



Coaching Practices that Promote Adult Competitive Sport Participation: Recommendations for 'Active for Life' Stage

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Abstract

Long-term development models contain context-specific advice that support coaches' approaches, but more is needed to address psychosocial approaches for competitively-oriented adult sport. To this end, the purpose of this study was to explore what coaches do well, what they could do better, and where they need support in developing adult-oriented psychosocial coaching approaches. Eight Masters rowing coaches from a North American rowing organization were interviewed using the Adult-Oriented Sport Coaching Survey. Interviews were thematically analyzed. Adult rowers have matured self-concepts, varied competitive orientations, and interest in quality programming. The coaches coached well according to adult-oriented survey factors but noted difficulties creating personalized programming, determining athletes' preferences for being held accountable, and imparting coaching knowledge. There were contextual challenges out of their control that constrained their application of adult-oriented themes. Coaches wanted adult-related coach education and were interested in feedback on their coaching. Recommendations are made for long term development models.

Keywords: Coaching; education; self-assessment; community; masters sport

Résumé

Le but de la présente étude est d'explorer ce que les entraîneurs font bien auprès d'athlètes maîtres (plus âgés et au-delà de leur performance optimale), ce qu'ils pourraient faire mieux et dans quel domaine ils ont besoin d'appui dans le développement d'approches psychosociales du coaching. Huit entraîneurs du domaine de l'aviron et membre d'une organisation nord américaine ont été interviewés sur la base du sondage Coaching sportif pour adulte. Les entrevues ont été analysées thématiquement. Ces entraîneurs ont une conception mature de leur identité, des orientations compétitives variées et sont intéressés à une programmation d'entraînement de qualité. Selon eux, ils font bien leur travail mais ils affirment qu'ils ont des difficultés à créer un programme d'entraînement personnalisé, à déterminer les préférences des athlètes pour une modalité de responsabilisation et à transmettre leur savoir. Ils affirment vivre des défis contextuels hors de leur contrôle qui restreignent leur application des thèmes du coaching orienté vers les adultes. Les entraîneurs voudraient une formation de ce type et sont intéressés à avoir du feedback sur leur coaching. Des recommandations sont mises de l'avant sur les modèles de développement à long terme des athlètes.

Mots-clés : coaching; formation; auto évaluation; communauté; maîtres sportifs.

Introduction

There is a robust body of literature that suggests the needs, preferences, and involvement opportunities of competitive adult sports participants are unique to their mature self-concept, wealth of previous experiences, and life stages (e.g., Callary et al., 2021; Dionigi, 2016; Jenkin et al., 2015; Young & Callary, 2018). Masters sport is promoted and organized for athletes who are past the normative age of peak performance in a sport. Masters athletes (MAs) prepare (practice/train) for competition, are registered in rule-governed organized sport activities, and compete to some degree (recreational to international level), often with a coach (Young & Callary, 2018).

Baker et al. (2010) noted that more people are living longer in many Western countries. Liffiton et al. (2012) suggested that older adults who are physically active are two times more likely to be aging successfully in comparison to those who were not engaging in physical activity. Masters athletes, as adults who are engaging in sport, and often times highly physically active, can make sense of their aging process by resisting, redefining, and accepting aging (Dionigi et al., 2013). Indeed, studying the benefits and motivations for lifelong sport involvement is key to promoting healthy active aging (Weir et al., 2010). According to Dionigi (2016), the benefits that adults derive from sport participation are categorized into four broad areas: physical and psychological health benefits; social networks; enjoyment; and competition. Indeed, coaches may be key agents of these experiences as they serve as resources and leaders in sport. For example, Young and colleagues (2021a) contended that coaches are instrumental in organizing and shaping participants' experiences to meet various hallmarks of a "Quality Masters Sport Experience" (p. 2), which are associated with sport retention and wellbeing in adult sport. These manifest when the coaching context supports meaningful competition, mastery, testing and assessing oneself, quality relationships, fun and fitness, intellectual stimulation, feeling empowered, and feeling validated. Motz and colleagues (2023) found that when MAs (all over 35 years-old, mean age 56) perceived that their coaches used psychosocial adult-oriented approaches, they felt that they had quality coach-athlete relationships, felt empowered, and they noted satisfaction of basic needs.

