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CONFLICT OF INTEREST STATEMENT

I have no actual or potential conflict of interest
in relation to this presentation.

Optimizing S&C Practitioner Education

Ongoing Lessons & International Collaborations

Dr. Brian Gearity, CSCS, ATC, RSCC, FNSCA
Associate Professor & Director
University of Denver

Dr. Chris Szedlak, ASSC, FHEA
Lecturer & Research in S&C
Hartpury University

Dr. Bettina Callary
Canada Research Chair in Sport Coaching and Adult Learning
Associate Professor at Cape Breton University, Nova Scotia, Canada



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Brian Gearity, Chris Szedlak, Bettina Callary
Optimizing S&C Practitioner Education

2022 NSCA
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Optimizing S&C Practitioner Education

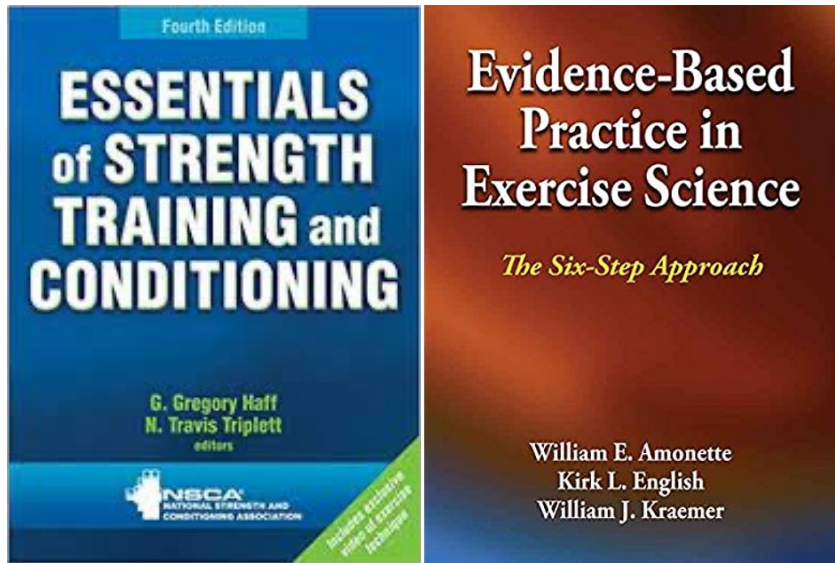
Ongoing Lessons & International Collaborations

Objectives

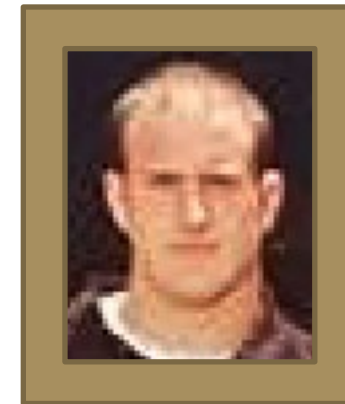
- Articulate an understanding of key terms and evidence-based strategies to enhance S&C practitioner preparation.
- How-to locate and adapt the scholarship of teaching and learning to their context.
- How to design, deliver, and assess a university-level course or professional development course.

- 1. What do S&C practitioners need to know and do?***
- 2. How can we optimize their education and development to achieve it?***

The original model?



Evidence



S&C Practice as Dynamic & Complex

1. NSCA S&C Professional Standards & Guidelines
2. NSCA Professional Code of Ethics
3. CSCS Job Task Analysis Summary & CSCE Detailed Content Outline
4. NSCA Education Recognition Programs
5. NSCA S&C Career Guide
6. Scholarship (Research & Literature)
7. CASCE

What Evidence Counts?

An Analysis of Undergraduate Exercise Science Programs: An Exercise Science Curriculum Survey

CRAIG L. ELDER, THOMAS J. PUJOL, AND JEREMY T. BARNES

Athletic Training Education, Southeast Missouri State University, Department of Health, Human Performance, and Recreation, Cape Girardeau, Missouri 63701.

Original Research

Journal of Strength and Conditioning Research

Practices of Strength and Conditioning Coaches: A Snapshot From Different Sports, Countries, and Expertise Levels

Anthony Weldon,¹ Michael J. Duncan,² Anthony Turner,³ David LaPlaca,⁴ Jaime Sampaio,⁵ and Candice J. Christie⁶

"It's Not Particularly P.C., You Know . . .": Women Coaches' Performing Gender in Strength and Conditioning

