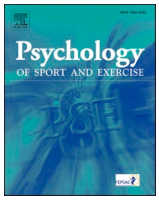
Psychology of Sport & Exercise 70 (2024) 102515

Contents lists available at ScienceDirect

Psychology of Sport & Exercise

journal homepage: www.elsevier.com/locate/psychsport



How do new runners maintain their running, and what leads to others stopping? A qualitative, longitudinal study

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A B S T R A C T

Many people who start running do not maintain their behaviour change. We used qualitative, longitudinal methods to explore and interpret the experiences of new runners and answer the question, "What experiences explain how new runners maintain their running or explain why they stop?" We interviewed 20 new runners (all White British, 14 women, 6 men) about their experiences; we interviewed 10 until they stopped running and 10 until they maintained running for 6–12 months (65 interviews in total). We also conducted nine participant observations at a running club, invited external reflections at a running club, and analysed six sets of participant diaries. Four themes were constructed using a reflexive thematic analysis: (1) Identifying a meaningful "why"; (2) "Life gets in the way" of running; (3) Learning that I *can* run; and (4) Opportunities are unequal and experiences contrast. The runners' reasons for running helped us to interpret changes in their experiences through time. Meaningful reasons helped runners to learn that they can run, prioritise running, and prevent life getting in the way. These reasons tended to be reasons to run, as opposed to reasons to be physically active, and they related to their identity, values, special memories, relationships, enjoyment of running, or a personal goal. Nevertheless, social inequalities like gendered experiences, wealth, and health differences meant that opportunities and experiences of running differed, creating more barriers for some runners. When runners faced substantial barriers, having a meaningful reason was helpful but it was sometimes insufficient for maintenance. The analysis illustrates how people's reasons for exercise influence their experiences through time, the dynamic nature of people's exercise barriers and facilitators, and the unequal nature of opportunities and experiences.

1. Introduction

Running and other forms of aerobic exercise can benefit physical health (e.g., Pedisic et al., 2020) and mental health and wellbeing (e.g., Nezlek et al., 2018). They can also allow people to pursue meaningful outcomes such as personal challenge, becoming fitter, being part of a community, or pleasure and enjoyment (Hall et al., 2023; McCormick et al., 2020). Nevertheless, many people who take up running and other forms of exercise struggle to maintain it for 6 months or longer (Fokkema et al., 2019; Johnson et al., 2022) because of reasons such as injury, lack of time, running not being their preferred form of physical activity, and ill health (Fokkema et al., 2019; Pereira et al., 2021). Interpreting how new runners' experiences change through time during the first 6 months or longer could improve understanding of the maintenance of exercise behaviour change and support the development of interventions that help people to achieve meaningful exercise-related goals and outcomes.

Running influences health outcomes at the individual and population level, and it is used as an intervention to promote physical activity (e.g., Stevinson et al., 2022). It is therefore helpful to understand the factors that support and discourage regular running. Researchers have identified and explored the experiences of barriers and facilitators to running (e.g., Stevinson et al., 2022), as well as exercise and physical activity broadly (e.g., Mbabazi et al., 2023). Some physical activity barriers like low motivation and lack of time are common across populations and across forms of activity (e.g., Pedersen et al., 2021), but others are specific to populations such as older adults, low socio-economic groups, people who have a health condition or disability, or parents (e.g., Mailey et al., 2014). Similarly, some facilitators of physical activity like enjoyment, access to activity environments, and social support (e.g., Pedersen et al., 2021) are common across populations and forms of activity, whereas others are population-specific (e.g., Mailey et al., 2014). Studies of barriers and facilitators are often quantitative, cross-sectional, or both (Pedersen et al., 2021). These studies therefore do not show in detail how people's experiences of barriers and facilitators change through time, which could help to explain *whether* different people maintain their behaviour change as well as *how* some maintain it.

The processes that explain health behaviour change maintenance were formulated by Kwasnicka et al. (2016). Behaviour change

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https://doi.org/10.1016/j.psychsport.2023.102515
Received 28 February 2023; Received in revised form 20 August 2023; Accepted 21 August 2023
Available online 23 August 2023

maintenance is defined as the "continuous performance of a behaviour following an initial intentional change at a level that significantly differs from the baseline performance in the intended direction" (Kwasnicka et al., 2016, p. 280). For example, it relates to whether people continue a form of exercise that they have started, like running. Kwasnicka et al. reviewed and synthesised 100 theories of behaviour change relevant to maintenance, including exercise behaviour change maintenance. They identified five over-arching, inter-connected theoretical themes related to: (1) maintenance motives, (2) self-regulation, (3) resources, (4) habits, and (5) contextual influences. These theoretical themes offer researchers and practitioners a useful interpretation of how some new exercisers, such as some new runners, maintain their behaviour change.

Kwasnicka et al. (2016) argued that people need at least one sustained motive to maintain health-related behaviour change; these motives could include enjoyment of the behaviour, satisfaction with behaviour outcomes, or congruence with beliefs, values, or identity. They also argued that these motives are often different from the motives for initiating the behaviour (e.g., losing weight), they often develop after initiation, and they are regularly gratifying. Further, they argued that people are more likely to start a new behaviour when their motivation and capacity are high and when goal conflicts and opportunity costs are low (i.e., when people have fewer competing demands and when exercising takes less effort). When motivation and capacity drop and when goal conflicts and opportunity costs increase, people need to use effortful self-regulation to maintain the behaviour (i.e., cognitive and behavioural strategies like planning). These examples from Kwasnicka et al.'s (2016) interpretation capture how people's experiences with exercise are dynamic and can change through time. Nevertheless, few researchers have used a qualitative, longitudinal approach to explore how people's experiences of maintaining health behaviour can change through time (e.g., Kwasnicka et al., 2019), particularly in an exercise context (e.g., Solomon et al., 2021).

Researchers have conducted qualitative studies exploring the experiences of new, inexperienced, or recreational runners. Example qualitative studies have contributed towards understanding of mind-body pleasures experienced during rewarding runs (Jackman et al., 2022), lived experience of pleasure and danger for women running in urban and rural spaces (Allen-Collinson, 2023), the metacognitive processes and attentional focus of inexperienced runners (Brick et al., 2020), how runners experience crowd encouragement during mass events (Gibbs--Nicholls et al., 2022), and how mother runner identities are constructed within blogging (McGannon et al., 2017). Further, some qualitative, longitudinal studies have captured how runners' experiences change through time, such as how beginner long-distance runners learn to derive pleasure and contentment when experiencing pain and bodily distress (Lev, 2019) and how women who take up running in later life develop new narratives about their bodies and physical activity (Griffin & Phoenix, 2016). Qualitative studies like these are valuable for understanding how people interpret and make sense of their experiences in the contexts of their lives, for studying the complexity of people's experiences, and potentially for illuminating processes that lead to people experiencing different outcomes like maintaining or not maintaining behaviour change (Sparkes & Smith, 2013). Qualitative, longitudinal studies more specifically could support researchers in achieving a detailed understanding of how new exercisers' experiences of barriers and facilitators unfold, in ways that would be less evident through cross-sectional data, quantitative data, or solely retrospective accounts of experiences (Tuthill et al., 2020).

In the present study, we used qualitative, longitudinal methods to interpret the experiences of new runners through their first 6–12 months and answer the following research question: "What experiences explain how new runners maintain their running or explain why they stop?" Answering this research question could advance theoretical understanding of maintenance of exercise behaviour change, such as by allowing comparison between new runners' accounts of their experiences and the theoretical themes that Kwasnicka et al. (2016) used to explain maintenance of behaviour change. Further, our analysis could inform interventions designed to support new runners and therefore help people to achieve meaningful exercise-related goals and outcomes. By using qualitative, longitudinal methods to answer our research question, we were able to gain an in-depth understanding of new runners' experiences of running, contextualised within their broader lives, during a period when people try to maintain their behaviour change but often do not (e.g., Johnson et al., 2022). We could also build relationships with participants that supported open and detailed conversations, we could learn about participants' recent recollections of experiences as well as their later reflections on these experiences, and we could capture similarities, changes, and turning points in people's experiences through time (Murray et al., 2009; Solomon et al., 2020; Tuthill et al., 2020).

2. Methods

2.1. Researchers and paradigm

The two lead researchers (first and second author) adopted a relativist ontology, a subjectivist, transactional, and constructivist epistemology, and a hermeneutical and dialectical methodology. We therefore assumed that social reality is humanly constructed, that each person experiences their own subjective reality, that researchers are inseparable from what they study, and that knowledge is co-created through interaction between researchers and participants (Guba & Lincoln, 1994; Lincoln et al., 2018; Sparkes & Smith, 2013). The first author designed the study, ran the interviews, co-analysed the data, and co-wrote the manuscript. He is a Sport and Exercise Psychologist in his 30s. The second author co-analysed the data and co-wrote the manuscript. She is a Trainee Sport and Exercise Psychologist and PhD student, using the results to inform an intervention to support new runners. Both have recreationally run for about 10 years. The researchers' interpretations are inevitably influenced by their theoretical understanding (Willig, 2017). The lead researchers' expertise is in sport and exercise psychology, and they were supported in interpreting the data by a public health lecturer (Author 3), a Sport and Exercise Psychologist (Author 4), and a sociologist (see Acknowledgements). Authors 3 and 4 consistently made links between the analysis and theories and models that explain exercise and physical activity behaviour. These theories and models were typically from psychology literature and behaviour change literature. The sociologist consistently drew our attention to less familiar sociological perspectives, such as perspectives on inequalities relating to age, gender, social class, race and ethnicity, and health (see also Data analysis section below). The research team reflexively discussed how guiding theories were influencing the interpretation of data, to ensure that that we represented participants' realities and meanings and to support co-construction of knowledge between researchers and participants (Varpio et al., 2021).

