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ORIGINAL RESEARCH

Coach Mentorship Using the Adult-Oriented Sport Coaching Survey

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The Adult-Oriented Sport Coaching Survey (AOSCS) is an evidence-based assessment tool for coaches that stimulates self-reflection and learning of adult-oriented coaching practices. The AOSCS, comprised of 22 items that form five coaching themes, was used in this mixed-methods case study by a coach of adult skiers, who sought facilitation and mentorship from a coach developer to apply the AOSCS to strategically improve his coaching across a season. A pragmatic paradigm was adopted for this mixed-methods qualitatively dominant, sequential study. The coach and his skiers ($n = 10$) completed the AOSCS at three points in time (pre-, mid-, and postseason). At each point, the coach journaled prior to debriefing with the coach developer for 20–50 min. Through reflexive thematic and correlation analyses, eight adult-oriented coaching practices were identified as strong points of integration. The findings indicated that working with the coach developer enabled the coach's reflection of the AOSCS scores to refine, strategize, and align coaching with his adult skiers' perceptions for adult-oriented coaching. This study outlined the facilitation of reflection on AOSCS scores can be used advantageously across a season to promote more deliberate coach learning and practice.

Keywords: coach development, adult-oriented coaching practices, Masters sport, andragogy

Key Points

- The coach used the Adult-Oriented Sport Coaching Survey as a stimulating coach education tool alongside a coach developer.
- Knowing Masters skiers' preferences for adult-oriented coaching helped the coach reflect and implement coaching strategies opportunely.

Masters sport is organized for Masters (adult) athletes (MAs) who are past the normative age of peak performance in their sport and compete against others of similar ages in various individual and/or team events (Callary et al., 2021). Adult athletes who have coaches report that a coach is beneficial to their sport experiences (Ferrari et al., 2017; Hoffmann et al., 2019). Coaches of adult athletes support and validate sport investments (Callary et al., 2015) and promote quality sport experiences for athletes (Young et al., 2021). The benefits to MAs are greatest when coaches understand and develop their adult-oriented coaching, such that their coaching praxis aligns with the needs of middle-aged and older adults and with mature self-concepts (Callary et al., 2021).

Adult-specific coach education is gaining attention in the form of self-assessment opportunities to reflect on adult-oriented practices (Callary & Gearity, 2021). Callary et al. (2023) illustrated how the Adult-Oriented Sport Coaching Survey (AOSCS; Rathwell et al., 2020) could be used by coaches to self-examine such practices. The AOSCS is the conceptual framework used in this study. It is grounded in adult learning principles (Knowles et al., 2012) and developed from an Andragogy (adult learning) in Sport Model (Callary et al., 2021; MacLellan et al., 2019), which conceptualizes how adult learning principles are framed and applied in the context of Masters (adult) sport using the descriptions of MAs' coaching wants, preferences, and needs (Callary et al., 2015; Rathwell et al., 2015). In the coach version of the AOSCS (AOSCS-C; Rathwell et al., 2020), coaches rate how often they use adult-oriented coaching practices with their adult athletes. The AOSCS-C consists of 22 unique items that respectively form five factors of adult-oriented coaching. *Considering the Individuality of Athletes* (CIA) is when the coach considers and tailors their approach to each adult athlete's experiences and motives when planning, organizing, and delivering practice. *Framing Learning Situations* (FLS) is where the coach frames learning for their adult athletes through self-discovery, problem-based scenarios, modeling, and assessments. *Imparting Coaching Knowledge* (ICK) is about the coach enriching the learning environment by sharing their own relevant athletic experience, coaching knowledge, and professional coaching development. *Respecting Preferences for Effort, Accountability, and Feedback* (RPE) is about the coach adapting their approach by considering how each adult athlete wishes to be held accountable for working hard, giving effort, and receiving feedback at practice. *Creating Personalized Programming* (CPP) is when the coach considers and tailors aspects of scheduling (practices and competitions), season-long programming, and coaching support at competitions, to each adult athlete's needs and abilities. The athlete version of the AOSCS (AOSCS-A; Rathwell et al., 2020) allows adult athletes to rate their perceptions

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of how often (frequencies) their coach uses the same 22 items and five factors of adult-oriented coaching practices.

Literature Review

Early studies using the AOSCS have explored the relationship between coaches' use of adult-oriented coaching principles and key psychosocial outcomes for athletes (Motz et al., 2023, 2024). In these more conventional studies, when MAs reported their coach using more adult-oriented practices (cross-sectionally and over time), their coach–athlete relationship improved, they felt greater autonomy and belonging, liked training more, and wanted to invest more into sport. In these early studies, the AOSCS was used as an assessment tool for adult-oriented coaching.

In more recent years, studies have examined how the AOSCS can help coaches reflect and learn about five adult-oriented coaching approaches when working with adult sportspersons (Callary, Belalcazar, et al., 2023). Callary et al. (2024) found the AOSCS-C was a useful toolbox for reflecting on practices they wanted to apply during the season. However, they noted they wanted their athletes' perspectives and wondered how their approaches might fluctuate during the season. Callary, Belalcazar, et al. (2023) had coaches paired with their athletes to complete their respective versions at two time points in a season. In interviews after the second time point, coaches were shown their own and their MAs' scores. Coaches felt reflecting on their MAs' scores could help them change their coaching approaches throughout the season. Consequently, the authors recommended that coaches reflect each time they (and their MAs) complete the AOSCS which could prompt changes to their coaching. They also suggested that knowledge of MAs' adult-oriented coaching *preferences* could be valuable. In these studies, the coaches often needed guidance to interpret their scores and coaching practices, such as expertise from a coach developer (CD).

Research on the role of CDs is growing in interest as their role becomes known as an important part of coach learning. CDs are expert practitioners that "develop, support and challenge coaches to hone and improve their knowledge" to facilitate coaches' delivery of positive and effective sport experiences (International Council for Coaching Excellence, 2014; p. 8). CDs lead and support coaches' learning through meaningful bidirectional dialogue about content (e.g., adult-oriented practices), co-create knowledge, and provide space for coaches' self-directed experiences (Callary & Gearity, 2021; Cushion et al., 2019). CDs give feedback, guidance, support on coach learning and applying content, and can formally evaluate coaches' learning (Leeder & Sawiuk, 2021; Kloos & Edwards, 2022). CDs' skillful evaluation and guidance while conducting development programs or workshops, coupled with the cultivation of a strong relationship with coaches, has the potential to significantly impact coaches' learning journeys (Edwards & Kloos, 2024). This influence may manifest in coaches as increased motivation to engage in additional educational endeavors and certifications (Edwards & Kloos, 2024). Moreover, CDs have noted that their ability to connect with coaches directly correlates with the CDs' effectiveness in fulfilling their roles (Kloos & Edwards, 2022). CDs can effectively mentor by creating collaborative experiences for coaches that empower them to reflect and translate content into their practical environment (Bloom et al., 1998; Costello et al., 2023; Nash, 2023). In this fashion, CDs can better support coaches' constructive and critical analyses of coaching beliefs, knowledge, and learning implementation (Trudel et al., 2013).