A well-organized Masters program with a coach who ascribes to adult-oriented approaches contributes to the extended commitment and enjoyment that keep adults involved in sport (Callary et al., 2015; 2021; Dionigi et al., 2021; Zehntner & Penney, 2018; Young & Callary, 2018). There is recent work detailing the nature of adult-oriented coaching approaches across Canada, USA, and Australia – that is, psychosocial tactics and executable strategies that are tailored to adult athletes' learning needs, preferences and tendencies. These approaches have been illustrated in coaches' capabilities to tailor interactions and use bi-directional communication to accommodate MAs' motives (MacLellan et al., 2019); their awareness of MAs' varying ranges of experience and sport related knowledge (Rathwell et al., 2015); their social connections with group members (Currie et al., 2021); and their abilities to develop MAs' confidence from learning new skills (Ferrari et al., 2017). Zehntner and Penney (2018) refer to such approaches as athlete-centred, and posit that being athlete-centred, coaches can stimulate and support learning. MAs (aged 49-64) reportedly value coaches' communication, structured organization, and instructional skills (Ferrari et al., 2017). They like coaches who have accumulated professional knowledge, are relatable and reliable, and can provide varying types of feedback (Callary et al., 2015). In addition to the literature which suggests competent coaching of MAs relates to adult-tailored practices, Becker (2009) found that coaches' effectiveness was captured in MAs' experiences of who their coaches were, what they did, how they did it, and how it influenced them.

With the rise in numbers of adult sport participants, it is increasingly important for sport organizations to take account of how they are supporting middle aged athletes and older cohorts, particularly through coaching. Sport organizations are responsible for supporting coaches' professional development to ensure that coaches learn what they need to coach effectively in relation to specific contexts (e.g., age and competitive cohorts; ICCE, 2013). However, scant opportunities exist for coaches to understand and learn to support the psychological and social needs and motivations of aging adults, together referred to as *psychosocial* (Callary et al., 2018). For this reason, Callary et al. (2023) considered the role of coach-report and athlete-report surveys as tools and catalysts for coaches to reflect on the value and importance of adult-tailored coaching approaches. Central to this reflective intervention was The Adult Oriented Sport Coaching Survey (AOSCS; Rathwell et al., 2020), a 22-item, self-assessment tool for coaches of adult athletes. Informed by research on the beneficial psychosocial approaches of coaches of MAs, it is the first psychosocial coaching tool specifically created with and for Masters sport coaches. Beyond its established reliability and validity (Rathwell et al., 2020), the AOSCS is grounded in multiple disciplines of adult education, sport psychology, sociology, and management, which lends practical credibility to the tool (Disipio & Callary, 2021).

Using the AOSCS survey, coaches reflect on how often they utilize different adult-oriented coaching practices (Callary et al., 2023). The survey (see Table 1) allows coaches to self-assess on five themes: (a) *Imparting coaching knowledge*; (b) *respecting preferences for effort, accountability, and feedback*; (c) *creating personalized programming*; (d) *considering the individuality of athletes*; and (e) *framing learning situations*. The AOSCS, as a reflective tool for coaches of aging adults, was used by Belalcazar and colleagues (2022). They created and implemented a series of professional development workshops for Colombian coaches to develop adult-oriented coaching practices in a Masters football (soccer) league for men over 60 years-old. Their project explored specific AOSCS items and themes that the coaches chose to work on during the workshops and outlined the benefit of using the AOSCS to facilitate the coaches' reflections on their adult-oriented coaching approaches. However, the ways in which coaches actually use the adult-oriented approaches outlined in the AOSCS, what they could do, or what reinforcements they need in order to work with adults in competitive sports has not been examined.

Given that the AOSCS was predominantly developed by and with Canadian Masters sport participants, we turn to Canada's Long-Term Development model in Sport and Physical Activity 3.0 (LTD; Higgs et al., 2019). Canada's LTD is also inherited by many organizations internationally as an evolving template (Sport for Life, 2023). In this document aging adults, along with several other marginalized sport cohorts, are touted as an underserved and under-supported population. Higgs et al (2019) note that "most sport... programs have not adequately engaged and worked with these populations to design and deliver quality experiences to meet their diverse needs" (p. 6). Based on the literature presented above, coaches could be conceived as key agents in delivering LTD strategies to promote sport commitment and retain lifelong sport participation. Therefore, coaches would benefit from information framed within the LTD that is sensitive to the needs and preferences of underserved groups such as middle-aged and older adult sport participants (Callary et al., 2021; Jenkin et al., 2018; Young et al., 2021a). Coaches could use the information so that the sport experience satisfactorily accommodates age-related involvement opportunities (Young & Callary, 2018).