in Women in Sport and Physical Activity Journal

Gavin Thomas^{id}*,¹ Jaime Guinan*,¹ and Győző Molnár*,¹

View More

DOI: <https://doi.org/10.1123/wspaj.2020-0049>

Keywords: gender performance; male hegemony; marginalization; sexist banter

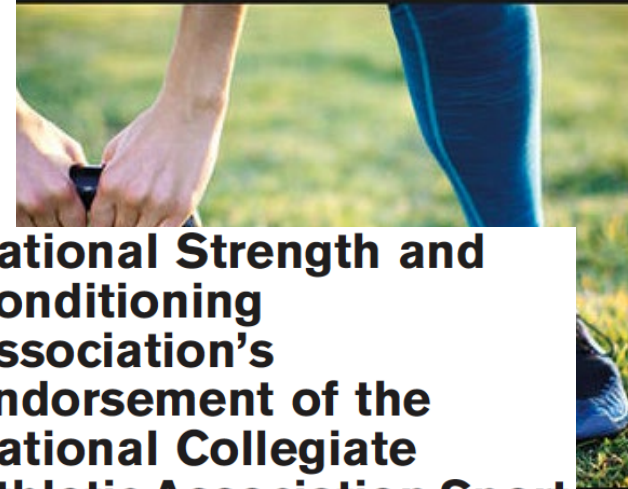
First Published Online: 03 Jun 2021

s Szedlak, Bettina Callary
Practitioner Education

Understanding Strength and Conditioning as Sport Coaching

Bridging the Biophysical, Pedagogical and Sociocultural Foundations of Practice

Tania Cassidy, Phil Hancock, Brian Gearity, and Lisette Burrows



National Strength and Conditioning Association's Endorsement of the National Collegiate Athletic Association Sport Science Institute's "Mental Health Best Practices: Inter-Association Consensus Document: Best Practices for Understanding and Supporting Student-Athlete Mental Wellness"

Brian Gearity, PhD¹ and E. Whitney G. Moore, PhD²
¹Graduate School of Professional Psychology, University of Denver, Denver, Colorado; and ²Division of Kinesiology, Health and Sport Studies, Wayne State University, Detroit, Michigan

- 1. What do S&C practitioners need to know and do?***
- 2. How can we optimize their education and development to achieve it?***



RISE TO the HIGHER STANDARD

What do coach developers do?



- Term used by the International Council for Coaching Excellence (ICCE, 2014)
- Coach developers (CDs) are individuals who develop, support, and challenge coaches in their ongoing efforts to improve knowledge and skills for athletes (Callary et al., 2021)
- Varied roles
 - programme design and evaluation,
 - leadership and personal development,
 - facilitation of coach learning, assessment, and mentoring (McQuade & Nash, 2015; North, 2010)
 - May work in National Sport Organizations, Government, Higher education (+ research) (Callary, Gearity, & Kuklick, 2021)
- Coach education initiatives are learner centered, flexible, co-constructed (Ciampolini et al., 2019)
 - Important to ensure that coach developers are knowledgeable in how to develop quality coach learning programs



Coach Education and Development in Sport

Instructional Strategies

EDITED BY
BETTINA CALLARY AND BRIAN GEARITY



- CDs are facilitators of learning, engaging with adult learning principles to provide coaches with self-directed, autonomous, and experiential learning opportunities in order to meaningfully develop (Callary & Gearity, 2020)
- Many theories and models that CDs can use to provide quality teaching and learning opportunities for coaches
 - Team-based learning (Thompson & Pasquini)
 - Reflective practice (Kuklick & Kasales)
 - Networks and social learning communities (Culver et al.)
 - Travel-based learning (Culver, Holder, Rynne)
 - Self-paced online learning (Driska & Nalepa)
 - Differentiated instruction through lecturing (Russell)
 - Considerations for inclusive coach development