Studies have explored the utility of the AOSCS as a coach education tool in workshops with CDs. Callary, Disipio, et al. (2023) found that Masters (adult) rowing coaches enjoyed the feedback and facilitated reflection on their AOSCS scores with a CD. Belalcazar et al. (2023) used the AOSCS in group workshops with Colombian coaches of adult athletes across 9 weeks. The researchers, as CDs, explored the coaches' perceptions of how they learned through workshops and how coaches implemented what they learned. The coaches expressed their appreciation in receiving facilitation and mentorship from the CDs for their coaching context. CDs ultimately helped the coaches use AOSCS themes as actionable strategies to support areas in their coaching where they felt they had room to improve. Altogether, the AOSCS—in tandem with a CD, seems to be an effective self-assessment toolkit that supports coaches' self-evaluation and reflection on their adult-oriented coaching. However, these studies identify that more research is needed to evaluate how coaches and CDs can use the AOSCS across sporting seasons, and how MAs' preferences for coaching can inform such endeavors. Knowing MAs' preferences for coaching may offer an additional perspective (Chelladurai, 1993) to shape a coach's craft a priori, rather than retrospectively (i.e., what is currently offered by the AOSCS-C and AOSCS-A). As such, deeper inquiries about coach learning from multiple perspectives of the AOSCS, supported by a CD, could prove useful both practically, to enhance the coach's craft/learning, and conceptually, to develop a greater understanding of how adult-oriented coaching approaches could be implemented.

Purpose

In this case study, a coach of Masters (adult) skiers sought out and self-initiated a professional development opportunity designed and mentored by a CD. The ski coach wanted to follow his own and his adult skiers' AOSCS score across the season with a particular emphasis on his skiers' preferences. The research question guiding this case study was: How does a coach of Masters (adult) skiers and a CD use the AOSCS to reflect on and inform their coaching?

Method

Pragmatism is an appropriate paradigm for conducting mixed-methods research (Creswell & Plano Clark, 2011). A pragmatic paradigm was used for this study because different methods and tools (both qualitative and quantitative) were useful for addressing the research question (Jones et al., 2015), such as written coach reflections, AOSCS survey responses, and coach debriefs. This is a mixed-methods case study (Stake, 1995) of a qualitatively dominant inductive sequential design (Schoonenboom & Johnson, 2017; see Figure 1).

Case Study Context

This case study (Stake, 1995) involved a formal, organized Masters (adult) alpine ski program that ran for 10 weeks over the winter season in Eastern Canada. The program included one training session every Thursday evening. Skiers also had the option to compete once per week in recreational league races that the coach attended (and raced in as a skier themself). The season culminated in a race day for all participants and a celebratory dinner that included season awards. Data were collected by the last author, who was also the CD (see below) and who is the principal

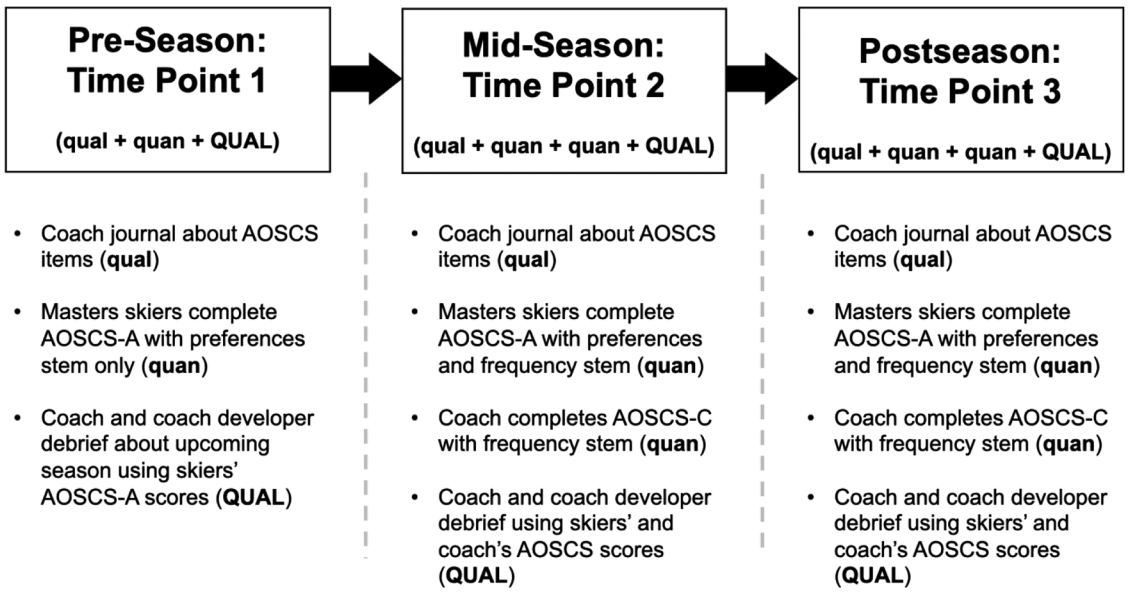

Figure 1 — Timeline of the mixed-methods procedures and equation used in this study. AOSCS = Adult-Oriented Sport Coaching Survey; AOSCS-C = Adult-Oriented Sport Coaching Survey-coach version; AOSCS-A = Adult-Oriented Sport Coaching Survey-athlete version.

investigator of a team that researches coaching MAs. The first two authors are early career researchers with experience in qualitative and quantitative research, respectively. These authors conducted data analyses and wrote up this study.

The Masters Alpine Ski Coach

The coach, pseudonym Nick, was 50 years old, and had been coaching for 10 years, with 5 years at the Masters level. The coach was in a paid role but had a full-time job elsewhere. He was certified at the Entry Level by Alpine Canada, and Level Two by the Canadian Ski Instructors' Alliance. He typically skis and coaches three to four months per year, regularly practicing/training alongside his athletes, and competing in weekly recreational races against his athletes. Since Nick had a prior working relationship with Bettina and knew about her experience as a CD and a researcher, he presented the opportunity to her to initiate a season-long learning experience to refine and implement AOSCS practices to improve his craft.

The Alpine Ski Coach Developer

Bettina had 25 years of experience as a ski coach and 18 years of experience as an alpine ski CD. She had given various alpine ski and multisport coach education courses, evaluations, and mentoring through Alpine Canada and Canada's National Coaching Certification Program. She was a trained CD through the International Council for Coaching Excellence, in which she developed facilitation skills to work one-on-one with coaches. Bettina was the lead coach for the Masters (adult) ski program, having coached the program for 8 years. She had recruited Nick to work with her for the past 3 years (he was originally an athlete) and mentored him since then.

Masters Skiers

The Masters skiers were conveniently sampled (Gratton & Jones, 2010) from Nick's program to take part in the study. Ten alpine skiers responded and participated, ranging from 33 to 68 years old ($M = 52.30$, $SD = 9.51$). Nine self-identified as White and one as Asian. Six skiers self-identified as male and four as female. Eight skiers had college or university education, while two had high school education. On average, the skiers started skiing at 16.20 ($SD = 7.08$) years old. In the last 12 months, they spent 2.90 ($SD = 0.51$) months skiing and 14.60 ($SD = 5.12$) hr per week skiing in-season. They reported participating in 0–14 competitions in the past year ($M = 3.75$, $SD = 5.75$), but all identified as being recreationally competitive. All skiers indicated some degree of practice to prepare for skiing and racing. Four skiers worked with this coach previously and four skiers indicated this coach was new. (Two did not respond.)

