in my own experiences and that of others observed during the pandemic.

For initial intrigue was matched with effort: finding space for a bike and trainer in shared accommodation, running cables across the floor, balancing the housemates needs and demands, and trying

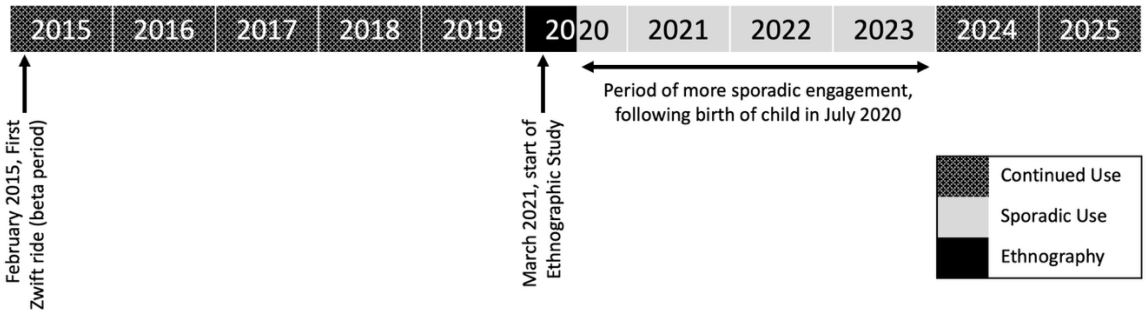

Figure 1: Timeline of experience of using Zwift, along with the ethnographic study period, showing key milestones and engagement with the platform over time.

Figure 2: Image of my home trainer setup during the pandemic, consisting of a road bicycle mounted atop a Tacx Neo trainer, a monitor and webcam, a keyboard and stream deck mounted to the bars, and a microphone to the side of the bicycle. The realities of Zwifting in a shared space are present, with an inflatable yoga/ pregnancy ball, a baby bath, and a broken bicycle wheel also shown surrounding the setup.

to avoid taking advantage of the Wi-Fi, or creating puddles of sweat on the floor. Even as someone immersed in cycling technology, having previously used Sufferfest videos and TrainerRoad for directed training, my initial trials of Zwift involved troubleshooting. Over the past decade, the complexity of this setup has grown, as the hardware and software ecosystems have expanded. Today, Zwift setups can include smart bikes; steering accessories; power meters; heart rate monitors; webcams, microphones and headphones for Discord, fans; multiple screens; remotes, controllers and devices like the Steam Deck for ease of control. For new users, particularly those without prior knowledge of indoors training or computer gaming, this can be confusing and intimidating.

During the pandemic, Facebook groups acted as a helpdesk for many newcomers – both to Zwift, and also to cycling more generally. These members frequently posted questions about pairing sensors, choosing group rides, or deciphering jargon: *"What's 'W/kg', and why does it matter?"*. For context, 'W/kg' (watts per kilogram) is a measure of effort that brings together power output and weight and is used to categorise rides and keep groups together at similar effort levels. During the pandemic in particular, many users would choose the 'wrong' group ride (e.g. one marked as 2.0 W/kg when they could only sustain 1.5 W/kg), which would often lead to them either 'flying' off the front of the ride, or being 'dropped' by the main group of riders.

Group rides are structured yet informal: a ride 'leader'; whose avatar is highlighted with a yellow beacon (to 'follow this person') sets the pace, provides encouragement (*"Keep it steady through this section!"*), and manages the event, often using both the in-game chat and Discord voice or text. One or more 'sweepers', each with a red beacon, support the leader by staying towards the back of the ride to help riders struggling to maintain the group's pace. Sweepers often send supportive messages, both publicly and in private, and do their best to bring 'stragglers' back into the main 'pack' of riders, also known as the 'blob'. In larger rides these roles can be quite formal, with sweeps and leaders communicating on Discord during the ride to adjust pacing or provide help to keep the group together.

The learning curve around these roles, and the etiquette of group rides, is a challenge for many new riders. Flyers (those who sprint ahead of the agreed pace) are a particular source of frustration for many more established riders: the pandemic saw a huge influx of flyers, which infuriated regular riders: *"Can't they read the title? This is a 1.5 W/kg ride!"* (paraphrased from field note, 2020). But over time, some established riders became more patient and understanding, as they realised that many newcomers did not understand the system or were simply happy to ride with others during a challenging time – with little or no interest in following the rules. Sweepers often face a difficult job in these circumstances, working hard to keep the 'pack' together and helping those who were struggling to keep up with the group pace, while the 'draft' from the flyers splits up the main 'blob'.