Table 1*Adult-Oriented Sport Coaching Survey themes defined and sample items*

Theme	Definition	Sample item
Considering the individuality of athletes	How the coach tailors their approach to each adult athlete's experiences and motives in the planning, organization, and delivery of practice	Ask your adult athletes about their past experiences to help you plan their training
Framing learning situations	How the coach engages athletes' learning through self-discovery, problem-based scenarios, modeling, and assessments	Use performance assessments to help your adult athletes understand why they need to learn a skill/tactic
Imparting coaching knowledge	How the coach enriches the learning environment by sharing their own relevant athletic experience, coaching knowledge, and professional coaching development to advance MAs' understanding and learning, relate and empathize with MAs, and/or inspire them	Identify to your adult athletes how your own sport experience bears on the information that you share with them
Respecting preferences for effort, accountability, and feedback	How the coach adapts their coaching approach by considering how each adult athlete wishes to be held accountable for working hard and giving effort, and how they each wish to receive feedback at practice	Take measures to better understand what each adult athlete wants in terms of coaching feedback
Creating personalized programming	How the coach considers and tailors aspects of scheduling (practices and competitions), season-long programming, and coaching support at competitions to an adult athlete's needs and abilities	Consider how to accommodate your adult athletes when you set up practice/competitive schedules

The LTD framework progresses through various stages of development from *active start* (for children aged 0-4 years) through a performance (podium) pathway to the highest competitive stage (*train to win*), or moving into a lifelong participation pathway (*active for life*) (Higgs et al., 2019). While the transitions through stages are developmentally based, adolescent participants are typically funnelled to the podium pathway, or they move into the *active for life* stage. This latter stage includes options for *competitive for life* and *fit for life*. While *competitive for life* participants may be as young as adolescence, there is no upper age limit, and therefore identifying specific adult-oriented strategies that coaches can use in this stage is warranted. Readers of the LTD are directed to a document that addresses regular physical activity choices throughout the lifespan (Sport for Life's, *Durable by Design*, 2016). However, there remain gaps in the detail of the *active for life* stage, especially regarding the option *competitive for life*, which makes it difficult for coaches to understand how to use the LTD for this stage. Larson et al. (2021) also noted the lack of information in this stage. They turned to the American Development Model (United States Olympic Committee and the Department of Coaching Education in the Division of Sport Performance, 2016) only to find that the stage for adults is similarly nebulous. To provide evidence-based information to the *competitive for life* option in the *active for life* stage, in this study, we explore the perceptions of Masters rowing coaches, what they do well, what they can do better, and the supports they need to develop psychosocial approaches when coaching adults.

Methods

This investigation employed interviews with coaches of Masters rowers. A social constructivist epistemology enabled the positioning of knowledge to come from discussions between the researcher and participants during interviews. Taking a relativist ontology, the participants' cultural and historical subjective understandings were important to make sense of the social learning situation (Sparkes & Smith, 2014). When aligned, these philosophical aims recognize individual subjective experience in which there are multiple realities. Using a phenomenological methodology (van Manen, 2016), participants discussed their personal experiences of adult-oriented sport coaching practices. Thus, we could gain an understanding of a universal experience by examining individual experiences of a shared phenomenon (Allen-Collinson, 2016). Research ethics approval was received from the authors' academic institution and organizational consent from the rowing sport organization as the sport partner. All participants gave informed consent. To maintain participant confidentiality, all names in the study are pseudonyms.

Participants

The director of a rowing organization in North America sought out the research team for two purposes. The first reason was because the rowing coaches were asking for adult-specific coach development. The second reason was because the organization was looking for ways to better address the needs of their sport participants who fell into the *active/competitive for life* stage. After the first author discussed possibilities with the director, it was agreed that the research team would provide a one-hour webinar in English for the rowing coaches that the director would advertise through their organization. To fulfill their second purpose, the director and first author agreed that the webinar would serve as a recruitment forum for a research project in which the organization could gain information about how their coaches supported the psychosocial needs of *active/competitive for life* (Masters) rowers.

Rowing is also a particularly useful sport for the purpose of filling in gaps in the *competitive for life* stage because it is a popular adult sport. The Masters age group starts at 21 years old and ranges to 80+ years old. Participation is growing in North America. For example, in 2019 approximately 263 athletes took part in the Row Ontario Masters Championship Regatta representing 25 rowing clubs (Row Ontario, 2019). The most recent statistics from USRowing show that MAs account for approximately 28% of the total USRowing membership. In 2018, approximately 25,367 members were eligible to race in Masters categories, which is an increase of 52% from 2011 to 2018 (USRowing, 2018).

In this study, the director promoted the webinar for coaches. When coaches registered, they were given a link to the AOSCS (Rathwell et al., 2020) and were asked to fill in the survey prior to the webinar. They were also told about the research project, and that they could contact the researchers if they would like to receive the results of their survey and take part in an interview about their psychosocial adult coaching approaches. Eight Masters rowing coaches were recruited via convenience sampling (Gorvine et al., 2021) (see Table 2). They had varied levels of coach certification from their organization and their coaching experience with Masters rowers ranged from one to 25 years. Two coaches worked as volunteers and six were paid.