2.2. Participants and recruitment

Following ethical approval, we recruited 20 participants using social media adverts and by contacting local running clubs in the South West of England, UK. We invited people who were increasing their physical activity through running, from a modest level of activity, to participate by sending them a participant information sheet. Participants were new to running as an adult or returning to running to become more active (as opposed to highly active people transitioning into running from another form of activity or experienced runners returning after injury). Participants were typically changing their exercise behaviour from not running to running up to three times a week, and they varied in their physical activity outside of running. One club (pseudonym South West Athletics) in a middle-class town supported recruitment of 14 participants by advertising the research to their new runners, and this club welcomed the interviewer for observations. Participants were recruited between January 2019 and February 2020. Twenty people (all White British/

British dual nationality, 14 women, six men) volunteered without compensation. Women aged 40 or older were particularly represented in our sample because of the demographic of beginner runner groups at South West Athletics, as well as because these people self-selected by volunteering. We have given each a pseudonym. Nineteen had their first interview within 1–2 months of changing their running behaviour (one interview was after 3 months). Of the 20 participants, 10 stopped running, although they often remained or intended to be physically active in other ways. Ten continued running, to varying degrees (see Table 1).

2.3. Multiple methods

We conducted prospective, longitudinal research by involving a consistent group of participants for a defined period from the outset of the study (Bennett et al., 2020); this defined period was six months of running or until the participant stopped running. We pluralistically worked with multiple methods (Chamberlain et al., 2011). We conducted serial interviews, where we built upon our interviews with each participant by feeding interview discussion points into their subsequent interview guides (Tuthill et al., 2020). We also undertook participant observations at South West Athletics, invited external reflections at South West Athletics, and analysed participant diaries. These multiple methods offered different insights into how each participant's experiences changed through time, as well as into similarities and differences between the 20 participants and other new runners at South West Athletics. We were also able to feed the observations, external reflections, and diary content into the interviews.

2.4. Interviews

Based on how long they maintained running, participants had one ($n = 1$), two ($n = 3$), three ($n = 9$), four ($n = 4$), or five ($n = 3$) interviews ($N = 65$ interviews). While most were involved until they stopped running or until approximately 6 months of running, some volunteered for interviews beyond 6 months to capture important experiences in their journey (see Table 1). For participants who had multiple interviews, they were 83 days apart on average ($SD = 27$ days). Time

Table 1
Participant characteristics.

Person	Gender	Age Group	Running Context	Sociodemographic, Health, or Contextual Factors	No. of Interviews	Research Involvement (Days)	Running Outcome
Laila	Woman	50–54	Solo	Employed; health	2	56	**Stopped** sporadic running after 1 month.
Mona	Woman	55–59	Club	Employed; health; weight	1	–	**Stopped** running once a week after 2 months.
Devon	Woman	60–64	Club	Caring; employed; health	2	40	**Stopped** running about once a week after 2 months.
Rita	Woman	55–59	Club	Caring; health; parent; retired; weight	5	293	Ran weekly for 2 months. Paused for 4 months, re-started briefly, and **stopped**.
Aaron	Man	30–34	Solo	Employed and student; parent; has a physical disability	3	157	Ran 2–3 times a week for 2 months. Became sporadic and had multiple breaks, including for injury. Completely **stopped** running after 8 months.
Ken	Man	55–59	Club	Employed; pandemic	3	119	Ran twice a week for 3 months, then **stopped**.
Lina	Woman	65–69	Club	Health; retired	2	69	Ran twice a week for 3 months, then **stopped**.
Kiera	Woman	60–64	Club	Employed	3	192	Ran 2–3 times a week until injured after 3 months. Could not return from injury. **Stopped**.
Zara	Woman	55–59	Solo	Employed; weight	4	208	Typically ran 2–3 times a week. **Stopped** after 5 months.
Asa	Man	20–24	Solo	Initially student, later employed	3	203	Sporadic running. Completely **stopped** after 6 months.
Kim	Woman	50–54	Club	Caring; parent	3	209	Generally **maintained**. Ran 2–3 times a week until injured after 5 months. Paused for 3 months due to injury. Still running after 14 months.
Isla	Woman	40–44	Club	Employed; parent	4	191	**Maintained** running but her frequency was inconsistent. Running about once a week at 7 months.
Anita	Woman	45–49	Club	Employed; health; single parent	5	376	Somewhat **maintained**. Still running at 12 months but her frequency was inconsistent and she had some breaks from running.
Zoë	Woman	45–49	Club	Employed; health; parent of a child who had additional support needs; weight	3	197	Generally **maintained**. Usually ran once a week, which was less than she hoped, but she did increase her distances. Little running during school summer holiday.
Kai	Man	35–39	Club	Became employed; parent	3	168	**Maintained**. Ran 2–3 times a week for 5 months. Running weekly at 7 months after a change in employment.
Leo	Man	40–44	Club	Parent; pandemic; self-employed	3	205	**Maintained**. Ran 2–3 times a week, then paused after 5 months for house renovations. Running again after 7 months.
Jas	Woman	40–44	Solo	Employed; health; parent	3	216	**Maintained**. Regularly ran once or more a week. Paused for a month due to illness. Running 2–3 times a week at 6 months.
Arya	Woman	25–29	Solo	Employed	4	217	**Maintained**. Ran consistently throughout study. Ran 2–3 times a week from about 3 months through to 8 months.
Mia	Woman	50–54	Club	Employed; weight	4	234	**Maintained**. Ran consistently and increased frequency over time. Running 2–3 times a week at 8 months.
Zack	Man	40–44	Club	Health; parent; self-employed; became student; weight	5	389	**Maintained**. Ran consistently and frequently throughout study. Running 4–5 times a week at 1 year.

Note: 'Parent' reflects being a parent of one or more child up to (and including) age 18. 'Caring'/'health'/'weight' mean that participants referred to how their caring responsibilities/health/weight made participation difficult. 'Pandemic' means that the participant's research involvement was ongoing in March 2020. 'Maintenance' (or lack thereof) was judged by comparing how often they were running against before they initiated the behaviour change.

between the first and final interview ranged from 40 to 389 days (M = 197, SD = 91). The mean interview duration was 63 min (SD = 19 min). Interviews were at the interviewer's university, the participant's home, or a location chosen by the participant (e.g., café, library). Interviews were conducted between January 2019 and August 2020, with two participants doing two of their three interviews by phone due to COVID-19 restrictions.

The interviews were semi-structured; we used pre-planned interview guides to ask relatively focused but open-ended questions (Smith & Sparkes, 2016). At each interview, the interviewer's main aim was to explore and make sense of the participant's experiences of running, or not running, during the timeframe covered. Interview 1 covered experiences since they started running, and subsequent interviews covered experiences since their previous interview. At each interview, the interviewer used generic questions to explore the runner's interpretation of their current reasons for running, the barriers they faced, and the support they received. These questions were informed by preparatory reading that the first author completed when designing the study. In particular, the interviewer included questions that invited responses relating to the five theoretical themes that Kwasnicka et al. (2016) used to explain maintenance of health-related behaviour change (maintenance motives, self-regulation, resources, habits, contextual influences). By including the same generic questions in each interview, the interviewer could explore change or similarity in participants' experiences through time (Tuthill et al., 2020).

Interview 2 onwards included a summary of the most recent interview, an exploration of experiences since then, and person-specific questions based upon previous interviews, diary content, email updates, or conversations at observations. At each interview, the interviewer used detail, elaboration, contrast, and clarification expansion questions to spontaneously explore experiences not covered in the guide (Sparkes & Smith, 2013). The interviewer also provided opportunities for member reflections by sharing his interpretations from that participant's interviews and anonymous interpretations from other participants' interviews (Smith & McGannon, 2018). At the final interview, the interviewer asked some generic questions to support reflection on the participant's overall journey. Supplementary Material 1 includes more detail on the interviews, including a characterisation of the interview style (see Pezalla et al., 2012), the generic interview questions, the full interview guide for Interview 1, an example guide for Interview 2, and example expansion questions.

2.5. Observations

The first author undertook nine 2-h participant observations at South West Athletics between March 2019 and January 2020, to examine beginner runners' experiences in situ (Sparkes & Smith, 2013). These observations provided further context for reported experiences and opportunities to get brief updates from participants, to converse with and gain insights from other runners and run group leaders, and to invite external reflections on interpretations (Wadey & Day, 2018). The first author observed and conversed before, during, and after sessions for beginner and intermediate runners at South West Athletics, which centred around their "Couch to 5K" beginner runner training plan. The first author participated in runs involving one or more interviewees with their consent, and he chose a group to join based on who was present. The observations coincided with 12 participants running with South West Athletics. The first author audio recorded field notes and reflections after each session (M duration = 21 min, SD = 6 min) and used the notes to inform questions for subsequent interviews. The reflection prompts are included in Supplementary Material 1.

2.6. Diaries

Participants had the option to complete diaries, and six chose to. These were guided by instructions and approached flexibly, with some participants choosing to complete electronic diaries and others choosing hard copies. Participants periodically emailed electronic diaries to the interviewer, and some brought hard copies to interviews (e.g., to prompt memory) before handing them in after the study. Some chose to complete interval-contingent diaries (Wheeler & Reis, 1991) where they answered questions each week or month that addressed their reasons for running, barriers, and facilitators. Others chose event-contingent diaries (Wheeler & Reis, 1991) where they described experiences (e.g., a challenging or enjoyable run) that influenced their motivation or commitment. The researchers used the diaries to gain insight into the runners' experiences between interviews and to prepare interview questions. Diary coverage and quality varied between the six participants; while all engaged, three provided more detail and more regular updates. Supplementary Material 1 includes the interval-contingent diary template and the event-contingent diary instructions.