Procedures

This study received ethics approval from Cape Breton University. The three phases (preseason, midseason, and postseason) of data collection are outlined in Figure 1. To recruit skiers, the coach sent emails inviting them to take part in the study where they were directed to an online survey which provided a study description and asked for informed consent. Skiers then responded to demographics and questions about coaching they receive and prefer to receive from Nick.[1] In total, 13 skiers completed the preseason survey; however, three skiers were removed for not completing the survey at later time points (one at midseason and two at postseason). Coach Nick completed an online survey during the last two phases of data collection.

Qualitative Methods

Reflective Journal Entries

With the AOSCS as the conceptual framework, the first author used previous research surrounding adult sport coaching and adult-oriented practices to create reflective journal questions. The purpose of these questions was to generate insight into Nick's perspective of applying adult-oriented coaching with his skiers across the ski season. Bettina sent Nick the questions at each time

point via email to respond prior to seeing scores from the AOSCS-C, AOSCS-P, and AOSCS-A. Examples of questions were: "Why did you want to have the Masters group fill out the survey pre-season?" (preseason); "How did your coaching change or evolve from pre-season to now?" (midseason); "Do you think you were able to implement any of the ideas that we talked about at our last debrief in this second half of the season? Please explain" (postseason).

Debriefing Discussions

Bettina and Nick engaged in debriefing discussions at each time point. The second author collated the scores and created a score table (see Table 1) that was sent to Bettina (i.e., the CD), who then emailed the score table to Nick. The scores included the coach's responses and the athletes' average responses for each item and theme of the AOSCS-C, AOSCS-P, and AOSCS-A, respectively. The scores were sent within one day of the debrief to allow time for the CD and coach to look through the scores and to keep the reflections on the scores fresh in their minds. When meeting (either online or in person), the coach and CD had the scores on a shared screen in front of them. The conversations revolved around the collected AOSCS scores from the online surveys. Bettina loosely followed probing questions such as "What will you do with these scores?," "Were the scores what you expected?," and "Was the athlete feedback on the AOSCS-P (pre-, mid-, and postseason) and AOSCS-A (mid-, and postseason) in line with what you do/did?" to facilitate discussion and reflection. Bettina also asked Nick, "What do you think of this process?" in reference to the overall procedures. The three debrief discussions were 37 (preseason), 50 (midseason), and 20 (postseason) min in length.

Quantitative Measurements

Alpine Ski Coach Measurement

Nick completed the coach version (AOSCS-C; Rathwell et al., 2020) at midseason and postseason, which measured how frequently he used adult-oriented coaching practices. The 22 AOSCS-C items are prefaced with the stem "How often do you . . . " and used a Likert scale ranging from *never* (1) to *always* (7) with the middle anchor as *sometimes*.

Masters Skiers' Measurements

At three time points, 10 skiers completed two versions of the AOSCS that used the same 22 items and 5 themes as the coach version. The *AOSCS-A* (Rathwell et al., 2020) measured their perceptions of how often (*frequencies*) their coach used adult-oriented coaching practices at midseason and postseason. The AOSCS-A items were prefaced with the stem "My coach . . . " and used a Likert scale ranging from *never* (1) to *always* (7) with the middle anchor as *sometimes* (4). Furthermore, an adapted version was designed for this study to capture the skiers' preferences for adult-oriented coaching practices (*AOSCS-P*) at preseason, midseason, and postseason. The AOSCS-P used the preface "How often do you want/prefer your coach to . . . ?" and the item stem "I want/prefer my coach to": and used the same Likert scale as the AOSCS-A.

Data Analyses

The following subsections outline how the qualitative and quantitative data were analyzed and interpreted independently and simultaneously to answer the research question.

Qualitative Data Analysis

All debriefing discussions were transcribed verbatim. We followed Clarke and Braun (2021) reflexive thematic analysis on transcripts and journal entries. Initially, the first two authors familiarized themselves with all transcripts by reading separately. The familiarization process included multiple iterations of listening to debriefs, reading, and making notes on the transcripts and journal entries. Individually, the authors conducted initial data coding on the preseason transcript and journal entry before coming together to discuss what they saw and to compare notes. The same steps were taken for the two remaining transcripts and journal entries.

Next, the first author extracted and organized quotes into separate documents based on each AOSCS theme (and corresponding items), and the data were organized by time point. Each document told a story of each of the AOSCS themes and items that were discussed by the coach and CD at different time points. Next, within each AOSCS theme, purposeful qualitative excerpts were organized. Excerpts were purposeful when the coach and/or CD spoke about an item or theme: (a) to guide the coach's learning, (b) to create coaching strategies or adapt coaching practices, and (c) to discuss the progress on strategies. Once collated across transcripts and journal entries for matching items/themes, there were 19 purposeful excerpts within the 5 overarching themes of the AOSCS. After the excerpts were presented and discussed with the research team, the qualitative data were put aside to conduct the quantitative data analysis.

Quantitative Data Analysis

RStudio was used for quantitative analyses. At each time point, item and theme averages and *SD*s were calculated based on the skiers' responses on the AOSCS-P and the AOSCS-A. Nick's responses to the AOSCS-C items were averaged to calculate a score for each AOSCS-C theme. Both Nick's and his skiers' scores were put into a score table (Table 1) to use in the CD debrief discussions. The score table shows the coach's responses to each item and their average scores for each theme (at applicable time points) alongside their skiers' averages for corresponding items and theme (based on their preferences and perceptions of coach frequency).

While the score tables were used for the debriefs and write-up, we examined the relationships between skiers' preferences and frequency scores across pre-, mid-, and postseason for each AOSCS item and theme. Thus, we calculated Pearson correlations using skiers' average scores for each AOSCS theme at the three time points. Correlation-based panel models were created for each AOSCS item and theme to explore temporal trends in skiers' responses across the season. Significant correlations were interpreted at $p < .05$, for small, medium, or large effects (.1, .3, .5; Cohen, 1988). Correlations were interpreted alongside the qualitative data.

Point of Integration of Qualitative and Quantitative Data

After qualitative data collection and analyses were complete, the skiers' responses underwent correlation analyses which resulted in 22 path diagrams for each AOSCS item and 5 path diagrams for each AOSCS theme. At this point, data were integrated (Schoonenboom & Johnson, 2017)—the path diagrams were interpreted alongside the qualitative data. Subsequently, the first two authors pursued the convergence of qualitative and quantitative interpretations (Johnson & Christensen, 2020) to present the results. Points of integration were made when the qualitative data told a story about coach development across the ski season *and*

Table 1 Example Score Table of Adult-Oriented Sport Coaching Survey Scores That Was Used During the Debrief Sessions (Adapted for Publication).