Table 2
Participant Demographics

Pseudonyms	Age	Volunteer/ Paid	Coach Education	Years as a Rowing Coach of Masters	Masters Rowers' Age Range
Bruce (male)	72	Volunteer	Rowing Level 1	1	31-55+
Neilly (female)	69	Volunteer	Rowing Level 3 Performance	5	21-55+
Dani (female)	59	Paid	Rowing Coaching Certification	25	21-55+
Joseph (male)	55	Paid	Rowing Level 3	10	31-55+
Rachel (female)	56	Paid	Rowing Level 2	11	30-55+
Ted (male)	74	Paid	Rowing Coaching Certification	7	30-55+
Victor (male)	68	Paid	Rowing Level 5	20	31-55
Wyatt (male)	29	Paid	Rowing Level 2, Weightlifting Level 1, Lacrosse Level 3, Strength & Conditioning	4	41-55+

Data Collection

Semi-structured interviews were scheduled with each participant through the internet-based platform Zoom. The day before their interview, each participant was sent their AOSCS scores (that researchers had collated and prepared as a scorecard; see Callary et al., 2023). As a form of member checking (Smith & McGannon, 2017), participants had time to assess their results and begin thinking about whether these scores adequately represented the depiction of their experiences. The next day, participants took part in an interview about adult-oriented coaching

approaches. Interviews were audio recorded and lasted 60 minutes on average.

Questions for the interview were guided by the AOSCS items and each coach's scores that they had received. The survey items, factor names and descriptions, and scores were shared on a PowerPoint slide deck over Zoom so that both the researcher and participant could view the material as they conversed. The participants were asked a series of questions, such as: "Looking at the survey items, did any of these items strike you as particularly important/not important and relevant/irrelevant? If so, why?" and "What information do you gain from these items and scores? What does this information tell you?" While the guide was used, the interview served as more of a conversation, where the researcher used probing questions to help the participant describe specific circumstances that pertained to the nature of their adult-oriented approaches and allowed them to speak about policy and sport trajectories for adults. For example, the participants often spoke about recreational and competitive athletes within the same group, and so the researcher probed on differences between types of athletes and intensity of training. The researcher acted as an active listener by showing curiosity, attentiveness, and requesting further elaborations (Smith & Sparkes, 2016) so that rich, contextual data could be collected.

Data Analysis

A thematic analysis followed Braun and company's (2016) six-steps, where transcriptions firstly were read and re-read to become very familiar with the data, looking for ideas that pertained to the purpose of the study. Secondly, the transcripts were coded by highlighting text and making notes in the margins, checking to see if the codes evoked the meaning of the data by marking down the code names on a separate sheet. For example, competition and participation codes helped us to see patterns when we coded a second time regarding the context that the coaches spoke about. Thirdly, topics were created based on organizing the codes and these were grouped together for theme development. In this step, we noted, for example, that we had codes that fit into each of the AOSCS factors. We created five themes related to each of the five AOSCS themes. Within each of these themes, we then created sub-themes regarding what the coaches noted that they did well, where they struggled, and what supports they needed. There was also a theme, which stood outside the AOSCS themes, on the context of Masters rowing, because most coaches noted a certain intensity that came with the sport. However, in step five, all of the themes were refined to better reflect the study's purpose so that the higher level analysis was not a summary of how coaches use each AOSCS factor, but were instead broader to capture the layers of what coaches were doing or could be doing according to adult-oriented approaches. Therefore, the final themes were as follows: (a) the Masters rowing context, (b) what coaches perceive they do well with regards to adult-oriented coaching themes; (c) where coaches recognize the need for improvement and challenges beyond their control; and (d) supports that they need for their own development, including information specific to the Masters context and supporting coach evaluation and feedback. The sixth step in the analysis was the write up of the findings (Braun et al., 2016), outlined in the findings below. Before getting to the findings, it is important to note that the data extracts used in the findings were reviewed by critical friends (the last two authors) to ensure that they were clear and compelling (Braun et al., 2016). The critical friends therefore read several versions of the results, asked questions, recommended clarifications, and supported the data analysis. In the final version, both critical friends felt selected excerpts illustrated the respective theme and subthemes.

Findings

Masters Rowing Context

The coaches specifically discussed the culture of adult rowing, the competitive-orientations of the adult rowers, and adult rowers' interests in quality programming. The coaches identified a culture in which they coached the sport and performance, but that the athletes did not develop life skills and personal assets in their Masters programs. They noted that the adults typically have high-powered careers, and do not need or want to learn life skills through rowing. For example, Wyatt said,

With MAs, I feel less responsible for their outcomes. It's like, 'You're paying me to be here and to be a resource for you, therefore you'll get out of this what you want to get out of this.' In my experience coaching juniors, I have more of a responsibility to teach what it means to be an athlete, work hard, achieve results.

