

# A Self-Reflective Toolkit of Adult-Oriented Coaching Practices in Masters Sport

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The Adult-Oriented Sport Coaching Survey (AOSCS) assesses psychosocial coaching practices for coaches who work with adult athletes. The AOSCS can be used as a self-assessment tool for coaches' professional development, but there is a need to better understand its relevance for coaches. The purpose of this study was to explore coaches' perspectives of the AOSCS as a self-assessment tool for reflecting, intuitively appraising, and provoking elaborations on contextually embedded psychosocial practices when coaching adult athletes. Thirteen Canadian coaches (nine women/four men, aged 59–78 years) completed the AOSCS prior to watching a webinar regarding the research on coaching Masters athletes and the development of the AOSCS. Each was subsequently shared a copy of their AOSCS results and interviewed about their perceptions of the relevance and utility of the AOSCS. Interviews were analyzed using reflexive thematic analysis, which resulted in three higher order themes (relevance of the AOSCS, using the AOSCS, and input from others) with six subthemes. The coaches see the AOSCS as provoking meaningful coach reflection, introspection, and learning intrapersonal coaching knowledge that serve ongoing coach development. As such, this paper outlines evidence with respect to the prospective relevance and practical utility of the AOSCS.

**Keywords:** adult sport, reflection, competition, psychosocial, professional development

Sport is viable for promoting community health to an ever-increasing segment of the population: adults and older adults. Targeted research is needed to better understand how to contribute to a perception of a quality experience in sport for adults (Young et al., 2021). Masters sport is promoted and intended for adults who are past the normative age of peak performance in a sport. Participants are typically 35 years of age and older, and will acknowledge a regular pattern of preparation (train and practice) to partake in competitive events (Callary, Young et al., 2021). While all Masters athletes (MAs) are formally registered in sport (to an event, club, jamboree, and league), not all have coaches, although many do. MAs also have varied competitive interests and orientations. Masters groups also may have a very wide age range with large variations in life experiences, expertise, sport skills, and abilities (Rathwell et al., 2015). The heterogeneity of MAs means that there are many combinations of motives and other characteristics in Masters sport groups that a coach needs to consider (Rathwell et al., 2015). In Canada, research regarding coaches as leaders who work with groups of adults in sport is emerging as an important consideration in how to do more for adult sport, including what strategies coaches can use to recruit and retain more adults and enrich their experiences in it (Callary, Young et al., 2021). This study explores a self-assessment tool as a strategy for coach development.

Notably, understanding how to do more for adults in sport requires consideration of coach education that is specific to this context, as well as ongoing professional development and assessment for coaches (Callary et al., 2018). Since Masters sport is a growing sport cohort in general (Young et al., 2015), it becomes

increasingly important for coaches to understand and develop their craft with adult-oriented practices in mind, so that they can promote and facilitate lifelong sport involvement (Callary, Young et al., 2021). Indeed, Masters coaches have noted that their roles are distinct from coaches of youth in that they are working in a peer-to-peer relationship, and they oftentimes also practice and attend competitions in the same sport as their MAs (Callary et al., 2017). Moreover, due to the heterogeneity of Masters groups, the psychosocial practices of coaches require focused attention since coaches who do not cater to adult athletes' learning needs could turn people away from sport (Callary et al., 2017).


In general, coaches understand the importance of, and are often required to engage in, an assessment of their coaching practice. Assessment has commonly been tied to formalized coach education and associated with measurement and judgment (Adams, 2006; McCarthy & Callary, in press), especially by knowledgeable external observers, for the purposes of certification and quality assurance. Less discussed are self-assessment opportunities for coaches to reflect on their practice to help them guide their pathway for ongoing development. Such self-determined assessment is arguably important, given the propensity for coaches to engage in continuing professional development, but also given an adult's readiness to learn based on the incidental, real-life scenarios they confront and need to resolve (Knowles et al., 2012). Indeed, while Canadian coach education systems include self-reflective opportunities in certification, ongoing self-awareness is important for the purposes of assessing one's own improvement over time.

Regarding assessment for the purpose of ongoing coach development, several recommendations can be gleaned from the research. Burton and Gillham (2012) suggested three components to clarify assessment objectives, including the following: (a) targeting key coaching competencies, (b) creating an easy-to-implement assessment process, and (c) using formative assessments that can support coaches' development. Gillham et al. (2013)

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developed the Coaching Success Questionnaire, an instrument for athletes to complete regarding their perceptions of their coaches' behavior and attitudes. However, they questioned the validity of athletes' perceptions of their coaches' effectiveness because their survey results appeared to depend on the extent of the coach–athlete relationship as well as the experience and knowledge of the athletes. Still, what could be gleaned was that a psychometrically sound self-assessment tool filled out by the coach, which targets key psychosocial coaching competencies, and which is easy to implement and use formatively, could be important in understanding how coaches satisfy athletes' participatory motives through their approaches and programming.

A limited number of coaching self-assessment tools have since been psychometrically tested for the purposes of coach development. McConkey et al. (2019) developed a self-assessment tool based on the experiences of coaches working with athletes with intellectual disabilities for coaches to reflect on how much they promote and develop inclusion. This tool was an easy-to-use formative assessment, which the authors noted may have benefitted from coaches' understanding and explanations of how their actions informed their motivations. Kramers et al. (2021) developed the Life Skills Self-Assessment Tool for Coaches used to help coaches understand how intentionally they teach life skills in youth sport. The authors noted they needed to revise the tool to be more concise to make it practical for coaches to use. Thus, lessons learned from these studies include grounding coaches' self-assessments in how they relate to specific motivations/intentions of the coach and ensuring that the tool is usable for coaches to maximize impact.