2.7. Data analysis

Data were analysed collaboratively by the first and second author, with the other researchers (see Researchers and paradigm section) informing the analysis through discussions about interpretations and through "critical friend" questioning. We used a reflexive thematic analysis to identify patterns across the dataset and create a detailed, nuanced answer to our research question (Braun & Clarke, 2014). Reflexive thematic analysis is systematic, accessible to less experienced qualitative researchers (second author), and valuable for applied projects where researchers aim to create an analysis understandable to non-academic audiences like runners (Braun & Clarke, 2014).

We used the recursive six phases of Braun and Clarke (Braun & Clarke, 2019; Braun et al., 2016) to construct, describe, and interpret the meaning and importance of themes (Braun et al., 2016): familiarisation and coding; theme development, refinement, and naming; and writing up. Themes are stories about patterns of shared meaning, united by a central organising concept (Braun & Clarke, 2019). Analysis inevitably involves both semantic and latent processes, and both inductive and deductive processes (Willig, 2017). Nevertheless, we primarily engaged with data at the semantic level by coding and reporting explicitly stated experiences and meaning, and we primarily approached data coding and theme development inductively, in a data-driven way (see Supplementary Material 1 for coding examples).

We began the analysis in October 2019 part way through the interviews and steadily completed the analysis over 2.5 years. Analysing the data steadily allowed us to maintain a high-quality analysis of a substantial data set, allowed the first author to collaboratively train the second author in the analysis process, and offered a substantial phase of "incubation" (Hunter et al., 2002) to identify patterns in the data, interpret the data, and create an informed and novel answer to the research question. We transcribed and coded all interviews, diaries, and observation reflections. To help work with the volume of interview data and to consider change in participants' experiences through time, we constructed a longitudinal summary of each participant's experiences based on the combined data relating to that participant (3-11 pages per participant, see Supplementary Material 1 for an example). The first author created nine of these summaries, and the second author created 11. The first and second author regularly met to discuss the ongoing analysis and used the summaries to discuss and interpret each participant's experiences in relation to the research question and research aims. We particularly considered: (1) change or consistency in each person's experiences through time, and (2) similarities and differences in experiences across participants. The following are examples of questions we discussed that supported engagement with each participant's data: How did this participant's experiences change through time? How did this participant's experiences compare with others? What led to this participant continuing to run, or stopping? How might we interpret this experience theoretically? What are the implications for intervention design?

Using cells in a spreadsheet and tables in a word processor, the second author organised the codes and coded data into 15 candidate themes, meeting with the first author throughout. Our interpretative discussions of the participant summaries helped us to name some of these candidate themes earlier in the analysis, and we later chose others inductively based upon similarities in codes. Using participant summaries to keep the codes and themes contextualised to participants' overall experiences, we gradually revised candidate themes into the final themes. When revising the themes, we aimed for each theme to have a distinct central organising concept, to identify relationships between themes, and to choose themes that tell a coherent and compelling story together relating to the research question (Braun et al., 2016). When we wrote about the final themes, we lightly edited the illustrative quotes to support readability and resonance, without changing meaning (Cristancho et al., 2021). For example, we removed redundant repeated words and hesitation markers (e.g., 'um') that impacted flow.

2.8. Quality criteria

Consistent with a relativist ontology, readers are invited to judge the extent to which the research meets the criteria in Table 2, which were drawn from the "big tent" criteria synthesised by Tracy (2010). We view the criteria as a list of socially constructed characteristics that reflect what "good quality" research could mean in relation to this study, based on the context, time, and aims of the research (see Smith & McGannon, 2018; Sparkes & Smith, 2009, 2013). Throughout this paper, we aimed to demonstrate topic worthiness, rich rigor, credibility, a significant contribution to theory and practice, and meaningful coherence. Within Table 2, we have summarised the strategies we used to achieve these criteria.

3. Results

We constructed four themes to explain how some new runners maintained their running and to explain why other runners stopped: (1) Identifying a meaningful "why"; (2) "Life gets in the way" of running; (3) Learning that I *can* run; and (4) Opportunities are unequal and experiences contrast. Each theme is presented separately, but they are related. Having a meaningful why supported participants in learning that they could run and helped to prevent life getting in the way. Life was more likely to get in the way for those who had fewer opportunities to run or difficult experiences of running.

3.1. Identifying a meaningful "why"

Starting with or later identifying a meaningful "why" or reason for running helped to explain whether runners continued or stopped running, as well as individual differences in whether they learned they could run and whether life got in the way. Some reasons for running were more powerful at supporting maintenance than others. Although all participants listed reasons that they were running for, some of these reasons seemed particularly significant and important and helped some participants to prioritise running, to overcome barriers to going for a run, to run when running was hard work and not particularly enjoyable, and to maintain running long-term. Meaningful reasons were characterised as being reasons related to their identity, values, special memories, relationships, enjoyment of the experience of running, or a personal goal. Meaningful reasons were also characterised as reasons to run specifically, as opposed to being reasons to do something active that just "happened to be running" (Rita). At the end of his final interview, Kai reflected on what he saw as the "key ingredients" (Interviewer's wording) for him maintaining running. Kai explained, "You have to have your reason for starting and you have to remember that the whole way through and then everything else will just spur from that … [Kai then renamed his reasons] Having that one anchor point blossomed into everything else that went on." Kai had improved his fitness very quickly through running, which had meaning tied to his self-confidence and marriage.

Kim's meaningful reason was the London marathon. Her opening sentence in Interview 1 was, "Well, why I started to run was because I want to run the London Marathon. That is the crux of it." She explained that completing "the crème de la crème of marathons" would be a "glorious" life achievement, a "dream", one of the best moments of her life, and a "bucket list" item. She wanted to do something *for her*, make herself and her family proud, show what was possible at her age, and raise money for a charity related to her husband's health. Kim was excited by the marathon; the interviewer felt he could see that in her "glowing" eyes and hear it in her tone of voice when she talked about the marathon. Kim's mother became terminally ill between the first and second interview, while Kim was completing the Couch to 5K. Kim frequently travelled long distances to be with her mother but managed to run despite the stress and despite her change of routine and priorities.

> Interviewer: Can I ask, with you saying about the living in a suitcase, kind of traveling back and forth, quite rightly being really stressed about it. I think other people might have stopped running at that

Table 2
Research quality criteria.

Quality Criterion	Questions to Support Engagement with the Criterion	Practices Used to Achieve the Criterion
Worthy topic	Is the topic relevant, timely, significant, and interesting?	The research was designed to address a current and significant applied problem in exercise and physical activity psychology.
Rich rigor	Do the researchers use sufficient, abundant, appropriate, and complex theoretical constructs, data, time in the field, samples, contexts, and data collection and analysis processes?	Longitudinal design; Prolonged engagement with participants (Table 1); Sixty-five, in-depth ($M = 63$ min) interviews with 20 participants; Prolonged, reflexive engagement with the data by Authors 1 and 2, with use of a "critical friend" throughout (see Acknowledgements); Critical discussion of the data by a research team with varied specialisms and theoretical perspectives.
Credibility	Does the reader feel that the research is trustworthy enough to act and make decisions on?	Pluralistic data collection (interviews, observations, diaries); Member reflections embedded into interviews; External reflections at observations; Multiple researchers with varying theoretical perspectives; Aesthetic quotes used to show the nature of the themes.
Significant contribution	Does the research extend knowledge? Does the research shed light on why some new exercisers stop, and how others continue? Could the research support interventions for promoting exercise and physical activity?	Qualitative longitudinal design to study how experiences change through time; Discussion of theoretical contribution, particularly in relation to Kwasnicka et al.'s (2016) synthesis of health behaviour change maintenance theories; Substantial focus on implications for supporting exercise maintenance within the Discussion.
Meaningful coherence	Does the research achieve its stated aims? Do the methods fit the stated aims? Are literature, research questions, results, and interpretations meaningfully interconnected?	Clear, explicit paradigm that shaped different stages of the research process; Manuscript writing centralised around the research question.

Note: Questions and practices were informed by Tracy (2010).

point, thinking that was a reason to stop it. What led to you finding a way to

((in overlap)) Kim: Well, you know, I've got my aim, haven't I, you know, I'm not going to give up. You know, my mother wants me to do this. So **for her**, I am running. And for me, you know, I told you my aim at the very start. And when I started on the 5th of January, I told the coaches, "I'm doing this to run the 2020 marathon". And that's it, you know, no bullshit about this, that's what I'm going to do.

During that time, Kim was away from home, unable to run with South West Athletics, sad, stressed, and prioritising her mother. Nevertheless, running was important to her, and so remained *a* priority: "Running is a priority, but it's not **the** priority" (Interview 2). Kim ran separately from South West Athletics while staying with her mother, and she completed the 5 km target distance independently but in line with the club's training plan.

Kiera also had a meaningful, running-specific reason. Kiera was returning to running, and she wanted to be able to "pop my shoes on and just go for a run, and be able to run for half an hour or 15 min or whatever time I have" (Interview 1), which she had previously been able to do. In the interviews, she described fond memories of when she "loved" running, with one memory from 10 years previous standing out.

One memorable afternoon sticks in my head where the friend I used to run with, we went up onto the moors and we ran seven miles, and I could have just kept running. I didn't feel exhausted, I didn't feel "Oh God I've got to stop". I just could have gone on and on and on. And if I could reach that again, I would be more than happy ((laughs)). (Kiera, Interview 1)

As well as having this reason, Kiera was enjoying her experience of exercising in the fresh air and socialising. During Interview 1, she talked about how she prioritised running when her son created conflicting demands, because she *wanted* to run.

Quite often he would ring on Friday night or a Saturday morning and say "Mum, could you have the children for later on today?", but I've said to them now that, you know, "I'm going to go running on a Saturday morning". So **nothing**. I'll have the children but that'd be later, I can't have them on Saturday mornings because that's when I'm going to do this … whereas before, whoever asked me to do whatever, I always said "yes".

Linking to our other themes, participants like Kim and Kiera who had a meaningful reason and who prioritised running tended to become fitter and progress.