The coaches also emphasized the competitive orientations of their rowers. Rachel said, "I kind of count on this element of a MA – almost everyone has a competitive drive." The coaches agreed that rowing may attract MAs that are driven and like to take risks, even if they might not have initially been aware of their own competitiveness. Dani highlighted the "competitive bone" adults possess to be successful in other aspects of life outside of sport (e.g., being successful at work or climbing the corporate ladder), and how this translated into sport, rather than the other way around. At the same time, the coaches also noted the need to consider MAs whose motives are geared towards participation rather than competition. Particularly, Bruce explained, "I think [some adults] are more interested in *participating* at races. They like the experience of going to an event more than [trying to win] at the event." Thus, although MAs are training to compete at events, satisfaction may come from self-improvement and experiencing the competitive experience, rather than competing in order to win.

Additionally, coaches spoke to quality programming and a misconception that "recreational" implies the need for less organization or structure, and they noted that this is not the case. They perceived that even for less competitively oriented MAs, there were expectations from a coach to show integrity in their approach. Ted noted the strong work ethic among recreational athletes, "People who are coming to a recreational program sometimes work harder than people that are in a competitive program. There are ability goals as well as achievement goals. These apply to competitive and recreational programs." Thus, being aware of the adult sport culture, competitive-orientations, and MAs' interests in quality programming set the stage for what they perceived they did well, what they could improve upon, and what supports they needed.

What Masters Coaches Do Well with Regards to Adult-Oriented Themes

The coaches noted using each of the adult-oriented themes from the AOSCS. For *imparting coaching knowledge*, they spoke about enriching the learning environment by sharing their own athletic experience, coaching knowledge, and professional development. Joseph noted, "My MAs like to hear what my old coach used to [tell me that related to what we are practicing].. From my own experience, I want them to know that I'm getting professional development, that I'm a lifelong learner, and I'm learning more about what I can do better."

Regarding *respecting preferences for effort, accountability and feedback*, the coaches were effective at understanding and adapting to their rowers' preferences. Wyatt shared,

In the online environment, I ask them how often they want me to give them feedback. Do they want me to check in with them every week of the training program, or is that going to

seem like I'm being a supervisor instead of a collaborator? Some people say, 'No, I know how to send an email, I'll ask you when I need help.' Other people say, 'Yes, the weekly check-in is a helpful accountability tool.'

Through this approach, Wyatt explained that he felt mutual respect and accountability was created and strengthened between his athletes and himself.

It could be a difficult task for coaches to *create personalized programming* given the diversity of roles and responsibilities, interests, and lives that MAs have outside of sport. The coaches discussed doing their best to tailor aspects of scheduling, season long programming, and coaching support at competition to fit as many of their MAs' needs and abilities as possible. Joseph spoke about the importance of creating time and space for proper preparation, "As I set up practice and competitive schedules, accommodation is crucial here. That's a huge thing because in rowing you do not want somebody to go to race when they're not ready, there's a lot of long-term programming." Wyatt spoke about the use of an intake survey to understand his rowers' interests and translate that into programming:

From my initial intake survey that they fill out, I have some personal questions: Favourite music, movies, books... Just to give us somewhere to go in the conversation right away that isn't [sport specific]. I ask about their prior experiences in sport to tap into some of those experiences. I ask about their goals in the next three to six months and then six to twelve months timeframes, to set the standard that my job is to help them achieve those goals. My communication through the month reinforces those things.

Wyatt focused on better understanding his MAs outside of sport to inform drills and activities during training, while also enriching his social interactions with them.

The coaches also brought up behaviours they recognized as being considerate and useful for tailoring their coaching approaches to MAs' experiences and motives. They *considered the individuality of athletes* in the planning, organization, and delivery of practice. Dani shared her organization and approach,

I have a clipboard with every person's name, each boat they're in, and what the workout plan is. I need to check off that I actually said something to every athlete, just making sure that I have touched each person is part of how I'm making sure that I'm considering their individuality and that they all are there because they do want input from me. I started that long ago and part of me says I've got that now, I don't need to do that, and then there's another part of me that says, no this keeps me honest.

Regarding *framing learning situations*, coaches shared their insights into valuable approaches to drills with their adult rowers. Victor commented,

I really rely on drills to challenge certain abilities of the rower: Balance; blade work; moving the blade in and out of the water, such things. Instead of, 'Make this hand go up, and pull there', I always try to find and possibly even invent new drills where the athlete does the movement automatically without really thinking about it.

Using such drills enabled his adult rowers to self-discover how movements should feel without over-thinking how to execute technique. Ted spoke of the use of modelling,

If we have a new rower, I'll pair them with an experienced rower and their learning curve is very accelerated by doing that versus struggling on their own...When somebody's in a

boat with you, they are right next to you, and they can see everything you're doing and talk you through things. I rely a lot on the experienced rowers.

The coach was not able to be physically next to their MAs in the boat, a unique aspect to the sport of rowing. However, they could rely on their adult sport participants to work with one another, given their mature self-concepts.