It is with these key recommendations in mind that we set out to investigate the utility of the Adult-Oriented Sport Coaching Survey (AOSCS; Rathwell et al., 2020). The AOSCS is a self-assessment tool specifically designed to stimulate reflection and coach learning about key psychosocial coaching practices for coaches who work with adult athletes. Its development was firmly grounded in contextually embedded coaching research and rigorous psychometric examination (Rathwell et al., 2020). An initial case has been made for its strong associations with important psychosocial coaching practices among adults (Callary, Young et al., 2021) and key psychosocial outcomes for MAs (Motz et al., 2022). However, the *practical utility* of this survey is yet to be examined. In particular, there is a need to comprehend whether the AOSCS can be a useful tool for coach practitioners. In other words, we sought to determine its strengths and limitations as a practical tool to establish whether coaches who use the AOSCS see it as provoking meaningful coach reflection, introspection, and learning intrapersonal coaching knowledge that serves ongoing coach development.

## The Adult-Oriented Sport Coaching Survey

Extensive research has led to the understanding that MAs and coaches like and feel effective when coaches engage in psychosocial coaching practices pertinent to adults (e.g., Callary et al., 2015, 2017, 2018; MacLellan et al., 2018, 2019; Rathwell et al., 2015). These practices have been identified in the AOSCS (Rathwell et al., 2020) as follows: (a) *considering the individuality of the athletes*, wherein the coach tailors their approach to consider the experiences of the individual athletes in a group when planning, organizing, and delivering their coaching; (b) *framing the learning situation*, wherein the coach provides learning opportunities that help the athletes to solve real-life (sporting) issues through self-discovery, problem-based scenarios, modeling, and assessments; (c) *imparting coaching knowledge*, wherein the coach shares relevant information about

their own athletic and coaching experiences and development in order to relate to their athletes' experiences, empathize with, or inspire athletes; (d) *respecting the athletes' preferences for effort, accountability, and feedback*, wherein the coach adapts their practice based on each athlete's interests in feedback and in being held accountable; and (e) *creating personalized programming*, wherein the coach schedules practices, support at competition, and season programs that cater to each athlete's needs and abilities (also see Callary, Young et al., 2021). Rathwell et al. (2020) psychometrically validated these practices as five factors that could be reliably assessed with 22 items in the AOSCS. They supported the initial face validity of the AOSCS using data from 12 Masters coaches and then conducted exploratory structural equation modeling with 383 Masters coaches to determine the factor structure before performing a confirmatory factor analysis using a sample of 467 MAs.

Motz et al. (2022) provided evidence of the construct validity of the AOSCS by demonstrating strong associations between coaches' assessment of their use of AOSCS practices with key psychosocial criterion outcomes among MAs. They found that when MAs perceived their coaches used adult-oriented practices more frequently, the athletes reported greater commitment and closeness to their coach, investment and liking practice because of their coach, and more enjoyment and sport commitment overall (Motz et al., 2022). Furthermore, Motz et al. (2021) examined how often coaches used adult-oriented coaching practices at two time points in a season (early season and 8 weeks later) and found that when changes to specific practices occurred, they were associated with positive psychosocial outcomes (e.g., quality relationships, empowerment, and mastery) as reported by MAs.

The AOSCS is grounded in adult learning principles (Knowles et al., 2012) and developed from an andragogy in sport model (Callary, Young et al., 2021; MacLellan et al., 2018). Promising research indicates that coaches can use the AOSCS for coach development. Belalcazar et al.'s (2023) participatory action research facilitated a personalized professional development program for Colombian Masters football (soccer) coaches. Using the AOSCS in a series of workshops, the coaches selected specific psychosocial practices from the survey that they wished to develop in their coaching and practiced the application of those practices. Similarly, the AOSCS was completed and discussed in workshops for coaches of Masters rowers (Callary & Gearity, 2021), adult fitness athletes (Callary, Gearity et al., 2021), and adult golfers (Callary, 2019) to help them reflect on their adult-oriented coaching practices (also see Callary & Young, 2020). Nonetheless, little is empirically known about coaches' perspectives of using the AOSCS to help them learn and as a strategy for coach development. Thus, the purpose of this study was to explore coaches' perspectives of the AOSCS as a self-assessment tool for reflecting, intuitively appraising, and provoking elaborations on contextually embedded psychosocial practices when coaching adult athletes. As such, this paper outlines evidence with respect to the prospective relevance and practical utility of the AOSCS.

## Methods

We were interested in understanding the coaches' perspectives of the AOSCS as a coach development tool based on their realities in order to gauge its relevance and practical utility for different coaches working with MAs in different contexts. Therefore, this study took a social constructivist epistemology with a relativist ontology in which the participants and researchers learned and constructed knowledge through one-on-one semistructured interviews that

were akin to discussions where each person brought their cultural and historical subjective realities to interactions (Crotty, 2015; Sparkes & Smith, 2014).