Discord, while initially intimidating, is an integral part of the group-riding experience, not just for ride logistics but for social connection. During the pandemic Discord chat would quickly turn to topics well beyond cycling: Tiger King, banana bread recipes, and support for those struggling with illness or loneliness were often evident. These conversations provided a *"social glue"* (field note, 2020), making group rides as much – more perhaps more – about togetherness and humour, as about exercise.

The combination of a steep technical setup, unfamiliar terminology, and implicit social rules meant that many new Zwifters found getting going to be a significant challenge. Despite my own background and research in sports technology, this also presented a learning curve for me - configuring my setup so that I could easily participate in Discord, while recording my rides and recording notes during them, required hours of troubleshooting. The process of trying, failing, and asking for help was echoed by many others – including more experienced riders, who would also share tips and tricks in attempts to make their setup and participation as smooth as possible. The complexity of getting started did not end with hardware. To fully participate, riders needed to understand not only the technical aspects but also the subtle cultural norms: how to stay with the group, when to use chat, what to do if dropped, and how to support others. The interplay of these social and technical demands helped foster a unique sense of community, while also excluding those who found the barriers too high. As Bentvelzen et al. [2] note, platforms like Zwift would benefit from more adaptive onboarding and greater flexibility for riders with diverse backgrounds and needs.

4.2 Group rides, community, connection and disconnection

Although Zwift offers a variety of ride types, from structured training workouts to full-on races, the focus of my riding and research was on non-competitive group ride. These events, built on collective effort and informal sociality, provided the glue that held these community together, while also pulling myself and others back to the platform through changing life stages.

When I first joined Zwift I was focused on improving my fitness and cycling performance: particularly my functional threshold power (FTP) and preparing for outdoor events, by completing training plans. Over time, role in academia progressed, family responsibilities increased, and my fitness and wellbeing changed, my priorities shifted. Rather than focusing on improved performance, I was instead valuing engagement, enjoyment and simply moving: using Zwift to stay active, connect with others, and have fun. This journey echoed the stories of many others I observed during the pandemic and beyond. Group rides, especially during lockdown, became essential social spaces for riders of varied abilities and backgrounds. For some, especially those shielding or living alone, these rides were the only time they spoke to another person all day: *"this is the community we need during these times"*, a rider living with leukaemia shared during a group ride (fieldnote, April 2020). The act of riding with the same group multiple times each week created a sense of community and stability during a period of collective uncertainty.

Although Zwift already offered built-in text-messaging service by this point, Discord helped transform these rides into social events for laughter, support, and friendship. Conversational topics ranged from cycling to home schooling, pandemic anxieties, and TV recommendations. Even when technical issues prevented some riders from joining voice chat, the supportive tone carried through in text messages and post-ride Facebook conversations: *"*[Zwift group rides] *give me a reason to sleep, to eat and move"* (field note, May 2020).

Group rides were not always straightforward, as the pandemic brought a surge of new users, the dynamic changed. Ride leaders and sweepers juggled multiple roles, educators, motivators, referees, while trying to keep the tone of rides friendly and inclusive. The phrasing of *"stay with the yellow beacon, it's not a race, we stick together"*, was constantly heard from the ride leaders, as the group worked to teach newcomers about drafting, pacing, and simply riding together. At times, this was exhausting, whilst at others it was rewarding, as more of these newcomers became more embedded within the community: connection was built not only through conversations during the ride, but before and after. through pre-ride 'banter', shared screenshots, and follow-up conversations on Facebook. For many, these interactions built a genuine sense of belonging. Over time, I came to know the sweepers, leaders, and regulars, not just as usernames, but as people with backgrounds and stories: *"I started to know the sweepers, the ride leaders, the voices on Discord, and I feel known in return"*.