Where Masters Coaches Recognize the Need for Improvement and Challenges beyond Their Control

What Coaches Could Do Better

The coaches noted ways in which they could be better at using two adult-oriented approaches: *Respecting preferences for effort, accountability, and feedback* and *imparting coaching knowledge*. Firstly, they mentioned the need to know their MAs well enough to truly understand their preferences for being held accountable and for giving feedback. Bruce said, "I don't really know the athletes that well to even be able to say who wants to be pushed harder because I haven't been coaching the adults that long." Limited experience coaching in Masters groups therefore created a barrier to aspects related to this adult-oriented approach. Secondly, some coaches avoided sharing personal experiences with their rowers, expressing discomfort that imparting such information could be construed as bragging about oneself. Neilly explained how imparting coaching knowledge could feel as though they were focusing on themselves and monopolizing the conversation,

I get a little shy about anything that is 'me demonstrating,' 'me doing,' 'me directing,' because I think the MAs don't like that. They like to be the center of the universe. So, I steer away from demonstrating and tooting my own horn. Although, I have done it since your webinar [where I learned about adult-oriented approaches], which was helpful. I did it a couple of times and yeah, it made a difference actually. A positive difference.

For some, there was a misconception that imparting coaching knowledge was about the coach reminiscing on accolades and past sport experiences. However, as Neilly noted, sharing was actually positive. A coach who imparts coaching knowledge by sharing resources, mistakes, or lessons learned can support their MAs. Imparting coaching knowledge should thus be understood as sharing in order to assist adults' goals, interests, and/or development, create connections, inspiration, or empathy between the coach and MA.

Challenges Beyond Their Control

Coaches identified challenges in implementing adult-oriented approaches especially with aspects out of their control, such as, participant turnover, varied commitment, and injury. Participant turnover at training made it challenging for coaches to properly plan practices, due to the uncertainty of who and how many MAs would be present. Ted explained, "I have up to 40 rowers, and on any given day there's usually 20-25 so there could be a 50% turnover of who's gonna be there from one day to the next, so individualizing is really difficult."

MAs' varying commitment also made it difficult for coaches to maneuver their adult-oriented coaching practices. Wyatt reflected: "The more voluntary nature of training increases the challenge of determining that individual responsibility to be pushed. In the online coaching setting, it's hard to do because I'm not directly overseeing their training sessions." He continued, "Then

in the camp environment, it's similarly challenging because a lot of people are there on vacation. Then there's other people who are really there to learn, to be pushed." Thus, coaches found it challenging to navigate that some MAs were ready, willing, and able to give more in terms of training volume/intensity and attending practice, while others struggled to balance the busyness of their daily lives and extracurricular time for sport.

Understanding injury was something they also found challenging. Dani shared a story where one of her rowers had developed early onset osteoporosis, but she did not know. She said,

My biggest roadblocks with adults are injuries and other medical conditions. One of the worst things I've ever done in my coaching life – luckily it was 20 years ago—was having somebody who in my mind was too young for osteoporosis and had a very “C” shaped back. I was like, ‘I want you to sit up, I want you to sit up’; it was just a constant push by me as a coach. Finally, it got to that point: she was miserable, she was frustrated, and I was like, ‘Go see a doctor or a physical therapist that can help you sit up straight.’ Then, I found out that she had early onset osteoporosis and she already had wedged shaped discs and that was as straight as she could possibly be. I learned how to build trust and to get that information so that my coaching could be even better.

She described learning from this experience how to work with MAs and other supports (e.g., doctors) to develop respectful coaching approaches.

What Supports Masters Coaches Need for Their Own Development

Coaches must have the knowledge and abilities to effectively lead and deliver programming to *competitive for life* participants to know how to effectively address their needs. The coaches discussed wanting information specific to the Masters context and supporting coach evaluation and feedback.

Information Specific to the Masters Context

Coaches noted the need for Masters-specific coach education. Neilly expressed her concerns with current resources available to her, “Coaches are doing the best they absolutely can with the resources that they have but the coaching education is very limited and it's not continuous.” Wyatt discussed how the focus on the Masters context in the webinar supported his development.

I think it's been helpful to think about and talk about Masters sport [in the webinar]. Having the specific conversations around stuff like framing learning situations or imparting knowledge, having the vocabulary and attention drawn to it is already making me think about ways that I could do more there.

Coaches shared that prior to taking part in this study, many had never before considered how they used adult-oriented coaching approaches, meaning that the AOSCS gave them the vocabulary and ideas to deepen their coaching repertoire. Indeed, Dani expressed her interest in wanting coach education that is not necessarily sport specific (e.g., rowing technique and tactics) but instead focused on other aspects of coaching (e.g., psychosocial or adult-oriented coaching). She explained:

Nowadays, I don't care so much about the coaching accreditation. The idea is that we want the athletes to improve. I want to find out what did that other coach say or do, what was

the information? And put it into my ‘coaching backpack’. When I started long ago, there wasn’t much coaching education in rowing and so I used to be [in courses] with high level swim coaches, power lifting, cycling, track and field. I’ve attended a lot of other sports’ [coach education] because there is so much in coaching that isn’t about the technique of the sport itself. So, it’s great to see what others are doing and how they bring stuff across. I love that part like, “What are the things behind coaching?”