After gaining ethical approval through the first author's institutional research ethics board, recruitment was pursued as part of a professional development opportunity through the coaches' sport organizations. Sport organizations (both sport-specific and multi-sport), who acknowledged they had a critical mass of coaches who wanted Masters sport-specific information/training, approached the research team and asked whether we could provide a webinar as part of their coach professional development efforts. Thus, coaches were recruited by way of the sport organization sending out an invitation to a webinar on the topic of coaching MAs and asking coaches to follow an online survey link embedded within the registration platform to complete informed consent and the AOSCS prior to attending the webinar. Those coaches who completed the AOSCS and indicated they consented to be contacted for follow-up, or those who emailed the research team after the webinar to enquire about follow-up, were sent a Personal Score Card of their survey results and were subsequently invited for an interview within 1 week to debrief on these scores.

## Participants

Thirteen Canadian coaches inquired about and received a Personal Score Card. The coaches included nine women and four men, aged 59–78 years, all White, who had been coaching MAs from recreational to national levels of competition for 4–38 years. They had completed various modules through Canada's National Coaching Certification Program (such as community coaching courses, competition development modules, former Levels 1–4, and sport-specific modules<sup>1</sup>) and had mostly completed postsecondary education. They were living in various urban and rural settings across Canada and coaching in the sports of speed skating, bowls, trampoline, swimming, equestrian, dragon boat, or figure skating (see Table 1). Given that the participants signed up for the webinar,

completed the AOSCS, and wanted to receive and talk about their Personal Score Card, it is fair to assume that these coaches were interested in their own professional development in coaching. The names in this manuscript have been replaced with pseudonyms.

## Data Collection

The data were collected online via Zoom face-to-face meetings with the coaches, resulting in audio recordings that were subsequently transcribed verbatim with minor editing for grammatical errors. In these interviews, the researcher asked the coaches about their perceptions of completing the AOSCS and their perceptions of the 1-hr webinar presentation. Importantly, a different researcher conducted the interview than those who had been involved in the presentation, so that the participant could feel at ease discussing the presentation without worry of critiquing the AOSCS or the webinar. The interviewing researcher was trained in conversational interviewing techniques and also engaged in biweekly meetings prior to the interviews in which the team discussed their biases and assumptions about the project, so that the researcher was aware of their positionality during the interview. In line with the study's constructivist paradigm, while the interviews followed a semi-structured guide, they were also conversational in nature wherein both the researcher and the participant asked one another questions. This meant that the interviewer asked the participant about their perceptions, and the participant asked this researcher about the nature of the items, factors, and survey creation. Importantly, this interviewing researcher was careful to not show a reaction on the participants' perceptions or the scores that were examined, did not provide advice on how to use the scores, did not indicate to the participant whether their scores were *effective*, nor did the researcher talk about scores from other participants.

Regarding the interview guide, a PowerPoint slide deck was used as a visual, which both participant and researcher could see during the virtual interview, to move through the interview questions and debriefing process to gauge participants' understanding of

**Table 1 Coach Demographics**

Pseudonym	Gender	Age	Education	Sport	Years coaching MAs	Volunteer/paid	Level of MAs
Jill	F	64	Graduate degree	Bowls	7	Volunteer	Recreational, local, provincial, national
Lindsay	F	—	—	Speed skating	—	—	—
Brittany	F	—	—	Speed skating	—	—	—
Quinn	M	71	Undergraduate degree	Bowls	4	Volunteer	Recreational
Georgia	F	73	Undergraduate degree	Bowls	15	Volunteer	Recreational, local, provincial, national
Rachel	F	67	Undergraduate degree	Bowls	7	Volunteer	Recreational
Kate	F	66	College diploma	Bowls	10	Volunteer	Recreational, local, provincial, national
Alex	M	78	College diploma	Bowls	38	Volunteer	Recreational, local, provincial, national
Bill	M	62	Undergraduate degree	Trampoline	10	Paid	Recreational, local
Austin	M	65	Undergraduate degree	Swimming	10	Paid	recreational
Bea	F	60	Undergraduate degree	Equestrian	23	Paid	Recreational
Kim	F	61	College diploma	Dragon boat	7	Volunteer	Recreational, local, provincial, national
Rebecca	F	59	High school	Figure skating	6	Paid	—

Note. MA = Masters athlete; M = male; F = female. A dash in the column means that the participants did not report this information.



their coaching practices in relation to the AOSCS. The researcher used the slides and associated questions to ask participants to comment on what they learned in the webinar. Then, participants reviewed each of the 22 items of the AOSCS and commented on the relevance/irrelevance and importance of these items in their personal context, for example, whether the items were applied when coaching athletes in their groups who have different competitive motives. For example, the researcher asked, “Do you think these items are relevant for MAs whose motives are fun? fitness? fraternity? competition? What if your athletes are not competitive?”

Subsequently, the researcher brought up a slide of the participant’s Personal Score Card (see [Supplementary Material](#) [available online]) that included the names and definitions of each of the five factors from the AOSCS (which they had already learned about in the webinar presentation the week prior), and the average score (on a Likert scale from 1 to 7) of the items within each of those five factors. The interviewer reviewed the factors with the participant and then asked them about their perceptions of the scores while ensuring that the participant understood that higher or lower scores did not reflect their effectiveness as a coach, but rather that these were based on the frequency with which they themselves determined they applied the items within each factor. In particular, participants were asked questions, such as “What information do you gain from these scores?” “Were these scores expected or unexpected? Why?” “Did you score lower or higher on any of these themes than you thought? Can you tell me about that?” They were also asked “What do you think of the five factors more generally? Are they relevant in your experience?” Finally, the researcher asked each participant about their perceptions of receiving this feedback from the self-assessment. They were asked what they might do with these results with regard to their coaching, and whether they might need any further supports or resources. They were given a chance to reflect on how they could use the factors and scores toward their coaching. Furthermore, they were asked whether they would have enjoyed seeing how their athletes scored them on these same factors and what information that might tell them. Interviews lasted between 67 and 93 min.