Yet, the community was fragile: as pandemic restrictions began to lift, many members stopped riding within the group, and the community began to change. I was shielding at this time and avoided riding outdoors, but soon other commitments prevented me from

joining these group rides. Despite only riding with the group very infrequently, I still felt a sense of connection with the community. Then, I left Facebook in early 2021, which led to a complete sense of disconnection. Without access to group announcements, ride schedules, and post-ride chat, I found myself completely removed from the community. Others reported similar challenges, especially as life circumstances changed, priorities shifted, or the complexity of the setup (hardware, apps, accounts) became too much to manage – some riders simplified their setup and began to simply ride with Zwift running on a tablet. Indeed, I did not return to regularly riding with this community again until early 2025, when my academic sabbatical allowed me more flexibility in my schedule.

Community engagement was a double-edged sword: on the one hand, it provided accountability and motivation, keeping riders engaged even when energy was low: *"I didn't want to let the team down, so I'm still riding even though I feel exhausted"* a sweep admitted during the pandemic. On the other, community could become a burden, a source of guilt or anxiety when attendance slipped. Richards et al. [14] described this tension in the context of social identity and fitness communities, where the same group that sustains can also pressure.

Engagement is not always linear or stable. I became a parent in summer 2020, following which there were periods where I barely considered or used Zwift at all. Returning after a break was not easy, the group, rides, and community members changed, requiring effort to reconnecting. The change in group rides over time, growing, shrinking, and changing focus, mirrored my own relationship with Zwift, as well as broader themes of community described by Reed et al. [13]. However, fun, enjoyment, and meaningful connection can matter as much as fitness or performance. My own journey, captured in notes, screenshots, and reflections, shows how the value of platforms like Zwift is not just in tracking and training, but in supporting fun, playfulness, and a sense of belonging. As SportsHCI research argues elsewhere, utility and enjoyment can and should coexist in technology design [9].

4.3 Use and non-use, barriers, frictions, and the myth of flexibility

While Zwift promises flexibility, accessibility, and a straightforward exercise experience, my decade-long journey, and the experiences of many riders observed during the pandemic, shows a messier reality, shaped by barriers, interruptions, and periods of non-use. Infrastructure is the first hurdle to overcome: at the very least a Zwift setup requires a smart trainer, a compatible device, reliable Wi-Fi, and enough space to ride – costly requirements that cannot be taken for granted. As a student, my setup was wedged into kitchens or bedrooms; later, as a parent, my trainer migrated to a cold, unheated garage, becoming unusable during the winter. For others, constraints include a lack of dedicated space, family members sharing devices or internet connections, and the sheer cost of equipment. Hardware failures, Bluetooth dropouts, and ongoing software updates frequently disrupted rides. *"I've spent more time syncing sensors than actually riding"* I noted in a particular frustrating ride in 2018. These stories were echoed by others: *"it took me 45 minutes to update everything and get back on—by then, the ride had started without me"* (cyclist, May 2020).

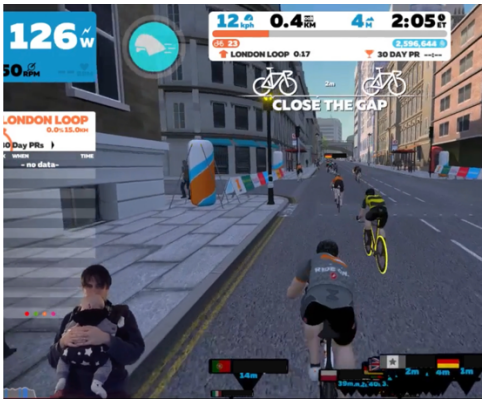

Figure 3: A screenshot showing myself taking a short Zwift ride with my 4-month old in a baby carrier in 2020.

Financial barriers are substantial. The subscription cost is only one piece; most riders spend hundreds or thousands of pounds on trainers, fans, accessories, and other equipment. For many, especially newcomers or those riding through financially precarious times, they are exclusionary. Time and scheduling present their own challenges. While Zwift offers the flexibility to ride at any time, engaging community experiences including group rides, challenges, and events, are tied to fixed schedules. For me, and for many with work or caring responsibilities, these times often conflicted with other obligations. Follow the birth of my child, my rides became more sporadic, and for others, home-schooling, late work meetings, or even fatigue meant rides were missed or abandoned. Zwift's flexibility is conditional: it works for those with control over their schedules, space, and with more fewer household responsibilities. For others engagement is sporadic, marked by periods of use, followed by drop-off as life circumstances change. This temporal engagement is not failure, but reality. Research in HCI repeatedly shows how technology use is rarely stable or continuous; people engage, disengage, and return as their lives shift [1, 4, 7].