Evaluation and Feedback

Coaches expressed their appreciation and interest in using the AOSCS for self-assessment and getting feedback through facilitated reflection on their coaching during the interview. Joseph explained,

I didn't know [before attending the webinar] that anybody would give me the opportunity to evaluate my own coaching, so I thought that was great. It was nice to see that there was an instrument out there, and that there's a research team working on it, and it was nice to see that the rowing association was facilitating this [professional development].

The interview also provided an opportunity for coaches to be asked questions about their adult-oriented approaches and for them in turn to ask questions. Ted explained: “The biggest benefit of this whole process for me is the feedback piece...I think that's where the real value is, your self-concept versus your impact.” Supporting the coach’s learning by facilitating reflection on their practice was appreciated. In the absence of such facilitation, Neilly suggested value in creating a booklet of ideas or suggestions for coaches:

I think if you did something that was a little more standardized about ‘here’s your feedback. Here’s a booklet, pages one through four are ideas about what [your scores] are telling you so that you can think your way through what you want to work on.

Overall, the coaches wanted support in further developing their coaching and found the AOSCS useful for such purposes.

Discussion

The purpose of this study was to explore the perceptions of Masters rowing coaches around adult-oriented coaching, in terms of what they do well, what they can do better, and the supports they need to further their own development. From the surface, the Masters rowing context appears to fit the *competitive for life* option in the *active for life* stage of the LTD model (Higgs et al., 2019). The brief information in the LTD document on *active for life* outlines how sport participants engage in sport for enjoyment, satisfaction, or health benefits. The information about *competitive for life* notes that it is “for those who compete within the formal structure of their sport” and it is differentiated from “*fit for life* because competitive athletes are striving to improve and to win, and they train accordingly” (p. 34). While the category *fit for life* also includes participants who compete at a recreational level from time to time, it is suggested that competition is not their primary focus (Higgs et al., 2019). Our results suggest that while these neat categories may exist in theory, coaches are working with groups of Masters rowers who traverse these categories. Zehntner and Penney (2018) concur that it is rare within a Masters swim group to have members who are all interested in swimming for the same (competitive) reasons, instead, coaches need to consider how they can use athlete-centered approaches to work with critical thinking Masters athletes. Therefore, we see the need for coaches to accommodate various competitive orientations in their groups while being more keenly aware that adult sportspersons are all adults with matured

self-concepts. Finally, even those participants who might be conceptualized within the *fit for life* category are striving to improve through training and *all* want quality programming for training.

The coaches in our study leveraged the discussion of coaching practices to further contextualize aspects of adult sport. Our findings indicated that the coaches utilized adult-oriented coaching practices in line with the AOSCS's (Rathwell et al., 2020) five themes. They fostered mutual respect and accountability with MAs by respecting their adult athletes' preferences for effort, accountability, and feedback, but only once they had had enough time with the adults to know these preferences. They involved MAs in the process of planning and making decisions through bidirectional communication in which they asked for adults' input, listened to them, and also had athletes work together to build each other's skills. These findings offer insights into programming of sport experiences for participants who remain competitive across their lifespan (Higgs et al., 2019).

Barriers to effectively coaching in adult sport participation were uncovered from our findings, including participant turnover, commitment, and injury. These are well known from past research in the psychology of physical activity and sport for older adults. Indeed, these can be seen as key managerial considerations. Callary et al. (2017) noted that coaches who do not ascribe to adult learning principles, including understanding their MAs' matured self-concept and interest in self-direction, considering their prior experiences and current life obligations, and accommodating and adapting their approaches, were frustrated and felt ineffectual at coaching MAs. Relatedly, Young and colleagues (2014) outlined the importance of coaches tailoring the sport environment to heighten MAs' commitment, helping MAs maximize their limited time in sport, and fostering engagement in learning. The concepts of retention and commitment need to be understood from an adult sport participation perspective - in Masters sport, where other life responsibilities for adults may need to be prioritized, and where injury (or the fear thereof) can prevent further involvement, the ability for adults to receive support in properly readying themselves for training will help them remain in the program and with the coach (MacLellan et al., 2019). Zehntner and Penney (2018) suggested that catering to individual athletes by knowing not only their skills and abilities within the sport, but also their lives outside of the sport (in other sports, jobs, and other obligations) can support coaches in taking an athlete-centered approach in engaging and understanding Masters athletes (also see Patelia et al., 2021). Grounded in adult learning principles for sport that also take an athlete-centred approach, the AOSCS items are therefore useful to prevent and circumvent such barriers.