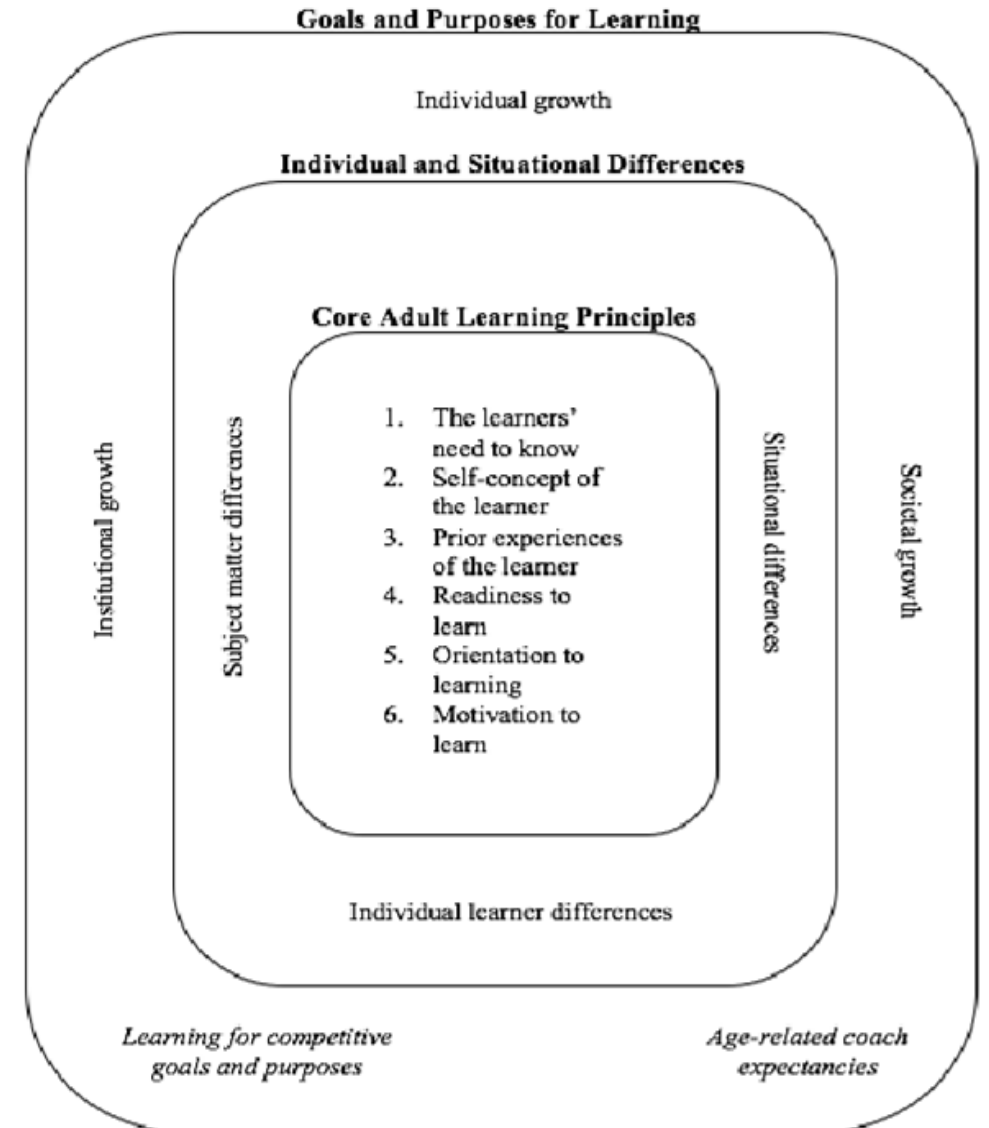
LEARNS

- Pedagogically, what coach education worldwide has in common is a focus on **experiential learning** using a LEARNS framework
 - Learner-centered,
 - Engaged in discussions
 - Apply their knowledge and skills
 - Reflect
 - New knowledge gained
 - Stretched (coaches are pushed in what they know and do, helping them grow)
- (Walters, et al., 2020)



Andragogy in Sport Model (Callary, et al. 2020; MacLellan, et al., 2019)

Andragogy – the art and science of teaching adults (Knowles et al., 2012)





UNITED STATES CENTER FOR
COACHING EXCELLENCE



ICCE

International Council for
Coaching Excellence



Coaching Association of Canada
Association canadienne des entraîneurs

Backwards by Design (Wiggins & McTighe 1998)

Step 1

What is the subject matter to be taught? What does the S&C practitioner want to know and be able to do at the end of this course?

Step 2

How do course designers know that learning has occurred? How do assessments capture what S&C practitioners know or can do?

Step 3

How should educators facilitate S&C practitioner education?



COACHING
MASTERS ATHLETES
ADVANCING RESEARCH AND
PRACTICE IN ADULT SPORT

Edited by
BETTINA CALLARY, BRADLEY W. YOUNG
AND SCOTT RATHWELL



Brian Gearity, Chris Szedlak, Bettina Callary
Optimizing S&C Practitioner Education

Step 1: What & Who?

Step 1

- Course description
- Learner characteristics
- Course objectives
 - Know and do
 - Bloom's taxonomy
 - Remembering, understanding, applying, analyzing, evaluating, creating
- “At the end of this course, the S&C practitioner/student should be able to demonstrate instruction, feedback, and related types of communication related to athlete/client skill acquisition.”

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Step 2: Assessment

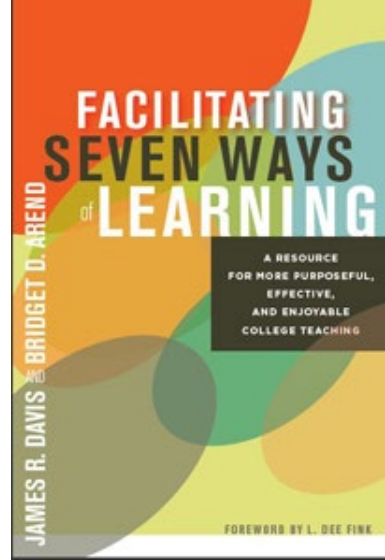
Step 2

- Objective?? Assessment
- Demonstrate $\neq$ Multiple choice exam
- Demonstrate $=$ In-class micro-demonstration
- Authentic assessment
- Examples: Multiple choice exams, essays, demonstrations, rubric / checklist,
Instruments: Adult Oriented Sport Coaching Survey

Step 3: The “real” teaching

Step 3

- Facilitating S&C practitioners’ learning
 1. Skills – Behavioral learning – tasks, procedures, practice exercises
 2. Knowledge – Cognitive learning – presentations, explanations
 3. Critical, creative, & dialogical thinking – Learning through inquiry – question driven inquiries, discussions
 4. Problem solving & decision-making abilities – learning with mental models – problems, case studies, labs, projects
 5. Attitudes, feelings, & perspectives – learning through groups and teams – group activities, team projects
 6. Practicing professional judgment – learning through virtual realities – role playing, simulations, dramatic scenarios, games
 7. Reflecting on experience – experiential learning – internships, service-learning, study abroad



Step 3: Example 1

Skills – Behavioral learning – tasks, procedures, practice exercises

Pedagogy skills or “the actual coaching”

Performing the squat, not lecturing about the squat



Step 3: Example 2

Acquiring Knowledge – Cognitive learning – presentations, explanations

Content or subject matter knowledge

The knowing of coaching

Lecturing about the squat!