		MAs' preference						MAs' frequency				Coach—frequency	
		*t*1		*t*2		*t*3		*t*2		*t*3		*t*2	t3
	Item/theme	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*M*
FLS1	Create situations wherein I discover for myself why I am learning a skill/tactic	5.3	1.3	6.0	0.9	6.2	1.0	6.2	0.7	6.5	0.7	6.0	6.0
FLS2	Use performance assessments to help me understand why I need to learn a skill/tactic	5.4	0.9	6.4	0.7	6.4	0.7	6.4	0.9	6.4	0.9	6.0	5.0
FLS3[a]	Ready me to learn by exposing me to higher skilled peers, competitors, or role models	5.9	0.9	6.1	0.9	6.1	0.9	6.2	0.9	6.1	1.0	7.0	7.0
FLS4	Ask me to do drills in which I need to resolve a challenge	5.7	1.0	6.5	0.7	6.1	1.1	6.1	0.9	6.3	0.8	6.0	6.0
FLS5	Ask me to relate drills/exercises to problems I am facing in sport	5.3	1.2	6.0	0.8	5.7	0.9	5.9	0.8	5.6	1.0	7.0	7.0
FLS6	Ask me to relate my training to concerns I am facing outside of sport	4.1	1.2	3.9	1.6	3.9	1.4	3.7	1.2	3.6	1.6	2.0	2.0
FLS7	Set up opportunities for competitive activities for me during practice	4.5	0.9	4.8	1.1	5.6	0.9	5.1	1.2	5.8	1.2	6.0	6.0
FLS[a]	FLS theme total	5.2	1.1	5.7	0.9	5.7	1.0	5.7	1.0	5.8	1.0	5.7	5.6
ICK1	Identify how his own sport experience bears on the information that he shares with me	5.2	1.1	5.5	1.2	5.6	1.2	5.7	1.6	6.3	0.9	6.0	6.0
ICK2	Share information from his professional coaching development with me	5.9	0.5	6.0	1.0	6.1	1.2	5.9	1.2	6.3	1.0	7.0	6.0
ICK3[a]	Bring in information to me that he has picked up in his sport experiences elsewhere	5.5	0.8	6.3	0.8	5.9	1.3	5.9	0.9	5.9	1.4	6.0	3.0
ICK[a]	ICK theme total	5.5	0.8	5.9	1.0	5.9	1.2	5.8	1.2	6.2	1.1	6.3	5.0
CPP1	Pay attention to where I am in terms of my progress relative to season	5.4	1.4	6.3	1.0	5.9	0.8	6.3	0.8	6.6	0.5	7.0	7.0
CPP2[a]	Consider how to accommodate me when he sets up practice/competitive schedules	5.4	1.1	5.7	0.8	5.9	1.1	5.7	1.2	6.4	0.8	7.0	7.0
CPP3	Points out aspects of long-term programming (e.g., practice/competitive schedules) that he has tailored to me	5.0	1.5	5.2	1.0	5.8	1.0	5.4	1.0	5.7	1.1	7.0	5.0
CPP4	Consider how to accommodate me in terms of programming, such as practice or competitive schedules	4.9	1.4	5.7	0.9	5.3	0.9	5.5	1.0	5.8	0.9	7.0	7.0
CPP5[a]	Tailor his support to me at competitions	4.5	1.6	4.8	1.2	5.1	1.4	4.1	1.1	5.2	1.2	7.0	7.0
CPP	CPP theme total	5.0	1.4	5.5	1.0	5.6	1.1	5.4	1.0	5.9	0.9	7.0	6.6
CIA1	Individualize his coaching based on what I have been able to do in past experiences	5.9	0.8	6.1	0.7	6.4	0.7	6.5	0.5	6.5	0.7	6.0	6.0
CIA2	Listen to my comments about my past experiences to inform how he sets up my training	5.2	1.3	6.0	0.6	5.8	1.0	6.2	1.0	6.5	0.8	6.0	6.0
CIA3	Ask about my past experiences when planning my training	4.4	1.0	5.6	1.3	5.4	0.9	5.9	1.0	6.4	0.5	7.0	6.0
CIA4	Consider what I want to accomplish when organizing my training	5.7	0.9	6.2	1.1	6.2	1.1	6.1	0.8	6.5	0.7	7.0	7.0
CIA[a]	CIA theme total	5.3	1.0	6.0	0.9	6.0	0.9	6.2	0.8	6.5	0.7	6.5	6.3
RPE1	Consider how I wish to be pushed during practice	5.8	1.1	5.5	0.9	5.9	0.9	6.3	0.9	6.3	0.8	7.0	7.0
RPE2	Consider my preferences for being held responsible for working hard	5.6	1.0	5.8	0.9	5.9	0.8	6.1	1.0	6.3	0.8	6.0	7.0
RPE3	Take measures to better understand what I want in terms of coaching feedback	5.7	0.8	5.4	0.9	6.2	0.6	6.1	0.8	6.5	0.7	6.0	7.0
RPE[a]	RPE theme total	5.7	1.0	5.6	0.9	6.0	0.8	6.2	0.9	6.4	0.7	6.3	7.0

Note. MAs = Masters athletes; *t*1 = preseason, *t*2 = midseason; *t*3 = postseason; ICK = Imparting Coaching Knowledge; FLS = Framing Learning Situations; CPP = Creating Personalized Programming; CIA = Considering the Individuality of Athletes; RPE = Respecting Preferences for Effort, Accountability, & Feedback.

[a]Coaching practice stories identified as strong points of integration.

the quantitative correlations supported the interpretation. Thus, quantitatively the path diagrams were deemed purposeful if the correlation trends (based on nonsignificance) coincided with the interpretation of the qualitative data. In the final stage, the 19 qualitative purposeful excerpts were respectively paired with path diagrams and were reviewed based on how the data integrated and how meaningfully they answered the research question. Upon refinement, eight coaching practice stories were identified as strong points of integration (see Figure 2): FLS theme; FLS3 (Ready me to learn by exposing me to higher skilled peers, competitors, or role models); ICK theme; ICK3 (Bring in information to me that he has picked up in his sport experiences elsewhere); CPP2 (Consider how to accommodate me when he sets up practice/competitive schedules); CPP5 (Tailor his support to me at competitions); CIA theme; and RPE theme. The coaching practice stories sometimes refer to the way in which the coach used the theme in its totality, and sometimes to the way the coach used an individual item within the theme.

Results

The eight adult-oriented coaching practice stories describe when in the season, and how, the Masters (adult) ski coach and the CD used the AOSCS to reflect and inform Nick's coaching (see Figure 2). They are presented in correspondence with their respective AOSCS theme.

Framing Learning Situations

This adult-oriented theme is where the coach frames learning situations for their adult athletes through self-discovery, problem-based scenarios, modeling, and assessments. Across the debriefs, Nick and Bettina spoke about two practices associated with this theme: the FLS theme in general and one particular item (FLS3: The coach readies me [athlete] to learn by exposing me to higher skilled peers, competitor, or role models). Bettina contextualized FLS and FLS3 scores to Masters alpine skiing for Nick. This helped him create an intentional coaching strategy that exposed the skiers to more FLS3 practices that the skiers wanted and preferred (see Figure 2).

In the preseason discussion, Nick identified but did not understand the skiers' high preference score (5.9/7) for FLS3. Bettina contextualized this for Nick: "... last year you did very well in the Monday night racing, that speaks a little bit to this [score]. You and I demonstrated, and we are those 'higher skilled peers', and I think this is probably a good way that we address this [score]." She added, "... the Masters skiers have told us they liked watching us ski and demonstrate." The CD and coach decided to focus on providing more FLS3 in the upcoming season, and they created a coaching strategy: ". . .demonstrate and get the Masters skiers to watch us [Nick and Bettina], and other visiting higher-skilled peers like Dawson and Simon."