## Data Analysis

The data were analyzed using reflexive thematic analysis ([Braun & Clarke, 2021](#)). All transcripts were read and re-read by the first and second authors, and comments were written into the margins to generate ideas. The first and second authors then read each transcript, taking note of the comments that the other had made and discussing these comments as they related to possible themes. This resulted in rich discussion as the first author was the principal investigator and also gave the webinar, while the second author was the interviewer and lead student research assistant. Working together, they coded each transcript according to the items and factors from the AOSCS and what was said about each item/factor (e.g., relevance, importance, and how the items/factor was used by the coach). The participants often spoke of reflecting on their coaching approaches, and so the transcripts were also coded based on the coaches’ perceptions of the overall use of the AOSCS as a reflective tool. The coding resulted in the development of 22 codes. After the two researchers finished coding together and by hand (hard copy), the transcripts were imported into NVivo (QSR International), and the initial codes were reviewed to determine how they fit into themes. This process resulted in generating three higher order themes across 14 subthemes, including (a) five subthemes of the relevance of each of the AOSCS factors and five subthemes regarding the use of the scores in each factor under Theme 1, (b) two subthemes regarding

social influences under Theme 2, and (c) two contextual subthemes under Theme 3. The fourth author read through two of the uncoded transcripts and was then sent a copy of the table of themes. The fourth author provided feedback and input on the theme development. After initial results were written, which were noticeably too long for an article format, the third and fourth authors reviewed the results and suggested reductions, which resulted in keeping three higher order themes (relevance of the AOSCS, using the AOSCS, and input from others) with six subthemes by collapsing subthemes that had been created for each of the five AOSCS factors (see [Table 2](#)). The team then came to consensus on the themes and subthemes and pertinence of the quotes within each of the themes and to the larger purpose of the study.

The rigor of this study was safeguarded in several ways. First, the participants’ time and perspectives were valued in providing them with a professional development activity (through both the presentation and the debrief of their AOSCS scores), thus contributing to meaningful links ([Tracy, 2010](#)) between research and practice. Second, providing the participants with the presentation prior to debriefing the AOSCS scores allowed the participants to have knowledge of the concepts that they were discussing, and the conversational nature of the interviews allowed for further elaboration and knowledge construction. The slide deck in the interviews allowed both the researcher and the participant to clearly pinpoint what they were talking about. Furthermore, a team approach allowed for Authors 1, 3, and 4 to give the presentations to the participants, while Author 2 interviewed the participants. The first and second authors then engaged in the data analysis together over several days, which contributed to rich discussions around theme development. The first author then collated and brought together the themes before all team members came to a consensus of theme development and supporting quotes ([Smith & McGannon, 2018](#)).

## Results

The results are organized into the three higher order themes. First, we summarize the coaches’ elaborations on the relevance of the AOSCS content in their practice. Second, we outline how the coaches used the AOSCS for reflection as well as how they used the AOSCS content and their scores. Finally, we outline how the coaches perceived possible input from others, including the prospect of their athletes completing the AOSCS, and from the debrief with the interviewing researcher.

### Relevance of the AOSCS

#### Relevant

Overall, the coaches found the AOSCS content to be very relevant to their practice in helping them develop their program, communicate, and guide their athletes. Austin noted, “It helps me to focus on what I need to do to improve.” Bill expressed how he thought the AOSCS was in line with adult learning principles:

It’s adult learning, that’s all it is, right? Those principles are universal . . . . Coach the person to be an athlete. Treat each individual in such a way that they can maximize their own potential. It is athlete-centered. [The AOSCS] is useful because it reinforces what I’m trying to do in terms of making sure I stay relevant as a mentor [and coach].

Rebecca reinforced why having adult-oriented approaches was important:

**Table 2 Themes and Subthemes**

Theme	Subtheme
Relevance of the AOSCS	AOSCS is more pertinent to a competitive orientation
Using the AOSCS in coach development	The AOSCS facilitates opportunities for self-reflection
	AOSCS content is a toolbox of ideas
	Unclear perception of the utility of scores
Input from others	Interest in gaining athletes' perspectives
	The debrief is insightful

Note. AOSCS = Adult-Oriented Sport Coaching Survey.

[At the Masters level] you're working with somebody on a more parallel level. So it's a adult-to-adult, relationship. As opposed to the instructor-young person relationship. So there's quite a different way you need to deliver your coaching in the way you communicate, there's a lot more questions, a lot more answers, a lot more talking with the adults . . . . My adult athletes are my friends. We talk like friends.

While Rebecca saw the value in the AOSCS factors/themes as a means to generate ideas, one coach, Jill, found them prescriptive:

I see what [the AOSCS is] trying to do . . . . But I would be very wary of using any kind of "here's what you can use for strategies for teaching adults" and including that focus . . . . I'm thinking about [the utility of the AOSCS] for competitive athletes, I'm not thinking about this for recreational. A lot of this is totally irrelevant for recreational athletes.