Using PBL for the Graduate Student Coach Learning S&C

Step 1: Course Description

- This advanced level course is designed to educate students on the scientific, theoretical and practical foundations of strength, conditioning, and injury prevention.
- Students will learn how to design S&C programs to enhance athletic performance and reduce and lessen the severity of injury.
- This course is also intended to help students become familiar with the National Strength and Conditioning Association's (NSCA) Certified Strength and Conditioning Specialist exam, and position statements from several national governing bodies on athlete safety and physical performance.

Using PBL for the Graduate Student Coach Learning S&C

Course Objectives

1. Design a S&C program that could be used to improve athletic performance, reduce injury, or lessen the severity of injury.
2. Plan individualized S&C programs based on individual and environmental factors.
3. Identify scientific concepts related to acute and chronic adaptations to anaerobic and aerobic exercise.
4. Produce informational materials on drugs, nutrition and supplements for numerous stakeholders.
5. Demonstrate, and offer effective instruction and feedback, for proper exercise technique.
6. Distinguish between training systems (e.g. Olympic, Powerlifting, bodybuilding, sport training, etc.) and methods (e.g. resistance training exercises, speed drills, etc.).

Using PBL for the Graduate Student Coach Learning S&C

Course Objectives

- PBL** 1. Design a S&C program that could be used to improve athletic performance, reduce injury, or lessen the severity of injury. Behavioral, Creative, & Problem Solving
- PBL** 2. Plan individualized S&C programs based on individual and environmental factors. Cognitive, Creative, & Problem Solving
- PBL** 3. Identify scientific concepts related to acute and chronic adaptations to anaerobic and aerobic exercise. Cognitive
4. Produce informational materials on drugs, nutrition and supplements for numerous stakeholders. Cognitive
5. Demonstrate, and offer effective instruction and feedback, for proper exercise technique. Behavioral
6. Distinguish between training systems (e.g. Olympic, Powerlifting, bodybuilding, sport training, etc.) and methods (e.g. resistance training exercises, speed drills, etc.). Cognitive

Step 2: Assessment - Presentation

Elements	Criteria		
Verbal Delivery, Flow, & Enthusiasm	Coach introduced him/herself, provided a good attention getter, appeared or sounded genuinely energetic throughout, and provided a formal conclusion, including question and answer opportunity.	Coach omitted one or two of the following: introduction of him/herself, a good attention getter, appeared or sounded genuinely energetic throughout, and provided a formal conclusion, including question and answer opportunity.	Coach omitted two or more of the following: introduction of him/herself, a good attention getter, appeared or sounded genuinely energetic throughout, and provided a formal conclusion, including question and answer opportunity.
Scale	8-10 points	4-7 points	0-3 points
Use of Instructional Aids	Instructional aids (e.g., slides, content description & image), font size and style, quality and quantity of information facilitated learning and enhanced presentation.	Instructional aids (e.g., slides, content description & image), font size and style, quality and quantity of information mostly facilitated learning and enhanced presentation.	Instructional aids (e.g., slides, content description & image), font size and style, quality and quantity of information somewhat facilitated learning and enhanced presentation.
Scale	13-15 points	9-12 points	0-8 points
Use of Time	Use of time fell within allotment and was allocated effectively to present vital information.	Use of time fell within allotment and was mostly allocated effectively to present mostly vital information.	Use of time fell outside allotment or was somewhat allocated effectively to present somewhat vital information.
Scale	9-10 points	6-8 points	0-5 points
Explanation	Explanation of S&C program was richly described and based on thorough review of research and astute practical observations; justification for program components was provided, as well as why other methods were not selected.	Explanation of S&C program was described and based on mostly thorough review of research and practical observations; justification for program components was mostly provided, as well as why other methods were not selected.	Explanation of S&C program was omitted or may have been described based on some or haphazard selection of research or limited practical observations; justification for program components was omitted or somewhat provided, as well as why other methods were not selected.
Scale	27-30 points	21-26 points	0-20 points
*Appearance & Delivery	Clothing and appearance was professional and non-verbals facilitated understanding.	Clothing and appearance was somewhat sloppy or unprofessional or non-verbals were somewhat distracting or failed to facilitate understanding.	Clothing and appearance was sloppy or unprofessional and non-verbals were distracting or failed to facilitate understanding.
Scale	4-5 points	1-3 points	0 points