At midseason, the skiers' scores on the FLS theme were a point of discussion. Bettina pointed out that Nick's self-reported frequency (5.7) matched the skiers' preferences (5.7) and perceptions (5.7), noting, "You are very much in line with what the athletes are saying." Indeed, skiers' preference and frequency scores were correlated at midseason ($r = .87$): the more skiers wanted FLS, the more they perceived Nick using the theme.

At midseason, Bettina also asked Nick to reflect about what he had done to implement the preseason FLS3 coaching strategy. Nick shared, "I think on almost every drill, we would explain it, and try to demonstrate it too." At midseason, Nick self-rated and recognized he performed FLS3 "always" (7.0), which aligned with skiers preferred (6.1) and received (6.2) practices. The skiers' high FLS3 midseason scores stood out to Nick, "I think these scores came from people who hadn't experienced our group. Before they didn't know what these demonstrations would do and how helpful they could be. I think once they saw it, it was like 'wow!', they felt it was even more important now than what it was before." Skiers' preference and frequency scores were correlated at midseason ($r = .83$); the more skiers wanted FLS3, the more they perceived Nick using FLS3.

By postseason, it was evident that Nick continued to incorporate FLS3 into his coaching as evidenced by correlations between the skiers' frequency score from midseason to their preference ($r = .83$) and frequency ($r = .64$) at postseason. The more the skiers saw FLS3 from their coach at midseason, the more they wanted and got FLS3 later in the season. Furthermore, the skiers' postseason FLS3 preference and frequency scores were also correlated ($r = .80$): the more they preferred FLS3, the more they perceived their coach using FLS3.

Nick reflected, at postseason, on the clarity he gained from having used FLS scores as feedback and how the changes across the season helped him to better understand his skiers: "At preseason, they probably didn't quite, either, understand what was being suggested or they realized afterwards that it was more important to them." Bettina agreed, "Yes, and I think the skiers mentioned that. They found it hard in the preseason to figure out, but then from midseason to postseason the FLS scores stayed almost exactly the same, so that's neat!" When Bettina asked Nick what he thought about the FLS theme scores, he expressed excitement, "the scores went up! Some of them [mid- and postseason scores] considerably, which is nice to see! Those stayed pretty close." The skiers' FLS scores corroborated: the more they perceived Nick using FLS at midseason, the more they wanted it at postseason ($r = .87$); and the more skiers wanted FLS at postseason, the more often they perceived Nick used it ($r = .76$).

Imparting Coaching Knowledge

This theme is where the coach enriches the learning environment by sharing their own relevant athletic experience, coaching knowledge, and professional coaching development. Across the debriefs, Nick and Bettina spoke about two practices associated with this theme: the theme in general (ICK) as well as one item (ICK3: The coach brings in information to me [athlete] that they [coach] have picked up in their sport experiences elsewhere). Using skiers' preference scores, Bettina and Nick created two coaching strategies (ICK and ICK3, respectively). The pair followed up on the progress of implementing these strategies through the season, using changes in the skiers' scores. Nick reflected on his intentional practices with facilitation and reassurance from the CD and his skiers' scores (see Figure 2).

Upon seeing his skiers' preseason ICK theme preferences scores, Nick considered them to be high, and Bettina agreed. He commented, "To me that says they want to hear what qualifies us to do this [ski program], our background." Using the preference scores for the ICK theme and particularly ICK3, the pair created two coaching strategies for the upcoming season. For ICK in general, Nick would talk about qualifications "sharing with the skiers about what qualifies us [coach and CD] to coach, share more of our backgrounds." Second, Nick created a strategy specific to ICK3: "tell skiers about our [coach and CD] experience."

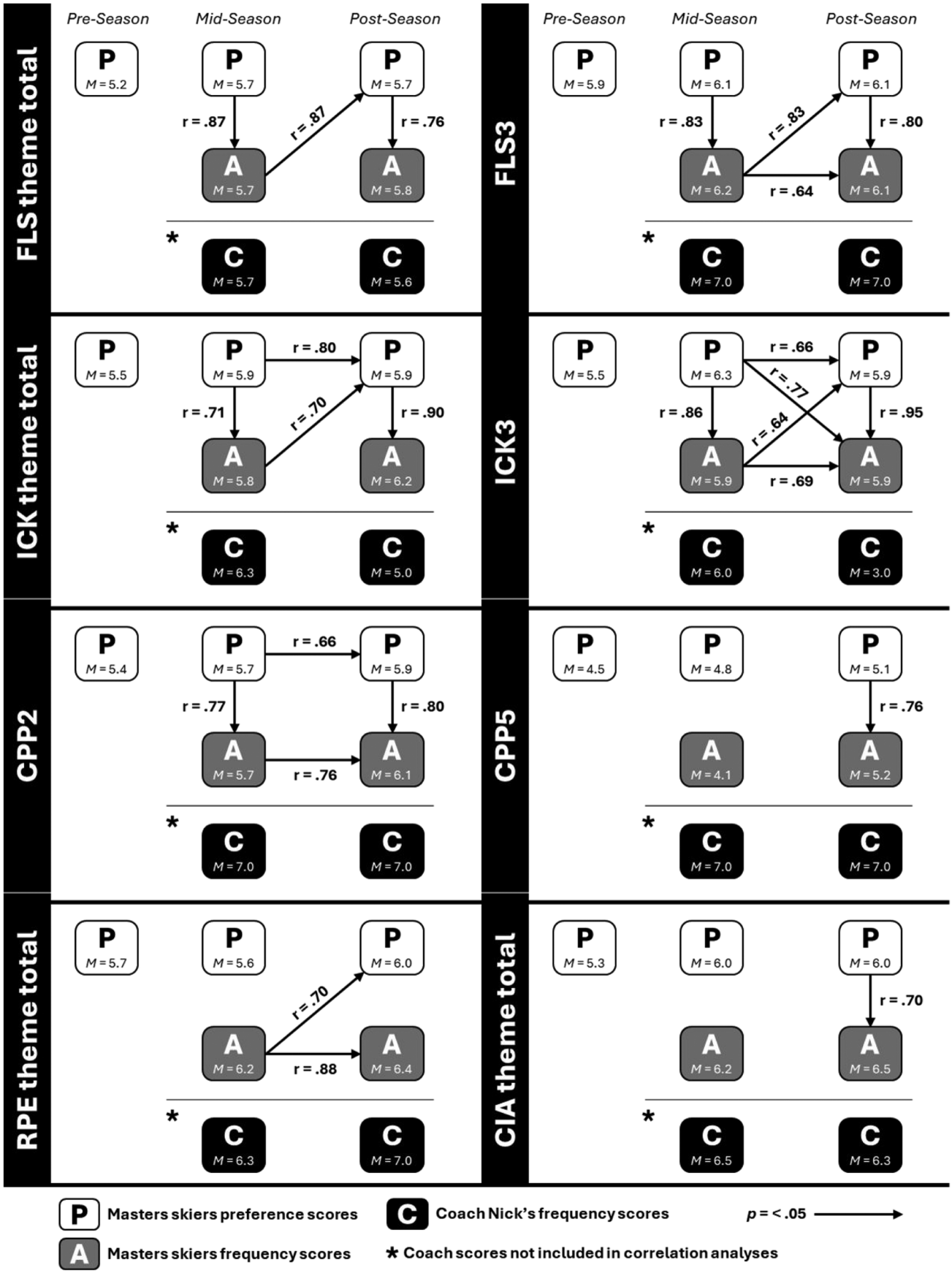

Figure 2 — Correlation-based panel models for selected AOSCS themes and items (nonsignificant correlations are not displayed). AOSCS = Adult-Oriented Sport Coaching Survey; ICK = Imparting Coaching Knowledge; FLS = Framing Learning Situations; CPP = Creating Personalized Programming; CIA = Considering the Individuality of Athletes; RPE = Respecting Preferences for Effort, Accountability, & Feedback.