The coaches discussed supports to their development, including coach education tailored to the Masters context (but not necessarily sport-specific), as well as the importance of evaluation and feedback on their own coaching. Young et al. (2020) indicated the need for sport-sensitive inventories, while also calling for the development of a coach-report instrument that captures the nuances, lexicon, and intonation of experiences in Masters sport coaching. Indeed, the coaches in our study used the AOSCS to build awareness and language of their adult-oriented behaviours as they applied to an evidence-based, psychometrically valid sport coaching survey (Rathwell et al., 2020). Thus, our findings illustrate Silva et al.'s (2020) contention that reflective practice could be used to foster coaches' strategies and attitudes. Our findings suggest that sport organizations should a) (continue to) engage in coach education for Masters coaches, and b) utilize the evidence-based AOSCS for this purpose, as a platform from which coaches have the opportunity to reflect and receive feedback on adult-oriented coaching practices (also see Callary et al., 2023). We further suggest that, should a process of reflection and feedback happen alongside a coach developer (i.e., a person who helps coaches learn and cultivate their coaching expertise), there may

be additional benefits. These include the development of conventions and terminologies more appropriate to the coaching of middle-aged and older adult sportspersons. Table 3 outlines the suggestions that we make in the LTD *competitive for life* stage.

Table 3*Recommendations for LTD Active for Life stage*

	Recommendation
Revise	<p>Acknowledge on the <i>Active for Life</i> introductory page (p. 34) that:</p> <ol style="list-style-type: none"> participants from <i>competitive for life</i> and <i>fit for life</i> may be training in groups together. ‘Sport and physical activity leaders’ should engage in ongoing learning through coach education, especially relevant to the stage in which their athletes are training, and that coaching pathways leading to (and in) each stage are needed to support such learning.
Add	<p>Considerations for adult participation in <i>competitive for life</i>:</p> <p>A collaborative approach among coaches, organizations, and athletes is needed to support the <i>competitive for life</i> participants’ ongoing engagement in lifelong sport. Each should seek ongoing feedback from one another.</p>
Add	<p>To get the most out of <i>competitive for life</i>:</p> <ul style="list-style-type: none"> Promote leadership and quality programming regardless of participants’ competitive orientation. Involve adult participants in the process of planning and organizing training by creating mutual respect in open bi-directional communication. Mitigate participant turnover by creating enticing training schedules and times for adult participants. Support social interactions between athletes and leaders (coaches) to be able to consider individual needs and interests. Goal set with participants and find out about obligations and priorities outside of sport that have an impact on their sport goals and commitment. Encourage leaders to share relevant details of their athletic and coaching experiences to connect with, show empathy, and make links to participants’ own training. Read about age-related decline and its effects on adult athletes and support referrals to proper professionals (e.g., doctors) when needed. Provide a development pathway for leaders in this stage, including coach education and feedback on adult-oriented psychosocial practices. Collaborate and network with other leaders, with the intention of promoting retention in lifelong sport participation.
Add	<p>The Adult-Oriented Sport Coaching Survey (Rathwell et al., 2020) involves five approaches that support many of the bullets above. Use Table 1 for details.</p>

Conclusion

With insufficient coach education opportunities to learn how to support the psychosocial needs and motivations of adult athletes (Callary et al., 2018), specific strategies for accommodating adults outlined in the LTD document's *active/competitive for life* stage are important. Our findings add to narratives suggesting that effective Masters coaches, who are particularly attuned to the needs, preferences and idiosyncrasies of adult athletes, are critical assets in enhancing the experiences of athletes in the lifelong sport trajectory. Recent focus on Masters sport has emphasized resources, capacity, and support for adult athletes at local and community levels (Dionigi, 2016; Jenkin et al., 2018; Young, et al., 2021b). Indeed, sport organizations are turning their attention to coaches' professional development in the Masters context (as seen in this study by the director of the rowing organization reaching out to the research team for the webinar). Next steps may involve the integration of research findings into coach education modules specific to supporting Masters sport contexts. To ensure confidentiality, we reported that the data were collected from members of a North American sport organization. Given the similarity of psychosocial needs of MAs in research across Canada, USA, Australia (e.g., Callary et al., 2021; Dionigi et al., 2013; Ferrari et al., 2015; Patelia et al., 2023; Zehntner & Penney, 2018), we feel confident in the application of our interpretation to Canada's LTD. As in other countries, the Canadian LTD strives to improve the quality of sport by "sharing and mobilizing knowledge, to act as a catalyst for governments, institutions, and organizations, to improve programs and services" (Higgs et al., 2019, p. 9). We call to action sport organizations to utilize our findings for professional development for personnel, organizations, and programming of aging athletes in the sport system. Located within Masters rowing, these insights may be interpretable, useful, and actionable within the *active/competitive for life* stage of the LTD model.

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