In contrast, Zara wrestled with her difficulty finding a "detailed, specific why" across four interviews. She often referred to a "lack of enthusiasm" and being a "reluctant runner".

It was actually probably only about the third or fourth run. And it really was the, "I don't really know why I've chosen to do this". I just couldn't find enough reasons to kind of go, "Well why have you chosen to do this? It's not fun. You don't like running, you've never liked running, what is it? Why? Why?" So there was a lot of that kind of internal dialogue. (Zara, Interview 1)

Zara did not seem to find a reason that was sufficiently "clear" and "powerful" to continue. Keeping going had been a "battle", which she took on using strategies like planning. Nevertheless, her family demands unexpectedly increased after the third interview and gave her "more powerful reasons" to not go, which contributed towards her stopping running. She reflected, "I lost the battle with, 'it's good for you'/'I hate it'. 'I hate it' won."

Participants often listed reasons for running, but the reasons did not necessarily reflect meaningful reasons. The meaning attached to the reason mattered and, across participants, the same reason differed in how significant it was. For example, many named aging healthily as a reason to exercise, but this was a more meaningful reason for some people. In Isla's case, her mother recently had heart surgery, which made the health reason more important to Isla.

Obviously, what's happened with my mum, I think has been very personal, like it's personally motivated me to kind of go, "Do you know what? I'm 40 now, you know, if I don't do it now, before I know it, I'll be 45 and even more unfit and put on more weight". And it's just a slippery slope isn't it, I think, as you get older so, I think that's been from a personal point of view, that's really motivated me. (Interview 3)

The meaningful reason was dynamic and could change. Some started with a clear and meaningful reason, whereas others developed a more meaningful reason. For example, Jas started running to improve her fitness and lose weight, but she began to appreciate running as time she needed for herself as a mother of a toddler. Like Anita, who was similarly a mother, Jas also felt that running was helping her to regain her identity: "I love being a mother, don't get me wrong, but people don't tell you, you lose who **you** are. And you have to gain that back … it is important, I think, to have **you** and time for you" (Jas, Interview 3). Numerous participants described how the interview process encouraged them to reflect on and clarify their reasons. At Interview 3, Isla reflected on the value of discussing her reasons and related it to why she and other participants were still running:

I think that's possibly why you've seen that there's not many people dropping off, because you ask us lots of questions about **why are we doing it**, you really start to think about why am I doing it? Whereas previously, I've just gone "I probably ought to do that, yeah I'll go and do that, it'll be fine". But you know, it's not as if somebody persuaded me to run or something like that. It needs to kind of be, "Why are **you** doing this? What are **you** getting out of it?" I think that definitely helps.

Some runners enjoyed their experience of running more than others, which supported them with maintaining running. For example, Zack, Kiera, Jas, Mia, and Leo named enjoying running and the experiences gained from it, such as running in beautiful scenery and exploring, as meaningful reasons for why they ran. Leo only started running because his partner asked him to join her, but he "fell in love with it" and "caught the running bug". His love for running supported him in maintaining running without South West Athletics during the COVID-19 lockdowns. In contrast, Zara experienced little enjoyment across her five months of running, which she felt contributed towards her slow progress and her ultimately stopping: "I think if I had enjoyed it more, then I may have worked harder at progressing" (Interview 4). During the first few months, most participants experienced running as a "slog" (Kim), "hard work" (Laila, Zara), a "chore" (Jas), "boring" (Arya), or painful or uncomfortable (e.g., Zack, Isla). Although running could become more enjoyable with time, only some seemed to reach the point of enjoying the experience of running itself or "loving" running like Leo did. Instead, many commented on enjoying the sense of achievement *after* runs, post-run endorphins, valuing benefits they gained from running, or appreciating progress. Participants' descriptions also captured tensions in their experience of enjoyment, with them enjoying some aspects but not others. For example, at her final interview seven months after starting to run, Isla said:

I've loved seeing all these new places, that's been amazing … I still don't physically enjoy it necessarily **when** I'm running. But I love the feeling when I finish, you feel this huge sense of satisfaction and, you know, especially once you've got home and had a rest, you know, lots of endorphins and you feel great, so I do like that a lot. But I haven't yet reached the point where [she physically enjoys it], maybe I never will, it still hurts ((laughs)) … after about five miles I'm like, "Yeah, I've kind of had enough now".

Having a meaningful reason beyond momentary enjoyment therefore

helped people to continue if running was important to them but not wholly enjoyable or something they "loved" doing.

3.2. "Life gets in the way" of running

Most started running when their lives were quieter, when they had less barriers to running, and when they felt they had time for running. Life demands and therefore barriers to running typically increased though, for varying amounts of time. Devon reflected, "Life is volatile and it changes things very quickly, doesn't it? ((pause)) And then, people's priorities change, don't they?" Independent of whether participants maintained or stopped running, many participants' lives got busier, which meant that they had fewer opportunities to run or that some lacked motivation to run. Some encountered a major life stressor like the death of a loved one, but for many the number of daily hassles increased (e.g., work demands, household demands, upcoming holiday or wedding, children's hobbies). Often, the runners did not expect the increase in barriers, and they were unprepared for maintaining running in changing circumstances. Numerous paused running when life got busier, planning to re-start after the busy period, but this resulted in some stopping because they lost their routine or because the sought-after quieter time never came. For example, Rita ran weekly at South West Athletics for 2 months but then paused for 4 months after competing demands increased. At Interview 4, she reflected:

> I struggle to do too much when – I mean, we were away for four or five weeks in the summer altogether and then visitors and then my son's 18th birthday and A levels. And I just didn't feel I could do it in the summer. I don't normally like to start something if I can't carry it on.

To maintain running, participants needed to sufficiently prioritise it when their lives got busier, which seemed to depend upon their reason for running.

Prioritising running was key to maintaining running, especially when competing demands arose. Running had to be given "that level of importance" (Kiera). Some participants actively prioritised running by "arranging their life around it" (Mia), whereas others only ran when running (e.g., a timetabled club run) happened to fit with their other plans. For example, soon before competing demands increased and she stopped running, Lina acknowledged, "I suppose running is not the highest priority in my mind. So that's what keeps me from doing that when there's other things around that I could be doing." As a further example, Laila started running when she had multiple trips planned and a diary filled with commitments, which made it hard for her to find the time to run and to create a consistent schedule.

> Interviewer: What does running currently mean for you, in the context of your life?
>
> Laila: In the context of my life ((pause)) if I'm **really** honest, at the moment, it's like "Oh God, I don't really have time for it" ((laughs)) (Interview 1)

She decided to stop running and wait until her weekends got less busy so that she could establish a "normal pattern" that running fit into. She reflected, "I think, to focus on something like that that's relatively challenging, you do need to be able to plan it in and make time for it. It didn't work trying to fit it in around everything else." (Interview 2). The active prioritisation of running, when compared against more passive hoping, was linked with having a meaningful reason to run. In Laila's case, she started running to drop a dress size for a wedding and to benefit her health, but she did not experience these as significant reasons to prioritise running.

When life was busy, people tended to prioritise commitments that were more important and more established in their lives (e.g., children, work, other hobbies) and some chose to de-prioritise running as it conflicted with demands that seemed closer to their personal values (e.g., Zoë, Devon). In Devon's case, she was running to be more active and improve her health and mobility, but she seemed to lack a meaningful reason to run specifically. When family demands increased for Devon, these family demands seemed more aligned with her values. Running became less of a priority and she stopped.

> I think there's just been so much going on. We've had to go up to [distant city] ((pause)) and do a quick round-trip of my Mum, my husband's Mum in the care home, and his Dad who we haven't seen since we moved. That took a 3-day weekend and then we had visitors for another weekend because lots of people are wanting to come up and see us at the weekend. And my husband did make a comment about how Saturday morning running encroaches on the weekend quite a lot, so ((pause)) and then other things, I've been trying to spend time with ((pause)) my daughters. One of them's got a few relationship problems at the moment, so I spend time with her. So it's sort of a combination of everything, I think, and I just felt I hadn't got the motivation to run as well. And my job ((pause)) I hate my job ((laughs)) … so I've got to start looking for another job as well, so. And I can't settle because of that, yeah, so a combination of lots of things, and it's demotivated me really. (Devon, Interview 2)

Life getting in the way could cause runners to lose their momentum. "Momentum" meant runners were getting into a consistent, cyclical pattern with running, where they ran, progressed, experienced benefits, felt motivated, and therefore ran more. In contrast, infrequent running made it harder to gain fitness and progress. Routine could be helpful, but it was a double-edged sword. Knowing that sessions at South West Athletics were every Saturday at the same time helped some to protect that time and plan it into their family schedule (e.g., Zoë). Relying on that day of the week lacked flexibility, however, and resulted in some (e.g., Devon) not running at all that week when they had barriers on the day, like other plans or illness.

3.3. Learning that I can run

The runners, especially those who maintained running, experienced a process where they learned that they *could* run. The runners commonly doubted their ability to run initially and question "if you've never run before, can I actually do it?" (Lina, Interview 1). They also doubted whether they could progress and whether they could maintain their running. For some, their doubts were a barrier to maintenance. In her only interview before she stopped, Mona found it difficult to imagine running for 30 min, she was aware of how far she had to go from currently running for 90 s, and she was daunted by the size of the challenge: "I've still not convinced myself that I can do this". In a tearful moment, she referred to her "stupid goals" as somethings she's "never gonna achieve". Further, some participants needed to learn or re-learn that running could be for them, rather than just being for "elite athletes" (Mia). These people believed that running required a lot of fitness, a particular body type, or a particular image like wearing technology. Mia, amongst others, had developed these beliefs and a sense of failure with exercise from physical education experiences in a school that promoted "sporting excellence" over "fitness for life".