At midseason, when Bettina checked in about the ICK3 strategy, Nick spoke about sharing more with his skiers about his experience:

> I gave them more background into what I do and where I have been through my skiing career. It gives them a better view of who I am and how competent I am in teaching. Me saying "I've been skiing for 41 years and coaching for the last 10" and "I'm a Development Level race coach, a Level 2 ski coach, and CADS [Canadian Adaptive Snowsports] instructor." It helps add validity to my ability to assist them.

For ICK3 (see Figure 2), the more skiers wanted this practice at midseason, the more they perceived Nick using it ($r = .86$). When it came to midseason preferences, the more skiers wanted ICK3, the more they wanted it ($r = .66$) and perceived Nick using it ($r = .77$) later at postseason. In terms of skiers' ICK3 perceptions at midseason, the more skiers perceived Nick using it, the more they wanted it ($r = .64$) and perceived Nick using it (.69) later at postseason.

At midseason, Nick reflected on the ICK theme as a whole, "The skiers' frequency is slightly down from their preference, so that would be good to develop." To facilitate Nick's learning, Bettina suggested:

> It's about talking about the experience you have, talking about your knowledge. Anything that comes up where you can share a story. Often times on the chair lift you'll tell me about Monday night racing and something that happened. Even something that maybe happened that was difficult, like when you hooked the gate with your thumb. I bet they [athletes] would be interested in hearing that and thinking about that for themselves too.

Nick reflected on what that may mean for his skiers, "that's a good learning one [hooked thumb on gate experience] too because my hands were not in the right position." An ICK coaching strategy was set for the remainder of the season, specifically to "talk more about Monday night racing" with the intent to support skiers that race on Mondays and skiers that have growing curiosity about racing. He reflected further, "And the ones that are in it [racing] would like to hear certain little things, right? How did I do what I did to make it go faster versus what they are doing? So, they might be able to relate to it better. Like course inspections."

In his postseason reflection entry, Nick specifically journaled about trying: "... to give more of my personal experiences to show I am experienced in what we are doing, both achievements, and mistakes made." Indeed, in the postseason debrief his efforts were evident. Nick appeared focused on closing the gap between what the skiers wanted and their frequency score for what they felt they were receiving for ICK. During the postseason debrief, as the pair reviewed the scores, Nick self-reported he "frequently" used the ICK theme (score of 5.0). The more skiers wanted and perceived Nick using ICK at midseason, the more they wanted it at postseason ($r = .80$ and $r = .70$, respectively). At postseason, the more skiers wanted ICK, the more they perceived Nick using it ($r = .90$). He reflected,

> I'm not a person to talk about myself, but I intentionally went out of the way to tell them about some different times that I was in things, or whether I failed, or succeeded at it. I wanted them to understand that I struggled too, or I'm qualified to speak about this.

Regarding Coach Nick's ICK3 score (3.0) at postseason, Bettina pointed out, "you may have been a bit hard on yourself" and brought his attention to the skiers' scores. The skiers' preference and frequency scores were both at 5.9. She continued,

> You scored yourself quite a bit lower compared to mid-season, but they [skiers] did not score you any lower! I think they really liked when you talked about how you had hit your hand on the gate and how that had thrown off your time. They appreciated that, like they wanted to understand not only when you do well, but when you didn't do well and why. And they can see how that translates.

Coach Nick agreed, "Yeah, exactly! Haha and my thumb is still sore." At postseason, the skiers' scores affirmed Bettina's support for Nick: the more skiers wanted the ICK3 practice, the more they noticed their coaching using it ($r = .95$).

Creating Personalized Programming

This adult-oriented theme is where the coach considers and tailors aspects of scheduling (i.e., practices and competitions), season-long programming, and support at competitions to an adult athlete's needs and abilities. Bettina and Nick spoke about two practices related to two items (CPP2 and CPP5). The CD noted skiers' preference scores for CPP2/CPP5 practices and motivated the coach to think about how he could address them. Through coaching strategies and dialogue, Nick shared why these coaching practices were a focus later in the season, which was further reciprocated by the skiers (see Figure 2).

In preseason, Bettina mentioned the skiers' preference score for the CPP5 practice (Tailors their [coach] support to me [athlete] at competitions), "4.5, what do you think about that?" Nick reflected on how the skiers connect to competition,

> I think it's the word "competition," they may not see what we are doing as competition. We are not trying to tailor all of them for a schedule to get ready for a specific event, and for some, the schedule is only for one day a week. It's not like we are trying to give them more and maybe that's how they read it and say, "I only want the one day of tailoring."

Bettina added, "That could be it, right? It's like 'tailor it for me once a week'. It's a 4.5 out of 7." Supporting their discussion, the quantitative data showed that the skiers' CPP5 scores from pre- and midseason did not affect their postseason scores (i.e., no significant correlations). Nick reflected about the lack of movement in the CPP5 scores, "There is no competition in class. They see the word 'competition' and say, 'I'm not doing any competitions, so it's not important.'"

The skiers' preseason preference score for the CPP2 practice (Considers how to accommodate me [athlete] in terms of programming, such as practice or competitive schedules) was used to talk about how skiers wanted Nick to consider their schedule. Bettina shared, "It may be worthwhile asking skiers about this [CCP2] a little further. Whether they are interested in gate training, for example." Nick recognized the importance of getting in-person feedback from his skiers to better implement CPP2: "Yeah, that's definitely a big question for tomorrow because I know some are all gung-ho for gate training, and others, we don't know them. So, we can't say what they want." The various motivations of the group were considered to better support skiers. Bettina helped Nick understand how CPP2 could apply to noncompetitive skiers:

> Jess [adult skier] asked me, "Is this group training only for competition?" And I said "Well, it's a mix. If you're not planning to use gate training towards competition you can use it towards your personal improvement" and she was like, "Oh okay, I signed up!"

Nick added, "Robby was there Monday night, and he brought his buddy Sam who raced as well. So, if Sam is going to be racing, he'll want to learn [to ski through] gates!" To better understand their heterogeneous group of skiers the coach and CD set a CPP2 coaching strategy to "ask about interest in gate training, personal development, or race training." Coach Nick's reflection on the skiers being unsure of what they wanted is evident as the skiers' preseason CPP2 preferences were not significantly correlated to scores later in the season.

During the midseason debrief, Bettina checked in about the CPP2 coaching strategy and whether Nick thought he was able to do it. Nick's goal for better communication involved hearing skiers' preferences to create better personalized training, specifically regarding their schedules. At midseason, he reported he was "always" doing CPP2 (7.0) and reflected, "we talked about that [CPP2]. We really pulled everything out of them [skiers] to see what their expectations were from the program and us." He also talked about what he understood from skiers' CPP2 scores "They scored quite high [5.7] and seemed to have increased their [CPP2 score] over pre-season [5.4]." The more skiers wanted CPP2 at midseason, the more they perceived Nick using it ($r = .77$). Thus, there appeared to be an improvement from pre- to midseason in how the skiers thought the set-up of schedules accommodated their preferences.