Step 2: Assessment – Project of Program Design

Elements	Criteria		
Useable & Professional	S&C manual is professional looking and immediately useable. Manual contains proper use of Standard English Grammar	S&C manual is professional looking and immediately useable. Manual contains proper use of Standard English Grammar	S&C manual is professional looking and immediately useable. Manual contains proper use of Standard English Grammar
Scale	8-10 points	4-7 points	0-3 points
Athlete Profile	Athlete profile is presented and contains all essential components	Athlete profile is vague or missing a few components	Athlete profile is unclear or missing several components
Scale	9-10 points	6-7 points	0-5 points
Needs Analysis	Thorough and detailed explanation of athlete and sport physiological, biomechanical and injury analysis.	Mostly thorough and detailed explanation of athlete and sport physiological, biomechanical and injury analysis.	Partial or superficial explanation of athlete and sport physiological, biomechanical and injury analysis.
Scale	9-10 points	7-8 points	0-6 points
Macro- and Meso-Cycles	Annual plan is fully completed and accurate per sport schedule and governing body rules. Training volume matches the respective mesocycle's goals. Development is informed by strong research and reasoning. Use of time is sensible and equitable to meet goals.	Annual plan is fully completed and mostly accurate per sport schedule and governing body rules. Training volume closely matches the respective mesocycle's goals. Development is informed by some research and reasoning. Use of time is mostly sensible and equitable to meet goals.	Annual plan is partially completed or somewhat accurate per sport schedule and governing body rules. Training volume somewhat matches the respective mesocycle's goals. Development is informed by weak research and reasoning. Use of time is somewhat sensible and equitable to meet goals.
Scale	27-30 points	21-26 points	0-20 points
Microcycles	All components of training are included, richly described, and highly likely to achieve stated goals.	Most components of training are included, described, and likely to achieve stated goals.	Some components of training are included, described, and unlikely to achieve stated goals.
Scale	27-30 points	21-26 points	0-20 points
Exercise Selection & Progression	Exercise selection and progression is highly likely to achieve stated goals.	Exercise selection and progression is likely to achieve stated goals.	Exercise selection and progression is unlikely to achieve stated goals.
Scale	9-10 points	7-8 points	0-6 points

Using PBL for the Graduate Student Coach Learning S&C

Step 3: The “real” teaching

3-Step PBL process

1. Driving question (aka Step 1)

How would you design a S&C program to improve athletic performance and decrease or lessen the severity of injury? Are you really doing everything you can to design the best program?

2. Map & Manage the Process (aka Step 3)

3. Create & Perform Assessments (aka Step 2)

A practical example...



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- Grant-funded international collaboration (US, Canada, UK)
- **Purpose: To understand and enhance curriculum development, delivery, and assessment of S&C practitioners regarding effective psychosocial coaching practice**

What we did together?



Collaborative: not research done on “others” but “with” others.

RESEARCH

Cyclic, reflective process, where all parties critically reflect on how knowledge and self-understanding inform practice.

UKSCA Collaboration Project Timeline

Phase 1	
Summary: Data analysis is complete.	
Research Team	UKSCA
Output 1 - Journal Article (under review in JSCR): Defining Psychosocial Strength and Conditioning Coaching Competencies: A Qualitative Participatory Action Research Approach.	
Output 2 – Stakeholders Report (Professional Strength and Conditioning): - Outlining identified and neglected psychological, pedagogical, philosophical, and sociocultural competencies. - Identifying current research that underpins our findings (especially the sociocultural competencies).	End of June 2022 Draft ready for feedback from Sarah & Andy B (middle of June)
Output 3 – Journal Article (Sport, Education, and Society) - Coach education stakeholders’ dominant discourses regarding psychosocial competencies. - This is critical analysis of the findings and provides some alternative/new understandings of ideals, norms, and practices regarding effective psychosocial S&C coaching with a strong focus on the sociocultural context current S&C practice is situated in. - The context includes areas of hegemonic masculinity and performance, which both illuminate and strengthen some of the current concerns the UKSCA EDI panel aims to address.	End of June 2022 Draft ready for feedback from Sarah & Andy B (middle of June)
Output 4 – Keynote presentation - NSCA conference Optimizing S&C practitioner education in your context: Lessons learned from an international research collaboration to enhance S&C coach performance.	July 2022 Recording and presentation made available on the UKSCA IQ
Output 5 – Podium presentation - NSCA conference Examining how stakeholders of a S&C certification body identify psychosocial coaching practice.	July 2022 Recording and presentation made available on the UKSCA IQ
Output 6 – Oral presentation - QRSEH conference Coach education stakeholders’ dominant discourses regarding psychosocial competencies.	July 2022 Recording and presentation made available on the UKSCA IQ

Planning change

Implementing change

Observing the process and consequences of these actions

Reflection

Replanning

Develop mutual investment

Markula & Silk, 2011

Mutual investment in what?

How to implement effective psychosocial coaching practice in S&C curricula.