Running group leaders at South West Athletics coached 14 participants about how to run, and these leaders showed that it was possible to learn to run, improve at running, and in some cases call themselves a "runner". For example, Rita (Interview 1) said "I mean, I think you surprise yourself, you think you can't run at all and then, you know, you do that course and you do gradually build up". Similarly, after completing the Couch to 5K during her pursuit of the London Marathon, Kim wrote the following in her diary:

> I have a huge debt of thanks to all the coaches who have so sportingly encouraged us to get to that 5K level … I never ever thought I could run!! It was what other people could do, so it just goes to show that

> with the right coaching, advice, research, determination and a fab group of people, you really can achieve your goals.

The leaders at South West Athletics were relatable, which increased new runners' beliefs that they, too, can run. Most leaders had gone through the Couch to 5K themselves and had started running later in life, which made them relatable to new runners and realistic to aspire to. Many runners used language like "if they can do it, I can do it". For example, Zack said:

> They're real people, they're all shapes and sizes, they're not all racing snakes, that's kind of helpful, and they're all people that said, "Oh, I hated it before and now I actually really enjoy it' and things you can relate to.

Seeing tangible improvements, "even if only small" (Mia), supported a better quality of experience, offered a sense of accomplishment, and supported motivation. Adhering to a structure supported improvement for some runners like Aaron and Mia. Nevertheless, some runners (e.g., Kai, Arya, Leo) were fitter or more mobile than other runners (e.g., Mona, Aaron) and improved faster. Runners valued tangible running improvements like being able to run further or faster, as well as improvements in their physical and mental health (e.g., sleeping better) and their body (e.g., weight). Kai, who progressed much faster than most, was "spurred on" by seeing results:

> I think seeing the results of running has spurred me on. That sounds so terrible doesn't it, but it's true. There's no point doing something and then not feeling like you're getting any benefit out of it and then keep doing it. I kind of need to see that things are progressing, that's kind of what motivates me really. If I feel like it's going well and it looks like it's going well, then I just run away with it. (Kai, Interview 1)

Similarly Zack, who was running most often and the furthest distances (4–5 times a week, and as far as 17 miles) at the final interview, named tangible changes as a main reason for why he was still running; these changes included substantial changes in his fitness, running pace and distance, weight, health, sleep, and mental health.

Seeing improvements boosted people's running confidence and opened opportunities to explore on the runs, which made running more enjoyable. For example, by the third interview, Arya was more confident in her fitness and stopped worrying about getting lost or encountering hills while exploring on runs. Some participants like Arya and Mia transferred their new belief in what they can do to other aspects of their lives, such as by trying new hobbies or physical activities. At her final interview, Arya reflected on developing her confidence to try challenging physical activities:

> I've always been quite unsure about my level of fitness … doing some fun outdoor adventure activity or something, I'd always get nervous that I wouldn't be able to do it. But actually, I now have much more confidence that actually I could manage to do pretty much most things because my level of fitness is much better … it means that I'm much happier to take on challenges.

Some people (e.g., Isla, Rita) relied on the support of South West Athletics so much that they did not run on their own and become independent. Running only with South West Athletics meant that if people missed the scheduled session, they would not run for a whole week. This sometimes resulted in people worrying about returning less fit than they were or returning less fit than the group, and instead choosing to pause running to re-start at another cycle. In contrast, those who maintained running tended to gain independence from South West Athletics and met with others midweek (e.g., Mia, Zack), ran with a partner (Leo), or began running alone (e.g., Kim). Independent runners tended to have a meaningful reason to run, and their independence appeared to support long-term maintenance. For example, Kiera had a meaningful reason and smoothly completed the Couch to 5K process. She saw the Couch to 5K process as "the route to learning how to run and being able to run independently" (Interview 2). In contrast, Rita liked the social aspect of running at South West Athletics, but she did not seem to have a meaningful reason for choosing running as her way of being active. At Interview 3, she reflected on only running with the club, which was located about 10 miles from her home:

> If I had somebody that lived here [to run with in her hometown], it'd be easier to say "Shall I meet you down at the park?" or something … and I'm not at the point where I feel I could just go for a run by myself.

When Rita's life demands increased after 2 months of running, she stopped going to South West Athletics and paused her running until a subsequent Couch to 5K cycle.

3.4. *Opportunities are unequal and experiences contrast*

Some runners had advantages over others that supported them in maintaining running. Across participants, opportunities to run were unequal. For example, participants had varying employment, parenting, and caring commitments competing for their time. Participants' experiences of running also contrasted, based upon differences in barriers like ill health, disability, weight, pain, older age, fitness, and running ability (Table 1). For example, some participants like Kai improved faster than others like Zara, and some like Lina experienced more pain through running. These contrasting experiences impacted their motivation for running. Many of the disadvantages were gendered and impacted women more often and more strongly than men, such as parenting and caring responsibilities. Although having a meaningful reason for running could help people to prioritise running, some experienced barriers that were too much to overcome, resulting in life getting in the way.

Women experienced many disadvantages. Parenting and caring responsibilities, exhaustion associated with the menopause, body-image concerns, and safety were described by women. Because of safety concerns, women had to be more selective with times and locations. Running opportunities therefore expanded and contracted as the months and seasons passed: "The thought of going down to the park in the evening, you know, it's that safety bit, isn't it, it's being safe I suppose, that's what's concerned me, and that might get better as it gets lighter" (Mona). Women were also particularly likely to feel self-conscious running in public. Further, some women (Kim, Rita, Devon) had older parents to look after who took priority and limited their running opportunities. Some (e.g., Zoë, Jas) also described how their partners got more access to leisure time, whether through agreement or selfish behaviour, or described how partners had a say about them running. A few weeks into running, Devon reflected that her husband passive-aggressively commented that her running interfered with their shared weekend plans (see quote under "Life gets in the way" of running theme, right-hand column). Similarly, Jas, a mother of a toddler who also had a demanding career, had few opportunities to run. Her partner prioritised the substantial time demands of his hobby over Jas's wants and needs, and he restricted the opportunities she had.

> I think running's for my own mental sanity, I suppose. Obviously my partner plays tennis **a lot**. So he'll play tennis like four times a week, and I'm kind of left with our son, which is great, don't get me wrong, but I need that time away from both of them, and time away from home.

At Interview 1, Jas had to be motivated and "psychologically prepared" to run when her partner happened to be free and spontaneously offered her opportunities to exercise. Interview 1 was a reflective experience for Jas that led to her prioritising running more and planning it into her and her partner's diaries: "So I think I have to demand that time … I need to put in his diary, actually I'm going for a run at this time, and you have to be here and look after our son." Nevertheless, her partner continued to

treat her running as secondary to his leisure pursuits throughout her involvement in the study.

Being a mother was a factor that limited opportunities to run. Numerous of the mothers seemed to have a strong mother identity, which explained them not prioritising running. For example, reflecting on how she was unable to run three times a week at Interview 3, Anita said "I need to remember, actually, I'm a mum, I need to be at home with them as well. They are teenagers but they need me, as well as running, do you know what I mean?" Mother identity and prioritising children seemed engrained even if the children were older. For example, a factor that contributed towards Zara stopping after 5 months was her adult children returning from university, which disrupted her routine. She said, "Even though they're all big now, I'm the mommy, I'm always at home, I'm there, so that bit about changing the balance is quite hard". Mothers typically prioritised their children, and so running had to fit around the children. After completing the Saturday Couch to 5K sessions at South West Athletics, Isla did not want to continue committing her Saturdays to running when she had three children. Commenting that "if you can't beat them, join them", she started running on a Tuesday night instead because she was already driving her sons to South West Athletics for their own sports (Interview 2). At times, however, being a mother supported some in prioritising running, depending on the meaning they found in running. Mia acknowledged that prioritising running might seem "a bit selfish" to her young-adult children but she viewed running as something that will make her "happier and healthier for longer" which would be for "everyone's benefit". Similarly, Jas initially felt guilty having time to herself to run but as the interviews progressed, she started seeing it as "me time" and something she "deserved" to do outside of her mother role. Those with a meaningful reason to run tended to experience motherhood as less of a barrier.

The impact of inequality is best illustrated through the contrast of Kim and Zoë. Each had a meaningful reason behind their running. Like Kim, Zoë "collected medals", which had meaning tied to a sense of pride in her achievements and associated self-esteem and self-worth. Like how Kim's eyes seemed to glow when she talked about London Marathon, Zoë's reported "immense pride" in once completing events like the London Marathon was tangible to the interviewer when Zoë talked about her past achievements. Kim had numerous advantages over Zoë, however. Kim was wealthy and did not work. She could afford help with managing her home, which reduced competing time demands relating to childcare and household work. She could also afford running accessories and equipment, a masseuse, and a physio when injured. In contrast, Zoë had chronic illnesses where the symptoms were barriers to running (e.g., weight gain, tiredness), she was a mother to a child who had additional support needs, she juggled her child's education and medical appointments, she worked full-time, she earned a more modest income that meant expensive events were hard to justify, and her partner's hobbies seemed to be prioritised. Running was "incredibly difficult" for Zoë. When she had opportunities to run, she often felt tired: "I spin plates and that's what my life is, I just spin plates ((pause)) and I'm constantly knackered all the time" (Interview 2). At the beginning of the study, she had maintained weekly running and was aiming to increase her running volume and distances. During much of the study, she ran once a week on a Saturday when her partner could look after their child. At her final interview, however, the school holidays had led to her barely running because of lack of childcare; life got in the way.

4. Discussion

We aimed to explain how some new runners maintained their running and explain why others stopped. To achieve this, we analysed longitudinal data of 10 new runners until they stopped running and data of 10 runners through their first 6–12 months of running. We interpreted 65 interviews, nine observations at a running club, external reflections, and six sets of participant diaries. Our analysis shows that identifying a meaningful "why" for running—a meaningful reason to run that related to their identity, values, special memories, relationships, enjoyment of running, or a personal goal—helped people maintain their running, particularly when life demands increased. This reason helped them learn that they *can* run, prioritise running, and prevent life getting in the way. Nevertheless, social inequalities like gendered experiences, wealth, and health differences meant that opportunities were unequal and experiences of running contrasted, which created more barriers for some runners. Having a meaningful reason was not sufficient for overcoming these barriers; some runners who had a meaningful reason became unable to continue running.