### **AOSCS Is More Pertinent to a Competitive Orientation**

Many coaches focused on the AOSCS as a tool for coaching MAs who were competing. Lindsay felt the AOSCS was geared toward "MAs who are looking to compete because there is input, like there are questions about tailoring programming and competition . . . in my opinion it's a little bit more performance driven, these [survey] questions." However, Brittany was quick to point out that "Even within a practice setting, MAs are a little competitive amongst one another so you want to give them a bit of that flavor and they may actually want to be involved in more competitive events." Nonetheless, Georgia said, "[The AOSCS] might be for coaches that are coaching at a much higher [competitive] level, players who want to play internationally. It didn't sound like it was aimed at coaching the people that just want to come out and enjoy themselves, be social, meet other people." Of note, several coaches were working with Masters teams that included highly competitive to recreational athletes within the same group.

### **Using the AOSCS in Coach Development**

All the participants engaged with the AOSCS out of their own interest in developing themselves. Brittany said,

I like to go to a lot of [coach] training sessions, to find out how I can improve because the most enjoyment I get out of coaching is helping my athletes achieve their objectives. If I can find ways to improve my communication or the way to help them achieve their objectives, that is very fulfilling and satisfying. So, any exercise I can be involved in, if I can move things forward on that spectrum, I will definitely make an effort to be involved.

Because of their own interest in professional development, they spoke about how they would use the AOSCS to reflect on their practice as a toolbox of ideas to use. They also explained they could use the content but found the scores somewhat confusing.

### **The AOSCS Facilitates Opportunities for Self-Reflection**

The participants perceived that completing the AOSCS and debrief interview were opportunities to learn through self-reflection. The AOSCS items were either ideas to try out or confirmation and reminders of what they already do. Kim said, "thank you for your time and for doing this with me because it's helpful to me . . . it's like I know what I'm doing and I now know I need to work on improving [certain aspects]." Kate, who was also responsible for the development of coach education for her club, noted,

There's always room for improvement and I think all of these five [AOSCS] areas need to be in the back of my head when I'm dealing with athletes, being in a group or in an individual session. I think the best one is about the feedback, we either don't give it enough or we give it in the wrong way and we really need to be accountable for some of the stuff that we say. [Completing the AOSCS] allows me to self-reflect, adapt. I'm just in the midst of developing our coaching program so I can take a lot of these items into account. I really need our coaches to believe, it's just not about imparting the physical movement of the sport, it's also very psychological and that it's not a one-size-fits-all . . . the AOSCS provided me with a picture of what I need to do.

Regarding specific factors, Lindsay explained that she learned to think through her approaches for *considering the individuality of her athletes* by reflecting on the AOSCS:

It turned on some light switches about different ways that I interact with MAs. It made me think about how I coached last year and things that I would want to change moving forward . . . hopefully allowing me to operate in a different way that caters more effectively to MAs. So, ensuring that their voices are heard, that they have input into the practice, that I start to build up better relationships, to understand why they've come out and how they wanna be pushed . . . [For instance], autonomy and having MAs be part of that process and having their voice be recognized through the planning, delivery, debrief of the exercise or the training plan. I think that that was a really big takeaway for me . . . . And now when I'm doing it, I can tweak and understand whether it is effective or not.

Thus, Lindsay illustrated how she reflected on one specific factor to determine whether she wanted to apply its constituent approaches

more frequently and her brainstorming for how to do so. Rachel mentioned how she would reflect further on the factor entitled *framing the learning situation*:

Self-discovery [by my athletes] stuck out because I feel I don't do that with my coaching. I guess I have to think about it more, why I don't do it. It could be time? Maybe I feel it's a lot more time-efficient to tell them. That's what jumped out at me learning-wise, it's just something I don't do and maybe I should.

Bea spoke about new insights pertaining to *creating personalized programming*:

Long-term programming, I don't know that I do that enough, I could probably do that more whether people are going to competitions or not. We could still have a year-long program and we could still be doing competitive tests, because it gives them levels they feel they're attaining. Those are goals they can have.

Rebecca noted how she would continue to reflect on the factors of the AOSCS:

I printed out my score card. It's going to be in my binder with information on all my athletes that I keep. It's a reminder on what I want to continue to do or any changes that need to be done. How I can improve. There might be additions, there might be deletions, and I will just try and grow through the process. That's how I'm gonna use this.

### **AOSCS Content Is a Toolbox of Ideas**

The majority of coaches noted that the AOSCS items were a collection of ideas that could help them at various times as needed, but they did not need to implement all the items/factors all the time. Brittany spoke about the AOSCS as a toolbox wherein she could choose which item to use at which time:

You're not necessarily gonna be able to implement [all the items] at every single setting all the time because those opportunities don't always present themselves on that particular day. But if you can say that you've hit on all those items within a microcycle, you're making good on what your objectives are as a coach . . . I don't think your "toolbox" can ever be too full. I think there're always things that you can use—you may not realize you need them at a particular point in time but if that situation arises and that tool is there in your box, then you'll use it.

Georgia expanded,

I understood the [survey] questions. Sometimes my answers might have been different when I thought of "this group" versus "that group," because the way you interact with people changes based on your knowledge and their knowledge and experience.

Thus, the AOSCS items could be adopted when realistically useful. Jill's understanding of the AOSCS as a researcher-led directive on what to do led her to be skeptical of its practical use. As a result, she critiqued the items based on when they would be most appropriate to her during her season. She explained,

Ask your athlete about their past experiences to help you plan [item 5] . . . Eh, yeah I do that at the beginning of the season, but I wouldn't spend too much time on that . . . With the

performance assessments [item 2], that's later on, because you can't really understand why you need to learn a new skill and tactic until you're working with it.