Research

Applied Change



Enriching Selves in Strength and Conditioning Society: A Multilevel Proposal to Enhance Strength and Conditioning Psychosocial Practice as Part of the Council on Accreditation of Strength and Conditioning Education

Brian T. Gentry, PhD,¹ Christoph Szedlak, PhD,² Clayton R. Kulick, PhD,³ Jean Bettina Callary, PhD,⁴ Adam Felt, MS,⁵ and Maurs Bergan, PhD⁶
¹Graduate School of Professional Psychology, University of Denver, Denver, Colorado
²University of Southampton, Student Services, Sports Training & Performance Cent
³School of Physical Education, Performance and Sport Leadership, Springfield Coll
⁴Breton University, Sydney, Nova Scotia, Canada, and ⁵Precision Nutrition, Inc, Tor

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The Characteristics Differentiating Expert and Competent Strength and Conditioning Coaches

David A. LaPlaca and Paul G. Schempp
 University of Georgia

ABSTRACT

Purpose: The purpose of this study was to identify the skills, knowledge, and experiences differentiating expert and competent strength and conditioning (S&C) coaches. **Method:** The participants were 87 elite-level head S&C coaches with an average of over 18 years of coaching experience. These coaches were employed by teams from the MLB, NBA, NFL, NHL, NCAA Division I FBS "Power Five" Conferences, United States National Teams, and the Australian Football League. This study used both a qualitative and quantitative research design through the use of the Delphi method, which incorporated three rounds of surveys. The first-round survey asked the participants to identify at least one important skill, knowledge area, and experience that should be possessed by an expert and competent S&C coach respectively. The characteristics generated from the first round were placed on a second-round survey and rated on their level of importance using a five-point Likert scale. If a characteristic received a suggestion for rephrasing, and did not reach a level of consensus, or an entirely new characteristic was suggested, then it was placed on the final-round survey to be rated again. Characteristics that reached a level of consensus were placed on the final list of characteristics. **Results:** A total of 46 characteristics reached a level of consensus and were placed on the final list of characteristics. **Conclusion:** There now exists an empirically validated list of characteristics differentiating expert and competent S&C coaches. This list can aid in the selection, evaluation, and development of S&C coaches.

ARTICLE HISTORY

Received 25 January 2019
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KEYWORDS

Expert coach; coach qualities; coach development; evaluating coaches

International Sport Coach
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Examining Us

Christoph Szedlak
 University of Southampton

Matthew J. Smith
 University of Winchester

Bettina Callary
 Cape Breton University

Melissa C. Day
 University of Chichester

The purpose of this study was to identify narrative types that illuminate how strength and conditioning (S&C) coaches used video vignettes in a guided reflection process to support the development of effective coaching practices. At the beginning of each week, over a 4-week period, 11 elite S&C coaches were sent a short video vignette clip of an S&C coach's practice. They subsequently engaged in daily reflections in which they were guided to explore how the topic of the vignette aligned (or not) with their coaching practice. After the intervention, each S&C coach was interviewed regarding their process of learning from the vignette and from their reflections. Using a holistic narrative analysis of form and structure, the results exemplified three narrative types: performance, achievement, and helper. The S&C coaches whose reflections fitted the performance narrative type focused on their own practice, with limited consideration of the athletes' perspective or the vignette. The S&C coaches whose reflections fitted the achievement narrative type strove to accomplish goals with their athletes and were selective in considering the vignette. The S&C coaches whose reflections fit the helper narrative type found that the vignette helped them consider an athlete-centered coaching approach focusing on the athletes' well-being, as well as athletic abilities. Thus, S&C coach developers should utilize a guided reflection process that focuses on encouraging a coaching approach based on the helper narrative type.

Stakeholders write curricula, develop resources, and certification guidelines.

How we did it?

Phase 1

Explore stakeholders' understanding of psychosocial coaching competencies

- Psychosocial: pedagogical, philosophical, psychological, sociocultural
- 8 video vignettes that portrayed effective/ineffective and acceptable/unacceptable coaching practice (Szedlak et al., 2018)
- 97% (N=3-) of UKSCA stakeholders (e.g., assessors, tutors, members of the board)
- Procedure: each watched two vignettes, semi-structured interview
- Inductive/deductive thematic analysis (Braun et al., 2019) & critical, poststructural analysis (Markula & Silk, 2011)

What did we find?

Thematic

Stakeholders' perception of psychosocial coaching practice

Main Categories	Main/Subthemes
Effective coaching practice	• Holistic and athlete-centred ○ Promoting autonomy ○ Aim to empower • Trust, respect, and care ○ Commitment ○ Motivation • Communication ○ Active listening ○ Encouraging dialogue • Reflective Practice ○ Metacognition ○ Situational awareness
Ineffective coaching practice	• Coach-centred ○ Coach dependency ○ Focus on own success ○ Authoritarian ○ Use of punishment
Identities, norms and discrimination	• Racism, Ageism, Ableism, and Sexism • Hegemonic masculinity ○ Tokenism ○ Relational view of self

Identified the majority of effective psychological and some pedagogical competencies

Coach-centred approaches were considered as ineffective.

Overt behaviors were easily identified, yet microaggression & microinvalidations were at times overlooked.

What did we find?

Critical (situates result in the sociocultural context)

Stakeholders' perception of psychosocial coaching practice

Main Categories	Main/Subthemes
Effective coaching practice	• Holistic and athlete-centred ○ Promoting autonomy ○ Aim to empower • Trust, respect, and care ○ Commitment ○ Motivation • Communication ○ Active listening ○ Encouraging dialogue • Reflective Practice ○ Metacognition ○ Situational awareness
Ineffective coaching practice	• Coach-centred ○ Coach dependency ○ Focus on own success ○ Authoritarian ○ Use of punishment
Identities, norms and discrimination	• Racism, Ageism, Ableism, and Sexism • Hegemonic masculinity ○ Tokenism ○ Relational view of self

...his understanding of their needs, and the fact that he's cut the session short because their sport is rowing and he wants them to row well today, is showing outstanding emotional intelligence (...)