Using a qualitative, longitudinal approach with multiple methods allowed us to thoroughly explore how new runners' experiences changed through time (Tuthill et al., 2020). Our interpretations of each runner's experiences were complex because (1) participants' experiences were influenced by individual and sociocultural factors like gender; (2) participants' running motives, facilitators, and barriers were dynamic; and (3) multiple factors contributed towards participants stopping or maintaining running. Researchers and practitioners can apply theories (e.g., relating to motivation, confidence, enjoyment, or gender) to the four themes and therefore to elements of people's experiences, but we argue that they also need to consider the dynamic interplay between the themes. For example, having a meaningful reason for running and experiencing progress encouraged running but, depending on the nature of the barriers participants faced at a particular point, they were not individually sufficient or jointly sufficient for maintenance. We offer some theoretical interpretations of our analysis below, but we encourage readers to: (1) interpret new exercisers' experiences holistically by considering how different individual factors and sociocultural factors are interacting; (2) appreciate the complexity of new exercisers' experiences; and (3) draw upon multiple, complementary theories when designing interventions.

Identifying a meaningful reason to run helped participants to maintain their running, which can be interpreted using the distinction between controlled and autonomous motivation in the motivation continuum of self-determination theory (Ryan & Deci, 2017). This continuum captures the importance of autonomous forms of motivation for explaining behaviour change maintenance. Although some participants experienced intrinsic motivation and ran for enjoyment, especially later in their running journeys, the more autonomous forms of extrinsic motivation seemed to particularly support runners in maintaining running for six months. The most autonomous forms of extrinsic motivation are identified regulation (where behaviour is valued for its outcomes) and integrated regulation (where behaviour aligns with identity and values). Some research suggests that these can play a bigger role in explaining physical activity than intrinsic motivation, especially shorter-term when physical activity might not be intrinsically enjoyable (Teixeira et al., 2012). Our participants often prioritised running and overcame barriers when they saw running as important and valued the health outcomes, as well as when running aligned with their wider identity or values. In addition, self-determination theory suggests that people only "internalise" or take ownership of an important but unenjoyable behaviour when it has personal meaning and significance (Vansteenkiste et al., 2018). Personal meaning can be enhanced if the behaviour aligns with other values and commitments. For example, new runners who saw running as benefitting their family or health values seemed better able to internalise running, compared to those who felt that running conflicted with important values and commitments like caring for family members. When a health behaviour is only partially internalized (i.e., introjected regulation on the motivation continuum), it results in internal conflicts between the behaviour and other priorities like family or employment (Sheldon et al., 2003). When some of our participants experienced such conflicts, they prioritised their other commitments and life got in the way.

Running is often seen as an accessible form of exercise because it requires less equipment than other forms of exercise and because people can run nearly anywhere. Nevertheless, the widely reported health

inequalities (e.g., Marmot, 2005) are experienced in running. Like other studies (e.g., Abbas, 2004; Hall et al., 2023), our analysis shows that running is less accessible to some people, because of factors like age, health, disability, gender, and wealth. Opportunities to run varied because of reasons like parenting and caring commitments. Experiences of running also contrasted between participants, with some experiencing more barriers during running. For example, being older or having health or weight barriers impacted running psychologically (e.g., through lower confidence or greater self-consciousness) and physically (e.g., through greater exertion and discomfort). Based on the nature of our sample, gender particularly influenced opportunities and experiences of running, with women experiencing barriers relating to parenting and caring, the menopause, body-image concerns, and safety. Our analysis highlights how some groups of people can be capable of safely initiating running and motivated to maintain their participation but can still find it very difficult to maintain running for six or more months. Running and running initiatives, like parkrun and the Couch to 5K running plan in the United Kingdom, are often initiated by people (Palmer et al., 2022) and recommended by their health professionals (Lowe et al., 2022) as a way of improving a range of health, fitness, and mental health outcomes. Our analysis highlights how some groups who could benefit from participating in running long-term would need additional support with maintaining their behaviour change.

Many women struggled to run when they had caring responsibilities to children or older family. Their opportunities to run seemed impacted by an "ethic of care", and they found it hard to prioritise their own needs (e.g., through exercise) at the expense of their family's needs (see Miller & Brown, 2005). In our study, participants' reasons for running influenced how the ethic of care impacted their running. People who had a meaningful reason to run often prioritised running *as well as* other priorities, whereas those who seemed to have a less meaningful reason to run were more likely to stop running. Ingram et al. (2021) similarly found that parents' physical activity benefited from them having reasons to exercise that aligned with being a parent, such as exercise keeping them healthier, exercise enabling play with children, and exercise supporting the role modelling of healthy behaviours. Nevertheless, in our study, having meaningful reasons were not sufficient for maintenance; some mothers who had meaningful reasons felt unable to run when they had more demands on their time and fewer opportunities to run.

Our themes align with the themes identified in Kwasnicka et al.'s (2016) meta-synthesis of theories of behaviour change maintenance. Our participants did benefit from having at least one sustained maintenance motive or reason relating to enjoyment, their values, or their identity, as captured by our "meaningful why" theme. Some of our participants started with their reason and others developed it through time. Participants also tended to start running when goal conflicts and opportunity costs of running were lower, and when their motivation and capacity to run were higher. As captured by our "life gets in the way" theme, barriers and facilitators were dynamic, and participants went through stages where they faced more competing demands (i.e., goal conflicts), were less motivated, and found maintaining running more difficult. Some participants used cognitive and behavioural strategies to continue running when facing additional barriers, but most participants did not knowingly use strategies to overcome their barriers. Kwasnicka et al.'s meta-synthesis also partially aligns with our interpretation that new runners learn through time that they can run, through the inclusion of relevant constructs such as self-efficacy. Our themes, however, offer additional insight by capturing inequalities in opportunities and experiences.

Kwasnicka et al.'s (2016) meta-synthesis does not represent our interpretations that running opportunities are unequal and that experiences vary depending on sociocultural factors, which leads to some being disadvantaged in their pursuit of behaviour change maintenance. Their meta-synthesis particularly captures possible within-person changes in experiences through time, but it does not capture inequalities between people. Theories of exercise behaviour maintenance need to capture social inequalities, to provide a thorough interpretation.

4.1. Implications

Our analysis can inform the development of group-level (e.g., interventions for running clubs) or individual interventions (e.g., exercise and physical activity psychology consultancy) that support new exercisers in maintaining their behaviour change. We argue that those offering interventions should: (1) support people in identifying their meaningful reason for exercise; (2) reflect how people's wider life circumstances and sociocultural factors influence their involvement in exercise; (3) support with building confidence and independence; and (4) help people prioritise exercise by planning for life getting in the way and by cultivating pleasurable experiences. Identifying a meaningful reason to exercise is particularly important as it helped our participants to prioritise running, learn they can run, and prevent life getting in the way. Identifying a meaningful reason could therefore provide a foundation that supports our additional suggestions.

Identifying a meaningful reason to exercise is important for maintenance of exercise behaviour change. In our analysis, meaningful reasons tended to be reasons to run, as opposed to reasons to be physically active, and they related to the runner's identity, values, special memories, relationships, enjoyment of running, or a personal goal. Psychology practitioners could help people to identify a meaningful reason by leading structured, autonomy-supportive conversations about people's values and identities. For example, they could lead a conversation around values and invite exercisers to reflect on how their values align with exercise (Ryan & Deci, 2017). Autonomy support can be offered by acknowledging the perspective of the exerciser, offering choice, and providing a meaningful rationale if choice cannot be offered (Sheldon et al., 2003). For internalization, the rationale can be given by a practitioner or self-identified, but the rationale must be meaningful for the exerciser (Vansteenkiste et al., 2018). In addition, a rationale given to an exerciser should capture some of the "hidden value" in exercise that the exerciser was not aware of, rather than presenting only familiar information (Vansteenkiste et al., 2018). The practitioner might ask questions, much like we did, that prompt reflection and guide the exerciser in thinking about their purpose for exercising (Vansteenkiste et al., 2018; Yeager et al., 2014). For example, "What do you see as *your* reasons for running?" or "How does running relate to the things that are most important in your life?" Nevertheless, our analysis suggests that identifying a meaningful reason may be insufficient for maintenance when people face substantial barriers like those relating to health, parenting or caring, and employment. The following suggestions therefore build upon additional themes from our analysis.

Interventions for running and exercise need to reflect exercisers' wider life circumstances and social exercise barriers such as those relating to health, gender, wealth, ethnicity, and disability. For example, our analysis suggests that it could be valuable for exercise clubs and groups to provide combined opportunities for parents and their children to be active, such as through offering concurrent activities (Ingram et al., 2021). Organisations and clubs should promote inclusive opportunities to be physically active (see Bailey & Sweeney, 2022; Oliver et al., 2021). Likewise, psychology practitioners need to work with exercisers in an inclusive, culturally sensitive way (e.g., Hacker & Mann, 2017; McGannon et al., 2014). As access to psychology consultancy is often privileged to those with more wealth, psychology researchers and practitioners can also aim to make evidence-based guidance more accessible through varied media such as magazines, websites, and social media (McCormick et al., 2020).