Overall, regarding the use of the AOSCS as a toolbox, Brittany explained,

Various elements might have more prominence at a particular point in time depending on the group of athletes that I'm dealing with in a particular season, but to a large degree I don't think that much would change. There might be slight variances but not a wholesale change.

The coaches' responses indicated that the items in the AOSCS could be used to reflect more fully on what they do, what they do not do, and what they could possibly do differently, but that the needs and interests of their MAs needed to be taken into account when deliberating on how the items and factors apply.

### **Unclear Perception of the Utility of Scores**

The participants received a score for each factor based on the average score they gave themselves for each item associated with that factor. The score was weighted on the Likert scale used in the survey (on 7), whereby a score of 7 meant that they always used an approach, and 0 meant that they never used it. The coaches were told that the information on their Personal Score Card did not imply that they were more or less effective as coaches but simply that they perceived they did this approach more or less often. For the most part, the coaches did not view the scores as a useful point of conversation. Quinn said, "I have no context or understanding of what they mean . . . I'm not fussed about numbers because it's just the 'dart board.' That's where the darts hit on the dartboard." Kim expanded, "I tried not to put weight on any of them not knowing how they were derived . . . I guess I didn't know whether that was a good thing or a bad thing." Bill said, "I must admit, I didn't pay a lot of attention to the scores."

The scores were confusing to some participants. Bea said, "At first I thought 'Seven? I thought it was out of ten' . . . I guess the other perception that I got was that there's lots of room for improvement." Her understanding that not receiving a perfect score of 7 out of 7 meant that there was room for improvement was echoed by others. P1 said,

I have a big background in assessment, statistics, surveying . . . . When I received my own assessment, I really was insulted . . . "You don't know me" . . . . You can't quantify some of this stuff.

Jill was closed off likely because she assumed that the scores measured effectiveness and that more was better. Thus, she did not elaborate on what the scores could mean to her.

Others reacted differently. Rachel said, "The scores look reasonable to me. I think it does describe me as a coach and my intention working with adults." On the other hand, Lindsay said, "With *respecting preferences for effort, accountability and feedback*, I was like 'Oh, I feel like this comes natural to me', but I [was surprised] that my score isn't super high."

Overall, given the confusion, disregard, or resentment created by the scores, coaches did not appear to learn from their numerical results. Due to the fact that the participants only received one score per AOSCS factor, perhaps they could not think through how they could use the individual items that they deemed to be the tools in the toolbox, thus limiting their capability to use the scores.

## Input From Others

The coaches spoke of their interest in gaining the perspectives of others, both in getting their MAs to complete an athlete version of the AOSCS and the benefits of talking through the items and scores with the researcher in a facilitated debrief.

### Interest in Gaining Athletes' Perspectives

The coaches were asked about whether they would like to receive feedback from their MAs regarding their use of the AOSCS items (i.e., whether the athletes were also to complete the AOSCS). Everyone responded that they would like this information. Bea explained, "it'll be good feedback to see from them if they feel like they're getting what I think they're getting." Kim agreed:

I would love it—I hope that they would be honest and not skew it . . . I hear often, "Oh you're the best!," and that's not what I'm really looking for: how do you honestly feel about some of these things and if you think that there's room for improvement, I hope that they would say that.

Alex explained, "I have a perception of what I'm doing, but it's nice to hear from the other side what they're actually seeing. Because sometimes there can be a bit of a disconnect." Kate agreed:

You know we need feedback as well, and that's the only way I'm gonna learn is if somebody sits down with me and says "these are the things that I like, these are the things that I don't like," so [having my athletes' scores] allows me to involve myself in some self-critical thinking.

Nonetheless, Lindsay considered the MAs' perspective and said,

I remember having not so great coaching experiences when I was [a] younger [athlete], but I probably wouldn't share those with my coaches, you know what I mean? So that just made me think, how can I start to understand and ask some of those questions [of my athletes] without feeling like I'm prying too much.

Overall, having a different perspective (e.g., from athletes) beyond their own singular score per AOSCS factor was a means to allow the coaches to have some comparison between the frequency with which they perceived they used adult-oriented approaches and what others might perceive they did. They noted that such information would be valuable, despite some distrust in their athletes' honest constructive feedback.

### The Debrief Is Insightful

Some of the coaches noted that the interview was useful to be able to understand and reflect on how to use their scores and the AOSCS themes within their coaching. Kim noted, "I think it's awesome that we could have this one-on-one talk." However, some noted that more was needed to use the AOSCS to its potential. Upon entry to the interview, Georgia asked, "Were you able to interpret my number and come up with a practice plan for me?" Ultimately, following the interview process, she noted that she was asked questions that enabled her to reflect on how she could come up with a plan for herself. Near the end of the interview, she said, "Perhaps I did come away with an area I can work on." Quinn also explained,

Great, I have a 5.5 for *considering the individuality of athletes*. I look at that and say "Okay, that's fine. That's a starting point." So, with research I assume it goes from there? And we find out if I can do things to improve?