Yeah, she was very "arsey" [rude] with him when he came in and offered to help lift the weights for her, so she could have handled it very differently, when she just yelled at him for, "I told you before I can do this."

What lens did stakeholders use?

Performance (Avner et al., 2017)

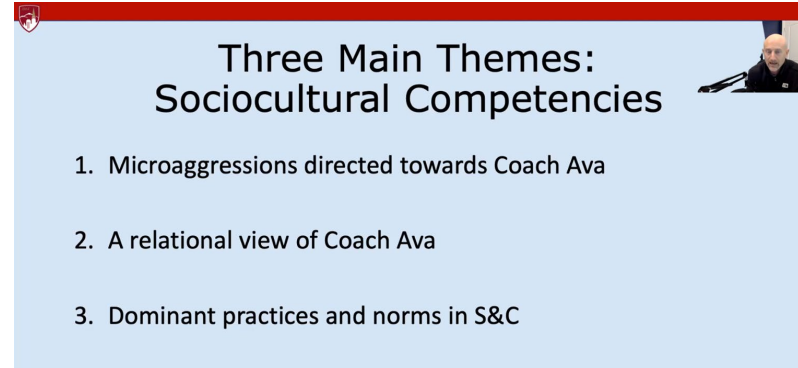
Hegemonic masculinity (Sawiuk et al., 2021)

What did we find?

Phase 2

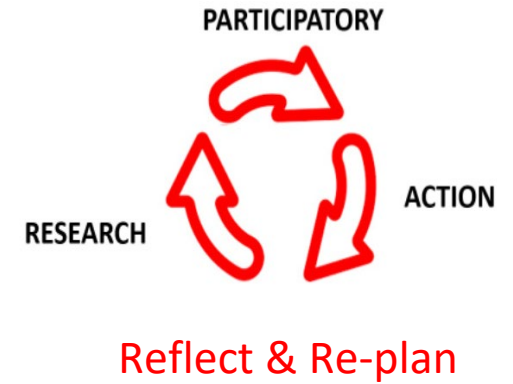
Integration of psychosocial skill development in the curricula

- Present results to stakeholders in focus groups
- Discusses which psychosocial explicitly/implicitly taught
- How are they integrated in the curricula?
- How would you like them to be integrated?



Three Main Themes:
Sociocultural Competencies

1. Microaggressions directed towards Coach Ava
2. A relational view of Coach Ava
3. Dominant practices and norms in S&C



1

- Working with the EDI panel to develop resources and promote awareness of current underlying discourses (i.e., hegemonic masculinity).

2

- **Future collaboration:**
 - Focus on learning strategies to effectively integrate psychosocial behaviours in S&C
 - UKSCA a forerunner to address current EDI issues aiming to raise awareness and advocate change in elite sport.

Teaching the Sociology of S&C

Sociology of Sport Journal, 2019, 36, 289-299

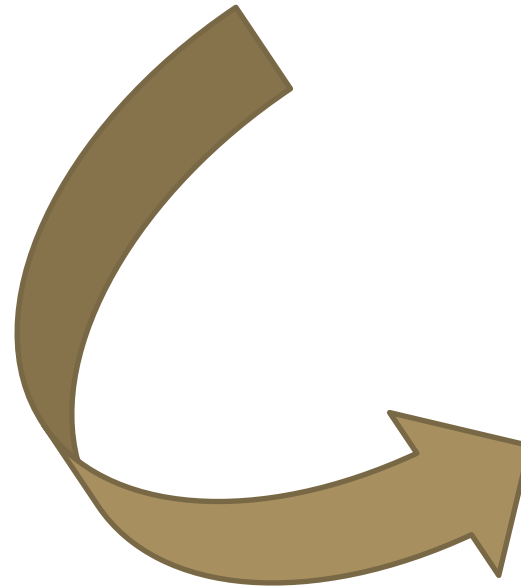
<https://doi.org/10.1123/ssj.2018-0158>

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ARTICLE

New Movement Practices: A Foucauldian Learning Community to Disrupt Technologies of Discipline

Clayton R. Kuklick and Brian T. Garity
University of Denver



Learning to Problematize Disciplinary Practices: Strength and Conditioning Coaches' Experiences Within a Foucauldian Learning Community

Backwards by Design

Step 1: Learning Community Description

Collaborative learning community approach with 3 h.s. S&C coaches to develop an understanding of power, knowledge, discipline, and freedom to hopefully redress the negative consequences of too many disciplinary practices and to create new, hopefully creative and effective practices.