When it came to Nick tailoring his support to his skiers *at* competitions (CPP5), the skiers' midseason preferences remained low (4.8). This was also indicated by low frequency (4.1) score for CPP5. Coach Nick explained:

> They [skiers] aren't overly concerned with the competition side. So, programming for competitive schedules and support at competition wasn't high on their list. But it's not low either. If they compete, they want support, but if it's not their goal, then they don't.

Nick catered to skiers who had an interest in self-competition or personal improvement differently than those training for Monday races. In his midseason journal, Nick wrote about catering his practice to improve skiers' personal development "in more difficult situations (conditions, steeps, pole planting properly) and the ins and outs of proper gate turns." But in the debrief, he also shared an example about skiers involved in Monday races:

> I am in the timing booth for 90% of the race. I get to see them when they are coming through doing their inspection. I usually stop them and chat about what I see and what they see. I'll say, "How did it feel when you were coming down?" or "Where's your line?"

For Nick, this means that he intentionally supported the Monday night ski racers when he had the time. However, the skiers generally showed a low interest in CPP5 at pre- and midseason evidenced by the quantitative data which showed no effects between pre-, mid-, and postseason scores (i.e., no significant correlations between time points). This affirmed that not all skiers saw CPP5 similarly, meaning some saw it as important. However, this changed later in the season.

In the postseason debrief, the pair discussed an increase in CPP5 scores and how they were connected to an end-of-season race where skiers had the opportunity to achieve competitive goals. At postseason, the more skiers wanted CPP5, the more they perceived it from their coach ($r = .76$), and Nick's CPP5 frequency continued to be a 7.0 ("always"). Nick spoke about moments at the end of the season that could have contributed to the skiers' scores: "That could have happened the evening we talked about [racing] tuck shapes and stuff, tailoring support at competitions." He continued, "Sam really wanted to know more about tucks and starts, and a few others had different and specific questions about different race things. So, I was able to give them that. That was just before the end-of-season race, so they appreciated that. Sam came in fourth overall!" Nick and Bettina celebrated the ski group's successes over the season, which translated to skiers' self-improvements, Monday races, and into the end-of-year race.

Coach Nick also reflected on how he continued to implement CPP2 until season's end. He was excited to see more skiers interested in gate training and shaped the remainder of the program to the skiers' preferences: "... a few more people have come on board with the idea of gate training, so that's good to see!" The more skiers wanted CPP2 at midseason, the more they wanted it at postseason ($r = .66$). Furthermore, the more skiers perceived Nick using CPP2 at midseason, the more they perceived him using it at postseason ($r = .76$). And at postseason, the more skiers wanted CPP2, the more they perceived Nick using it ($r = .80$).

Nick journaled at postseason about his satisfaction in seeing the skiers achieve personal improvement goals and noticed the difference in coach ability: "This was one of our best years yet. There were many new faces, they really took to what we presented and applied it. It was satisfying to see the great improvements from all the athletes this year."

Respecting Preferences for Effort, Accountability, and Feedback

This adult-oriented theme is where the coach adapts their approach by considering how each athlete wishes to be held accountable for working hard and giving effort, and how they wish to receive feedback at practice. The coaching approach used was based on RPE in general. Coach Nick noted it was difficult to apply RPE across the season, and a coaching strategy was set to help. Nick's efforts were validated via the skiers' scores, and Bettina's support (see Figure 2).

At preseason, the coach considered his skiers' preferences and reflected that it was important to "give them individual feedback when possible." He noted that it can be difficult to achieve: "I mean it's not possible to give 14 people feedback every run." He further speculated that he could have more intentional practices to give individual feedback: "... maybe it's the ones that I went up on the chairlift with that are the ones I am going to try to give the feedback to at the bottom before I get on the next chair." His reflection continued: "... somehow, we've got to figure out, if I am going to watch three or four specific people go by, I want to get to them [together on the chair lift] with me to give them their feedback." Bettina supported Nick's thought process and wrote down a coaching strategy that they could use for the upcoming season: "... giving them [skiers] individual feedback [based on their preferences for effort and accountability] when possible." There were no correlations from preseason; however, the skiers perceived that Coach Nick was implementing RPE more at midseason.

In his midseason journal entry, Nick reflected about his progress in listening to skiers' preferences to provide appropriate feedback: "I have improved as a coach in listening and feedback.

My enthusiasm is very high as my confidence is up too!" Bettina checked in on the previously set strategy: " . . . did you do more of what you wanted to work on?" Nick shared that he struggled with providing RPE support for his skiers in the past, but he was enthusiastic and found himself intentionally incorporating RPE into his practice more often, which made him feel more confident. He said, "This was a good one, before I struggled with larger groups. I was trying to keep track in my head of who was doing what. I got much better at it this year . . . I'm definitely gonna keep going at it!" According to the skiers' scores, Nick's effort was evident from midseason to postseason: the more skiers perceived Nick using RPE, the more they wanted and perceived him using RPE at postseason ($r = .70$ and $r = .88$, respectively).

Considering the Individuality of Athletes

This adult-oriented theme is where the coach considers and tailors their approach to each athlete's experiences and motives in the planning, organization, and delivery of practice. The coaching practice story is about the theme in general (CIA). In his journal, the coach highlighted his efforts of implementing CIA in recent seasons. His efforts were reflected by skiers' scores through the season, to which he expressed appreciation in his reflections (see Figure 2).

At midseason, Nick journaled about how his coaching changed from preseason. He talked with his skiers more often and understood them more as individuals: "I am getting better at asking questions in terms of what they felt, or what they thought of a particular drill, to see if they understood the function of the drill." Nick and Bettina also spoke about aggregate scores of CIA continuing to be high from preseason to midseason: "This score was a high one and it continues to be high!" The skiers' CIA preference score increased to 6.0 (from 5.3 at preseason), and at midseason, their perception of Nick using CIA (6.2) closely aligned with Nick's self-reported score (6.5).

In postseason, Bettina facilitated Nick's reflection on the CIA theme scores: "Looking at preferences, everything went up [from pre-season] and was consistent from mid- to post-season." Nick was glad to see the skiers' postseason preference score (6.0) and agreed, the scores were consistently high since midseason. Bettina pointed out that skiers noticed Nick intentionally implementing CIA more often. Nick reflected on what the scores meant for his skiers and himself:

> The [CIA] scores tell me skiers appreciated it [implementing CIA]. I tried really hard to be individual with them whether they were trying to shave a few seconds off their race time or they were just trying to make a better turn. I also made sure that they felt that just because there are gates it doesn't mean it has to be fast, this is about turn shape, not about just tearing down the hill. I was able to individualize them that way. I thought that went really well, I was very happy with how I did with them and how they performed with it!

At postseason, the more skiers wanted CIA, the more they perceived their coach using it ($r = .70$), which supported Nick's reflections that he was more effectively and intentionally considering his skiers' individuality through to the end of the season.