Finally, we recommend that interventions build exercise confidence and independence, support people in planning for life getting in the way, and cultivate pleasurable experiences. Based on our analysis, we offer the following examples:

- Meeting role models and experiencing progress particularly supported confidence. Role models were relatable runners (e.g., similar age, initial fitness, and relationship with exercise) who had overcome similar barriers and maintained running. Self-efficacy theory (e.g., Bandura, 1997) aligns with these findings and so could be used to inform interventions for building confidence.
- Exercisers could learn to use cognitive and behavioural strategies to prevent life getting in the way, especially if they do not spontaneously plan their exercise. For example, new exercisers could learn to specify when, where, and how they will exercise, and they could learn to plan for barriers like holidays and family visits that could hinder their intentions (e.g., Carraro & Gaudreau, 2013).
- Exercisers should engage with running in a way that supports them in experiencing pleasure and enjoyment *during* exercise, such as through running in green spaces like parks, running by blue spaces like rivers, and running on routes with scenic views (see Jackman et al., 2022).

4.2. Reflections on generalisability, limitations, and future research

Consistent with *naturalistic generalisability*, we aimed to create an analysis that resonates with readers who have started running, exercise, or another relatable hobby or behaviour change, or readers such as practitioners and coaches who are involved with these populations (Smith, 2018). In doing so, we aimed to support readers in reflecting on how to support people in maintaining behaviour change. Contextually, our results represent the experiences of White, British runners from a middle-class region, particularly middle-aged women. Our results particularly capture inequalities relating to gender and health, rather than inequalities relating to ethnicity, class, or disability. Different inequalities will shape how life gets in the way. Further, all 20 participants intended to maintain running at the first interview and numerous even participated as a strategy to support them in committing to running for 6 months. The interviews also benefited some runners, such as through providing a reflective space and helping them to identify their reason for running (see also Tuthill et al., 2020). The participants, therefore, could have been more committed initially than other runners who started running but who did not volunteer to participate, such as those "trialling" running. Considering that half still stopped running highlights the challenge and complexity of long-term behaviour change and suggests that many new, motivated runners could benefit from support. We recommend that researchers design and evaluate interventions for new runners, such as by using ideas from the Implications section above. To meet the needs, concerns, and preferences of the people who the intervention is for, researchers could co-produce (see Smith et al., 2023) the intervention with runners, coaching teams at running clubs, or other partners in a physical activity context.

We involved 10 new runners for 6–12 months of running and 10 runners until they stopped; this allowed us to interpret how some maintained running, explain why some stopped, and identify potential ways of supporting new runners during their first 6 months. We encourage further, longer-term qualitative, longitudinal research that answers related research questions. For example, our analysis suggests that enjoying the experience of running supported maintenance. Many new runners initially reported enjoying the outcomes of running more than the momentary experience, they reported tensions between enjoyable and unenjoyable aspects, and the experience of running became more enjoyable for some but not all runners. Researchers could build on these observations and examine how the meaning of "enjoyment" changes through time for different runners (or other exercisers). Researchers could also consider how changes in the experience of enjoyment relate to the role and importance of having additional, meaningful reasons for participating in exercise. Researchers could also build on our analysis and study new exercisers' experiences beyond 12 months of maintenance to understand what leads to people stopping exercise after initially achieving maintenance. For example, qualitative researchers could explore how new runners respond to medium-term and long-term injuries after maintaining running for 6 months.

5. Conclusions

The results of this qualitative, longitudinal study explain how some new runners maintain their behaviour change and why others stop. The runners' reasons for running were useful for interpreting their experiences through time. Meaningful reasons helped runners to learn that they can run, prioritise running, and prevent life getting in the way. These reasons tended to be reasons to run, as opposed to reasons to be physically active, and they related to the runner's identity, values, special memories, relationships, enjoyment of running, or a personal goal. Nevertheless, social inequalities like gendered experiences, wealth, and health differences meant that opportunities and experiences of running differed, creating more barriers for some runners. When participants faced substantial barriers, having a meaningful reason was helpful but it was sometimes insufficient for maintenance. Based on our analysis, we suggest that interventions for new runners should: (1) support people in identifying their meaningful reason for exercise; (2) consider how people's wider life circumstances and sociocultural factors influence their involvement in exercise; (3) support with building confidence and independence; and (4) help people prioritise exercise by planning for life getting in the way and by cultivating pleasurable experiences.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The authors do not have permission to share data.

Acknowledgements

Associate Professor Kass Gibson was a critical friend and adviser throughout.

Colin Potter, George Ingram, Kennidy Williams, Keri-Anne Taylor, Krissy Dudley, and Phil Mitcham helped with transcription and offered thoughtful insights on the data as part of a research informed teaching opportunity at Plymouth Marjon University.

Thank you for two comprehensive peer reviews that improved the paper substantially.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.psychsport.2023.102515.

References

Abbas, A. (2004). The embodiment of class, gender and age through leisure: A realist analysis of long distance running. *Leisure Studies, 23*, 159–175. https://doi.org/10.1080/0261436042000226354

Allen-Collinson, J. (2023). Pleasure and danger: A running-woman in 'public' space. *Qualitative Research in Sport, Exercise and Health, 15*, 382–396. https://doi.org/10.1080/2159676X.2022.2111460

Bailey, R., & Sweeney, R. (2022). Principles and strategies of inclusive physical activity: A European Delphi study. *Journal of Public Health*. https://doi.org/10.1007/s10389-022-01770-8

Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
Bennett, D., Kajamaa, A., & Johnston, J. (2020). How to … do longitudinal qualitative research. *The Clinical Teacher, 17*, 489–492. https://doi.org/10.1111/tct.13203
Braun, V., & Clarke, V. (2014). What can "thematic analysis" offer health and wellbeing researchers? *International Journal of Qualitative Studies on Health and Well-Being, 9*, Article 26152. https://doi.org/10.3402/qhw.v9.26152
Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health, 11*, 589–597. https://doi.org/10.1080/2159676X.2019.1628806
Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith, & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 191–205). Routledge. https://doi.org/10.4324/9781315762012-26.
Brick, N. E., Campbell, M. J., Sheehan, R. B., Fitzpatrick, B. L., & MacIntyre, T. E. (2020). Metacognitive processes and attentional focus in recreational endurance runners. *International Journal of Sport and Exercise Psychology, 18*, 362–379. https://doi.org/10.1080/1612197X.2018.1519841
Carraro, N., & Gaudreau, P. (2013). Spontaneous and experimentally induced action planning and coping planning for physical activity: A meta-analysis. *Psychology of Sport and Exercise, 14*, 228–248. https://doi.org/10.1016/j.psychsport.2012.10.004
Chamberlain, K., Cain, T., Sheridan, J., & Dupuis, A. (2011). Pluralisms in qualitative research: From multiple methods to integrated methods. *Qualitative Research in Psychology, 8*, 151–169. https://doi.org/10.1080/14780887.2011.572730
Cristancho, S., Watling, C. J., & Lingard, L. A. (2021). Three principles for writing an effective qualitative results section. *Focus on Health Professional Education: A Multi-Professional Journal, 22*(3), 110–124. https://doi.org/10.11157/fohpe.v22i3.556
Fokkema, T., Hartgens, F., Kluitenberg, B., Verhagen, E., Backx, F. J. G., van der Worp, H., Bierma-Zeinstra, S. M. A., Koes, B. W., & van Middelkoop, M. (2019). Reasons and predictors of discontinuation of running after a running program for novice runners. *Journal of Science and Medicine in Sport, 22*, 106–111. https://doi.org/10.1016/j.jsams.2018.06.003
Gibbs-Nicholls, S., McCormick, A., & Coyle, M. (2022). "Keep the pace! You've got this!": The content and meaning of impactful crowd encouragement at mass running events. *The Sport Psychologist, 36*, 115–127. https://doi.org/10.1123/tsp.2021-0082
Griffin, M., & Phoenix, C. (2016). Becoming a runner: Big, middle and small stories about physical activity participation in later life. *Sport, Education and Society, 21*, 11–27. https://doi.org/10.1080/13573322.2015.1066770
Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). SAGE.
Hacker, C. M., & Mann, M. E. (2017). Talking across the divide: Reflections and recommendations for context-driven, cultural sport psychology. *Journal of Sport Psychology in Action, 8*, 76–86. https://doi.org/10.1080/21520704.2017.1287144
Hall, D. L., Allen-Collinson, J., & Jackman, P. C. (2023). 'The agenda is to have fun': Exploring experiences of guided running in visually impaired and guide runners. *Qualitative Research in Sport, Exercise and Health, 15*, 89–103. https://doi.org/10.1080/2159676X.2022.2092200
Hunter, A., Lusardi, P., Zucker, D., Jacelon, C., & Chandler, G. (2002). Making meaning: The creative component in qualitative research. *Qualitative Health Research, 12*, 388–398. https://doi.org/10.1177/104973202129119964
Ingram, G., McCormick, A., & Gibson, K. (2021). Parents' experiences of starting and maintaining exercise: A qualitative systematic review. *Psychology of Sport and Exercise, 57*, Article 102058. https://doi.org/10.1016/j.psychsport.2021.102058
Jackman, P. C., Allen-Collinson, J., Ronkainen, N., & Brick, N. E. (2022). Feeling good, sensory engagements, and time out: Embodied pleasures of running. *Qualitative Research in Sport, Exercise and Health, 15*, 467–480. https://doi.org/10.1080/2159676X.2022.2150674
Johnson, L. J., Cronin, L., Huntley, E., & Marchant, D. (2022). The impact of the "RunSmart" running programme on participant motivation, attendance and well-being using self-determination theory as a theoretical framework. *International Journal of Sport and Exercise Psychology, 20*, 102–121. https://doi.org/10.1080/1612197X.2020.1819368
Kwasnicka, D., Dombrowski, S. U., White, M., & Sniehotta, F. (2016). Theoretical explanations for maintenance of behaviour change: A systematic review of behaviour theories. *Health Psychology Review, 10*, 277–296. https://doi.org/10.1080/17437199.2016.1151372
Kwasnicka, D., Dombrowski, S. U., White, M., & Sniehotta, F. F. (2019). 'It's not a diet, it's a lifestyle': A longitudinal, data-prompted interview study of weight loss maintenance. *Psychology and Health, 34*, 963–982. https://doi.org/10.1080/08870446.2019.1579913
Lev, A. (2019). Becoming a long-distance runner – deriving pleasure and contentment in times of pain and bodily distress. *Leisure Studies, 38*, 790–803. https://doi.org/10.1080/02614367.2019.1640776
Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2018). Paradigmatic controversies, contradictions, and emerging confluences, revisited. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (5th ed., pp. 108–150). SAGE.
Lowe, A., Myers, A., Quirk, H., Blackshaw, J., Palanee, S., & Copeland, R. (2022). Physical activity promotion by GPs: A cross-sectional survey in England. *BJGP Open, 6*(3), Article BJGPO.2021.0227. https://doi.org/10.3399/BJGPO.2021.0227
Mailey, E. L., Huberty, J., Dinkel, D., & McAuley, E. (2014). Physical activity barriers and facilitators among working mothers and fathers. *BMC Public Health, 14*, Article 657. https://doi.org/10.1186/1471-2458-14-657
Marmot, M. (2005). Social determinants of health inequalities. *The Lancet, 365*(9464), 1099–1104. https://doi.org/10.1016/S0140-6736(05)71146-6
Mbabazi, J., Kanmodi, K. K., Kunonga, E., Tolchard, B., & Nnyanzi, L. A. (2023). Barriers and facilitators of physical activity. *Journal of Health and Allied Sciences NU, 13*, 19–27. https://doi.org/10.1055/s-0042-1753561
McCormick, A., Anstiss, P. A., & Lavallee, D. (2020). Endurance athletes' current and preferred ways of getting psychological guidance. *International Journal of Sport and Exercise Psychology, 18*, 187–200. https://doi.org/10.1080/1612197X.2018.1486874
McGannon, K. R., McMahon, J., & Gonsalves, C. A. (2017). Mother runners in the blogosphere: A discursive psychological analysis of online recreational athlete identities. *Psychology of Sport and Exercise, 28*, 125–135. https://doi.org/10.1016/j.psychsport.2016.11.002
McGannon, K. R., Schinke, R., & Busanich, R. (2014). Cultural sport psychology: Considerations for enhancing cultural competence of practitioners. In J. G. Cremades, & L. S. Tashman (Eds.), *Becoming a sport, exercise, and performance psychology professional: A global perspective* (pp. 135–142). Routledge.
Miller, Y. D., & Brown, W. J. (2005). Determinants of active leisure for women with young children—an "ethic of care" prevails. *Leisure Sciences, 27*, 405–420. https://doi.org/10.1080/01490400500227308
Murray, S. A., Kendall, M., Carduff, E., Worth, A., Harris, F. M., Lloyd, A., … Sheikh, A. (2009). Use of serial qualitative interviews to understand patients' evolving experiences and needs. *BMJ, 339*, Article b3702. https://doi.org/10.1136/bmj.b3702
Nezlek, J. B., Cypryańska, M., Cypryański, P., Chlebosz, K., Jenczylik, K., Sztachańska, J., & Zalewska, A. M. (2018). Within-person relationships between recreational running and psychological well-being. *Journal of Sport & Exercise Psychology, 40*, 146–152. https://doi.org/10.1123/jsep.2017-0244
Oliver, E. J., Dodd-Reynolds, C., Kasim, A., & Vallis, D. (2021). Inequalities and inclusion in exercise referral schemes: A mixed-method multi-scheme analysis. *International Journal of Environmental Research and Public Health, 18(6)*, Article 3033. https://doi.org/10.3390/ijerph18063033
Palmer, T., Baker, A., & Snuggs, S. (2022). *Why do people participate in parkrun? A systematic review. Behavioural science and public health. Autumn/Winter* https://www.bsphn.org.uk/publication/why-do-people-participate-in-parkrun-a-systematic-review.
Pedersen, M. R. L., Hansen, A. F., & Elmose-Østerlund, K. (2021). Motives and barriers related to physical activity and sport across social backgrounds: Implications for health promotion. *International Journal of Environmental Research and Public Health, 18*(11), Article 5810. https://doi.org/10.3390/ijerph18115810
Pedisic, Z., Shrestha, N., Kovalchik, S., Stamatakis, E., Liangruenrom, N., Grgic, J., Titze, S., Biddle, S. J. H., Bauman, A. E., & Oja, P. (2020). Is running associated with a lower risk of all-cause, cardiovascular and cancer mortality, and is the more the better? A systematic review and meta-analysis. *British Journal of Sports Medicine, 54*, 898–905. https://doi.org/10.1136/bjsports-2018-100493
Pereira, H. V., Palmeira, A. L., Carraça, E. V., Santos, I., Marques, M. M., & Teixeira, P. J. (2021). Running prevalence in Portugal: Sociodemographic, behavioral and psychosocial characteristics. *PLoS One, 16*(1), Article e0245242. https://doi.org/10.1371/journal.pone.0245242
Pezalla, A. E., Pettigrew, J., & Miller-Day, M. (2012). Researching the researcher-as-instrument: An exercise in interviewer self-reflexivity. *Qualitative Research Methods, 12*, 165–185. https://doi.org/10.1177/1468794111422107
Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory. Basic psychological needs in motivation, development and wellness*. Guilford Press. https://doi.org/10.1521/978.14625/28806
Sheldon, K. M., Williams, G., & Joiner, T. (2003). *Self-determination theory in the clinic: Motivating physical and mental health*. Yale University Press.
Smith, B. (2018). Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for the sport and exercise sciences. *Qualitative Research in Sport, Exercise and Health, 10*, 137–149. https://doi.org/10.1080/2159676X.2017.1393221
Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology, 11*, 101–121. https://doi.org/10.1080/1750984X.2017.1317357
Smith, B., & Sparkes, A. C. (2016). Interviews: Qualitative interviewing in the sport and exercise sciences. In B. Smith, & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 103–123). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9781315762012-19/interviews-qualitative-interviewing-sport-exercise-sciences-brett-smith-andrew-sparkes.
Smith, B., Williams, O., Bone, L., & the Moving Social Work Co-production Collective. (2023). Co-production: A resource to guide co-producing research in the sport, exercise, and health sciences. *Qualitative Research in Sport, Exercise and Health, 15*, 159–187. https://doi.org/10.1080/2159676X.2022.2052946
Solomon, P., Carusone, S. C., Davis, A. M., Aubry, R., & O'Brien, K. K. (2021). Experiences of people living with HIV in community based exercise: A qualitative longitudinal study. *Journal of the International Association of Providers of AIDS Care, 20*. https://doi.org/10.1177/2325958221995344
Solomon, P., Nixon, S., Bond, V., Cameron, C., & Gervais, N. (2020). Two approaches to longitudinal qualitative analyses in rehabilitation and disability research. *Disability & Rehabilitation, 42*, 3566–3572. https://doi.org/10.1080/09638288.2019.1602850
Sparkes, A. C., & Smith, B. (2009). Judging the quality of qualitative inquiry: Criteriology and relativism in action. *Psychology of Sport and Exercise, 10*, 491–497. https://doi.org/10.1016/j.psychsport.2009.02.006
Sparkes, A. C., & Smith, B. (2013). *Qualitative research methods in sport, exercise and health: From process to product*. Routledge.
Stevinson, C., Plateau, C. R., Plunkett, S., Fitzpatrick, E. J., Ojo, M., Moran, M., & Clemes, S. A. (2022). Adherence and health-related outcomes of beginner running

programs: A 10-week observational study. *Research Quarterly for Exercise & Sport, 93*, 87–95. https://doi.org/10.1080/02701367.2020.1799916

Teixeira, P. J., Carraça, E. V., Markland, D., Silva, M. N., & Ryan, R. M. (2012). Exercise, physical activity, and self-determination theory: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity, 9*, Article 78. https://doi.org/10.1186/1479-5868-9-78

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry, 16*, 837–851. https://doi.org/10.1177/1077800410383121

Tuthill, E. L., Maltby, A. E., DiClemente, K., & Pellowski, J. A. (2020). Longitudinal qualitative methods in health behavior and nursing research: Assumptions, design, analysis and lessons learned. *International Journal of Qualitative Methods, 19*. https://doi.org/10.1177/1609406920965799

Vansteenkiste, M., Aelterman, N., de Muynck, G. J., Haerens, L., Patall, E., & Reeve, J. (2018). Fostering personal meaning and self-relevance: A self-determination theory perspective on internalization. *The Journal of Experimental Education, 86*, 30–49. https://doi.org/10.1080/00220973.2017.1381067

Varpio, L., O'Brien, B., Rees, C. E., Monrouxe, L., Ajjawi, R., & Paradis, E. (2021). The applicability of generalisability and bias to health professions education's research. *Medical Education, 55*, 167–173. https://doi.org/10.1111/medu.14348

Wadey, R., & Day, M. (2018). A longitudinal examination of leisure time physical activity following amputation in England. *Psychology of Sport and Exercise, 37*, 251–261. https://doi.org/10.1016/j.psychsport.2017.11.005

Wheeler, L., & Reis, H. T. (1991). Self-recording of everyday life events: Origins, types and uses. *Journal of Personality, 59*, 339–354. https://doi.org/10.1111/j.1467-6494.1991.tb00252.x

Willig, C. (2017). Interpretation in qualitative research. In C. Willig, & W. Stainton Rogers (Eds.), *The SAGE handbook of qualitative research in psychology* (2nd ed., pp. 274–288). SAGE https://doi.org/10.4135/9781526405555.

Yeager, D. S., Henderson, M. D., Paunesku, D., Walton, G. M., D'Mello, S., Spitzer, B. J., & Duckworth, A. L. (2014). Boring but important: A self-transcendent purpose for learning fosters academic self-regulation. *Journal of Personality and Social Psychology, 107*, 559–580. https://doi.org/10.1037/a0037637