Use after non-use can present barriers: software updates, forgotten passwords, changing ride times, and shifting community norms all become problematic. As I reflected after a long absence: *"It's easier to ride outside than to figure out where all the updates and cables are"* (field note, 2023). This resonates with Baumer et al.'s [1] work on transitions in social media use and with my own observations of other riders who, after missing a few weeks or months, felt adrift from their former communities. Access and privilege play powerful role. Having an understanding partner, a dedicated space, and financial security can make Zwift easy and enjoyable. Many do not have these advantages, and the platform's promise of flexibility accessibility does not work out. For riders who only engage with Zwift 'off season', seasonal change can shape use –when the weather improved, or pandemic restrictions lifted, some returned to outdoor riding, while others, constrained by time, space, or health, continued to depend on virtual rides year-round.

These findings point to the need for virtual exercise platforms and technologies to be designed for disruption, re-entry, and flexible, episodic use, not just constant engagement or maximum retention. They should be tools that can support fun, wellbeing, and inclusive

social experience, not just as training or competition platforms. The 'myth' is not of flexibility alone, but also of frictionless access. Technologies can support broad goals, fun, and flourishing, but only when they are made to fit, and adapt to, the messy realities of life.

5 Discussion and conclusion

This work contributes a longitudinal perspective to SportsHCI, showing how virtual exercise platforms are interwoven with the changing complexities of everyday life. By combining a decade of autoethnographic reflection with a structured pandemic-era ethnography, the study moves beyond performance and retention metrics to reveal how real-world constraints and shifting motivations shape patterns of use and non-use.

First, we deepen our understanding of **episodic and temporal engagement**. Sustained use is not simply the result of motivation or platform design, but a negotiation with infrastructure, health fluctuations, social situations and life events [1, 4, 7]. Where existing work in HCI and SportsHCI has focused on onboarding and drop-off, this study evidences a more 'lived' model of engagement, where riders move in and out of participation across seasons, life stages, and situations. My own timeline of use over the past decade – with times of intense engagement broken up with periods of non-use – illustrates how family events, illness, and sabbaticals impact use. Platforms could better support these non-linear journeys by allowing users to more easily 'jump-in' when returning from a break, for example with guided-transitions to bridge gaps between outdoor and indoors activities, performance recaps, or means of reconnecting with a community.

Second, our findings underscore the **value and fragility of bottom-up, community-led group rides**. Unlike top-down platforms such as Peloton, where classes and social interactions are professionally curated [8], Zwift's peer-led rides foster playful, supportive, and messy social situations. These dynamics can support motivation and adherence (e.g. [14]), while also creating space for fun, serendipity, and friendship – outcomes often ignored in sports technology research [3, 9]. However, this also makes them precarious – changing schedules or departing a platform (e.g. Facebook) can sever ties with a community, and those returning must relearn group norms. Combining both community-driven and platform-curated events might preserve grassroots vitality while providing continuity and support re-entry.

Third, we highlight the often-overlooked **barriers to flexibility and inclusion**. While Zwift sells itself as being broadly accessible, participation depends on privilege: costly specialist equipment, dedicated space, and technical knowledge. Furthermore, scheduling group rides into already crowded home lives, competing with childcare, remote work, or household chores, can feel less legitimate than attending an external class, making boundary-setting more challenging. As Bentvelzen et al. [2] argue, more adaptive, inclusive, and context-sensitive designs – session reminders that respect routines; modular equipment profiles that lower setup friction; and, inclusive interfaces that support flexible engagement – are needed to enable episodic, social, and enjoyable participation for a wider spectrum of riders.

Looking forward, this work advocates for a shift in SportsHCI towards designing for disruption, diversity, and experiences that accommodate life's ebbs and flows. Platforms should foster not just performance and social comparison, but playful, community-led, and enjoyable participation, while acknowledging how equipment costs, space constraints, and social responsibilities can exclude many potential users who could otherwise benefit from regular participation. By reframing lapses in use as part of a broader journey of participation and embedding inclusive entry and re-entry points, future platforms can serve a more diverse population and genuinely support meaningful, episodic engagement.

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