Discussion

The findings included eight adult-oriented coaching practice stories that described when in the season, and how Nick and Bettina used the AOSCS to reflect and inform Nick's coaching. The purpose of this case study was to understand how a Masters (adult) ski coach and a CD used the AOSCS to reflect on and inform their coaching during a ski season. The results showed the value of using the AOSCS at pre-, mid-, and postseason. The coach and CD were able to contextualize scores to the Masters (adult) skiing context, create intentional coaching strategies based on skiers' preferences, and follow up on alignment between strategies and AOSCS scores. We will discuss the AOSCS as a practical coaching tool for coach development, and Bettina's contribution to Coach Nick's learning.

The AOSCS Is a Practical Coaching Tool for Coach Development

In his use of the AOSCS, Coach Nick thought deeply, wrote, and discussed how he could incorporate adult-oriented practices into his coaching. Nick used the AOSCS information to create actionable coaching strategies to improve the skiers' sport experience, which provided him with opportunities to learn from his own coaching experience (Kuklick & Kasales, 2021). A practical benefit of the AOSCS in this case study was the novel use of measuring skiers' preferences with the AOSCS-P. Previous research in coach leadership has explored congruence between athletes' preferences and coaches' behaviors. In particular, Smoll et al.'s (1978) Mediational Model of Leadership and Chelladurai (1993) Multidimensional Model of Leadership holds that greater congruence between preferences, perceptions, and actual coaching behaviors is required for more effective coaching of athletes. In this study, the preference scores gave Nick a newfound perspective of his skiers' needs that acted as a measurable baseline prior to the start of the season. Thus, the coach went into the start-of-season with knowledge about how specific adult-oriented practices could be actioned on the first day. The preference data also acted as an additional tool to juxtapose how often the skiers said the coach was *actually* using the practices, and how often the coach felt he was using the practices. With these comparisons in hand across the season, the coach and CD pinpointed incongruencies between scores (from the descriptive quantitative data provided) in relation to specific practices. Although we were unable to use the coach's AOSCS responses in our correlations analyses, relationships between the skiers' preferences and their reported frequencies (of how often the coach used practices) added partial support for the notion of congruence. Inviting coaches to reflect on congruency is consistent with cognitive-mediation tenets of coaching models. The novel use of preference scores helped the coach reflect on and apply adult-oriented coaching practices; future research should explore adult athletes' preferences in greater detail.

The utility of the AOSCS scores for discussion between the coach and CD was in evidence in this study. The coach and CD together contextualized the meaning of certain adult-oriented practices for alpine ski coaching. This contextualization enabled sport-specific strategies to be applied. This aligns with Callary and Gearity (2021) objectives of an adult learning unit for coach development: Developing familiarity with AOSCS; better understanding of how adults prefer to be coached; and reflection on and experimentation with the application of adult learning knowledge. It further aligns with the notions of Taylor and Nash (2023) that surprises, such as high/low AOSCS scores from the skiers, usually prompt coaches' sensemaking, and further, that CDs can help coaches connect dots and make discoveries about their coaching

in a bidirectional process. The AOSCS was the key piece for coach learning, specifically contextualizing knowledge into practice, and located within bidirectional dialogue with the CD.

The Coach Developer's Contribution to the Coach's Learning

Before this study, the AOSCS had yet to be used by a CD and coach as part of a season-long coach learning and self-development program. Bettina's extensive expertise as a Masters (adult) ski CD, a coach, and a coaching researcher along with her rapport with Coach Nick positioned her as an ideal mentor to design a learning experience that supported and facilitated Nick's reflection on his coaching practices, adult-oriented coaching knowledge, and learning implementation. Bettina's expertise and knowledge promoted a learning environment where she engaged the coach in open conversations to debrief (Milistetd et al., 2023). Furthermore, she facilitated Nick's learning by generating bidirectional communication about the learning content through conversations that prompted Nick about how he was implementing adult-oriented practices. Furthermore, the debriefs were weeks apart and gave the coach ample time to reflect alone and then verbally with Bettina about his learning and applying adult-oriented coaching. The coach was self-directing his learning experience by focusing on areas he found important. Coaches appreciate being given the space and adequate support to enhance their adult-oriented coaching (Callary et al., 2024). In line with Nash (2023), Nick used a collaborative mentorship experience with the CD to reflect and translate the content into his coaching environment (i.e., used the CD and skiers' preferences to create adult-oriented coaching strategies). Because of this collaborative relationship and beneficial learning experience, Nick may continue to seek coach education and certifications (Edwards & Kloos, 2024).

Across the season, Bettina fostered opportunities for Nick to reflect on his coaching outside of practice (Schön, 1983) via the AOSCS-C, journaling, and debrief conversations. Bettina used these reflective practices by debriefing, providing feedback of how the coach was identifying practices that would benefit from coaching strategies, and how he implemented his learning. Bettina supported Nick's constructive and critical analysis of scores. For example, when scores were low (e.g., ICK3), Nick was able to refine his craft by shifting his self-critique to self-awareness of what, and how, he could improve in his coaching (Trudel et al., 2013). This helped Nick stay on track of his learning by refocusing his attention to better understand how he could do more of the practices his skiers wanted him to do more often (Crespo & Martínez-Gallego, 2023). Coach Nick used these reflections outside of practice (CD debriefs) to critically analyze his learning, the AOSCS scores, his actual coaching, and allowed him to refine his craft by implementing what he learned.

There were limitations with this study. While we know the CD was an essential aspect of the coach learning, we do not know if the same results would be found without a CD. Future studies should examine the feasibility of whether a coach, on their own accord or perhaps with the guidance of a coach workshop/module, can expect similar improvements to their craft. Additionally, there could be a common method bias for the skiers' scores—both the AOSCS preference and frequency items were collected in the same survey. Future studies could address this through procedural controls, such as temporal (e.g., time delay) and psychological separation (e.g., change answer formatting) or statistical controls (e.g., Harman's test) (Kock et al., 2021).

Conclusion

This case study had several practical and conceptual implications as a result of the coach's self-initiated learning journey, using the AOSCS with a CD, and becoming a more deliberate practitioner. Evidence showed that the coach's learning and self-development was enriched by reflecting on the scores of the AOSCS, from his own self-assessment in juxtaposition with the skiers' perceptions of his actions and their preferences in coaching approaches. Furthermore, the coach benefitted from the CD's mentorship and facilitation using the multipurpose AOSCS and demonstrated that adult-oriented practices can be refined and implemented into season-long coaching. Practically, the process of using multiple perspectives of the AOSCS as well as the CD supported the coach's self-initiated professional development and improved his reflection and application of adult-oriented coaching across the season (Callary et al., 2024). The coach used the AOSCS scores and a CD to learn, strategize, adapt, and implement (Callary & Gearity, 2020) adult-oriented coaching across the season. Conceptually, the findings showed that the skiers' preferences acted as a critical asset (Callary, Disipio et al., 2023) in constructing a more holistic adult-oriented coaching approach and supported an athlete-centered convergent collaboration (Callary, Belalcazar, et al., 2023) between the coach, the CD, and the skiers. This process ultimately furthered the coach's development and provided evidence that the AOSCS-P and a CD can be impactful in a coach's learning journey.

Notes

1. Since the coach developer was also a coach in the program, the skiers were specifically told to focus their responses based on Nick's coaching, and not the coach developer's.

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