Thus, the participants wanted more concrete actions that they could use to change their scores. Through the interview, most understood that it was in fact their own self-reflection that could provide those answers, but they appeared to need help with facilitating that reflection. Jill cautioned, "You don't want to assess the [other coaches] with a tool like this and have them walking away, saying 'I'm a no-good coach' or 'Do I have that many things to learn?'" Thus, the importance of having a positive debrief with a facilitator to understand the results and to identify what coaches wanted to use from the AOSCS and why, including the individual items from the survey as possible concrete actions, were deemed to be important for their development.

## Discussion

The purpose of this study was to explore coaches' perspectives of the AOSCS as a self-assessment tool for reflecting, intuitively appraising, and provoking elaborations on psychosocial practices when coaching adult athletes. The results outlined the relevance of the AOSCS, how coaches viewed potential uses of the AOSCS for reflection, and how they viewed its content and its scores in relation to their own development efforts. The results also indicated that others could contribute to their understanding of the AOSCS. In exploring ways in which this self-assessment tool could be useful to coaches, the practical utility of the AOSCS was evidenced.

The AOSCS was psychometrically validated as a tool to use in research with Masters coaches and athletes (Rathwell et al., 2020). However, before this study, its relevance was very much associated with assessment, specifically, the reliable and valid measurement of the coaching approaches. Although this is a critical aspect of any survey, the origin of the AOSCS and its derivative works were very much oriented toward narratives around coaching development (e.g., Callary & Young, 2020; Callary et al., 2017). Any discussion of the experience of using the survey in the context of coach development, and coach self-development, remained mostly anecdotal.

With respect to our results, the coaches indicated that they enjoyed and appreciated completing the AOSCS. The coaches appreciated that the AOSCS portrayed items that are grounded in adult learning principles specific to the Masters sport context and that it outlined key psychosocial adult-oriented approaches and attributes that coaches can use with, and demonstrate to, their MAs. Additionally, the 22 items were not a deterrent (too long) for the coaches to complete, as none of the coaches commented/complained about its length, even as they systematically reviewed each item while progressing through the slide deck during the interview. Thus, as a practical tool, the AOSCS appears to meet Kramers et al.'s (2021) recommendation to be concise, while also psychometrically valid. We further submit that the AOSCS is of suitable length and that its content resonates with the athletic population, avoiding two risk factors to survey usability in sport (Horvath & Röthlin, 2018). The coaches in our study also saw the relevance of the AOSCS within a formative professional development exercise to think through what they did well and what they might do differently. Altogether, the coaches' views substantiated that the AOSCS tool targeted key coaching competencies, was relatively easy to implement, and provided a formative assessment, three important features of coach surveys noted by Burton and Gillham (2012). Thus, in addition to its foundations as a rigorously developed assessment instrument, the current results add to the broader literature on coach education and development as the AOSCS can



be used as an example of a formative self-assessment and reflective tool for coaches, especially because the current five-factor, 22-item survey is user-friendly and relevant to coach learning.

The results from this study indicate that coaches see the AOSCS as a “toolbox” of ideas, meaning that the five factors and their associated items can be chosen based on what the coaches wish to do with their MAs or in line with their MAs’ needs. This corroborates adult learning principles from education (Knowles et al., 2012), wherein teachers adapt their approaches to take into account the matured self-concept of adults, as well as their prior experiences and internal motivations to learn when providing effective learning environments. MacLellan et al. (2019), superimposing adult learning principles to coaching in Masters sport, noted that MAs were inquisitive deliberators on their learning, meaning that coaches needed to explain, orient their training, and provide tangible learning strategies to MAs, especially when testing the boundaries of their comfort zones in sport. Furthermore, coaches could afford MAs the latitude of making their own decisions due to their matured self-concept and self-directedness in sport (MacLellan et al., 2019). Thus, considering the AOSCS as a toolbox of ideas that can be used when needed, not used when not needed, or adapted to fit the coach’s particular situation parallels both MacLellan et al.’s findings of coaches in the Masters context and findings from studies of teachers in traditional adult education domains (e.g., Beder & Darkenwald, 1982; Brookfield, 1991; Knowles et al., 2012). These all concur that, when working with adult learners, coaches/teachers should consider the individual learners’ purposes and goals for learning as well as the distinctive situation. The AOSCS appears well suited as a resource or inventory of relevant practices and attributes for coaches to “open up” and choose what they need for a particular situation and/or person.

An interesting result from this study was the coaches’ affirmation that the items of the AOSCS were competitively oriented. Indeed, sport is defined as having an inherent competitive focus (Coakley, 2021). Masters sport in particular is associated with adults being registered for events and training in order to prepare for competition (Young, 2011). Much research has focused on whether competitive discourse around MAs serves to reinforce aging norms (i.e., anticompetition norms for older persons) or resists such norms, with the latter interpretation suggesting that MAs may open up new space for understanding competitive expectancies among older adults (Dionigi & O’Flynn, 2007). Dionigi et al. (2022) note challenges for coaches working with older adults due to the lack of priority placed on the administration and organization of Masters sport. Social norms that may be associated with broader sport participation among middle-aged and older athletes are likely less competitively oriented than the portrayal of serious-minded MAs.

On the other hand, Young et al. (2015) noted that competitive orientations are inextricable from other participatory motives among MAs and that they are often ill-considered. Young and Medic (2011) contended that this can lead to misconceptions that middle-aged and older adults are simply motivated to engage in sport for health, fitness, and social reasons, and not for mastery, striving, and competition. Rathwell et al. (2015) identified three profiles of coached MAs, in which each had motives for competitions (both in training and at events) that were distinct: engaging in friendly competition in order to be social, striving for personal mastery through measured successes, and being able to compare oneself to others. Thus, competition appears to have multiple meanings within training and events in Masters sport. Furthermore,

it becomes incumbent on the coach to facilitate learning and competitive conditions differently depending on these meanings, all while being aware that coaches can be susceptible to ageist expectations that constrain the accommodation of competitive inclinations in practice (MacLellan et al., 2019).

The coaches in this study noted the competitive orientation of the AOSCS, and while not all the coaches attended competitions with their MAs, competition should also be understood as a function in training of competing against oneself, setting and measuring goals, engaging in social interactions, and gauging one’s abilities. Nonetheless, not all the coaches found value in the competitive orientation of the AOSCS. The possibility that this may reflect hidden ageist constraints against competition may require further exploration, as well as whether there are constraints in coaches reflecting on AOSCS practices in relation to highly recreational (and minimally competitive) coached contexts. Indeed, we concur with Dionigi et al.’s (2022) call to study the professional development for coaches of MAs to outline what is known about, and how coaches may use, the AOSCS in such a way as to enhance their MAs’ competitive experiences (in whatever way that has value to them).

One of the greatest uses of the AOSCS was in coaches’ self-reflection of their current practices and in assessing what they might do differently. The reflections centered on the content of the AOSCS, and in particular, coaches appreciated talking through the items as they related to the factors, rather than just on the factors themselves. They found value in the specific ways in which they could consider the use of the items, regardless of whether they had used those approaches in the past. However, while the coaches received five scores (an average score of the items in each of the factors), they found the scores were difficult to use. When they were told that the scores did not indicate their effectiveness, the coaches struggled to understand the meaning of the scores. While Côté and Gilbert’s (2009) operationalization of coaching effectiveness was dependent on professional, interpersonal, and intrapersonal coaching knowledge, the focus on coaches’ knowledge values a coach-centered reflection.

A more athlete-considerate reflection to understanding coaching effectiveness is to explore how the coach uses AOSCS approaches in enriching programming and interactions to their MAs. Young et al. (2021) noted that a Quality Masters Sport Experience encompasses eight hallmarks and that satisfaction of many of the hallmarks, such as feeling empowered, experiencing fun and fitness, feeling validated, and experiencing intellectual stimulation, may depend in great part on pertinent application of adult-oriented coaching processes. Motz et al. (2022) associated the AOSCS with some of these hallmarks, including a better relationship (greater commitment, complementarity, and closeness with the coach) when MAs perceived that the coach used the AOSCS items more frequently. With respect to our results, because the coaches did not see their scores as related to benchmark indicators of what their MAs wanted or how the MAs perceived their AOSCS coaching practices, their full capability to self-reflect and appraise may have been curtailed.

Indeed, McConkey et al. (2019) described how their coaching self-assessment tool could benefit from the coaches’ understanding of how their actions are informed by their athletes’ motivations. Because many of our coaches wanted, but did not receive, values for how other coaches engaged in adult-oriented practices, and/or because the scores they did receive were not specific to any of the particular items (just at the factor level), the coaches had difficulty in expanding their assessments to discrete, actionable strategies.



Future research should assess whether coaches are better able to utilize their scores if they receive scores on each of the items or in relation to another score, for example, a normative score (i.e., derived from other coaches), their own repeated scores throughout the season, or scores from their athletes that indicate preferences and/or frequency of AOSCS practices.

Overall, the coaches appreciated the debrief in the form of the researcher asking them questions about their use and reflection on the AOSCS. Facilitated debriefs are important forms of coach learning in which coaches can find answers for themselves on how they can best advance their coaching practice given their unique context and situation (Callary & Gearity, 2020). They also play a part in formal coach education programming, such as the work that coach evaluators do when certifying coaches in the National Coaching Certification Program in Canada (Kloos & Edwards, 2022). However, unlike coach evaluators in the National Coaching Certification Program, who are evaluative, normative, and valenced in their interactions, the interviewers in this study uncritically supported the participants' reflections, were nonvalenced, and were nonevaluative. Belalcazar et al. (2023) conducted a participatory action research in which Masters football player-coaches in Colombia engaged in a series of four facilitated workshops with coaching research practitioners using the AOSCS as a framework for discussions. In these workshops, the collaborative (and non-evaluative) dialogue between the adult participants and the research practitioners was beneficial, especially when coaches had the chance to talk through the use of the AOSCS items with the facilitator and with other coaches. Given the success of this approach, the AOSCS may be best suited for use in workshops where coaches have the opportunity to engage in dialogue and self-reflection.

## Conclusions

From the results in this study, we suggest that using the AOSCS for professional coach development is worthwhile, and its inclusion as a self-reflective activity is appreciated by coaches of MAs. This cross-sectional snapshot of coaches' professional development did not include any longitudinal data in which we could follow up with coaches about how they were using the AOSCS after the debrief. Future intervention research is needed to corroborate these results and to better understand how the AOSCS and associated narratives evolve with respect to coach learning and self-development over time. This study provided initial evidence that the AOSCS is a useful and relevant self-reflective toolbox for coaches of MAs to engage in their development of psychosocial adult-oriented coaching practices. It contributes to the adult sport literature in terms of making the case that coaches appreciate and need opportunities to enhance their capabilities and knowledge for applying adult-oriented coaching approaches in service of quality Masters sport experiences.

## Note

1. No formal coach education courses/certification exists in specific relation to Masters sport within this program.

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