Step 2: Assessment

Table 2 Code Map of Themes: Three Iterations of Analysis (to be Read From the Bottom Up)
(Anfara, Brown, & Mangione, 2002)

Third Iteration: Foucauldian Intervention Themes

Theme 1: Disrupting the control of activity

Theme 2: Disrupting the art of distribution

Theme 3: Disrupting the organization of genesis

Theme 4: Disrupting the combination of forces

Second Iteration: Training Methods

1a Spasmodic tempo training
1b Atemporal training

2a Variable geographic training
2b Variable intra-geographic training

3a Fluid and fragmented periodization

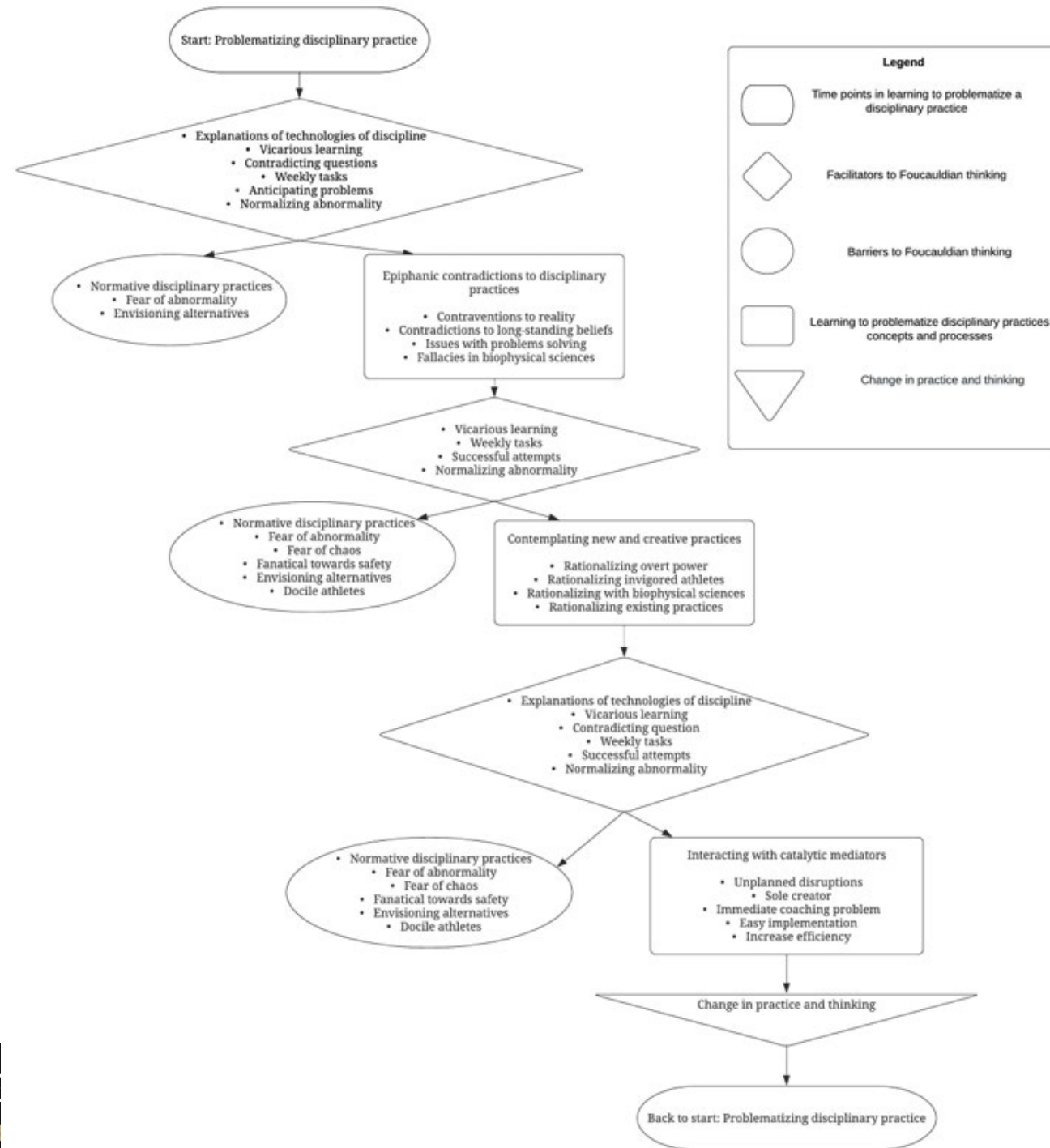
4a Explorative coaching
4b Strength coach as sage

Step 3: The “Real” Teaching

Readings; Meetings & Dialogue; Observation, Implementation & Reflection

Time Period	Tasks
Pre-meeting 1	Before meeting one, the three strength and conditioning (S&C) coaches (SCCs) were tasked to examine their current and most dominant coaching practices/knowledge and to prepare to discuss where they came from, with special consideration to previous coaches they interacted with (Jones, Denison, et al., 2016).
Meeting 1	With one coach developer, SCCs shared their dominant coaching practices/knowledge and their origins. The purpose of this task was to develop the SCCs’ awareness for how their S&C knowledge/practice was formed and thus begin to become aware of relations of power-knowledge. SCCs began to realize how practices/knowledge is socially constructed.
Post Meeting 1	SCCs were to search and explore aspects within their current coaching that contradict what they believe to be true or makes them question their coaching practices; coach developers provided examples. SCCs were to prepare to discuss where those contradictions and relate problems occur in their current coaching practices.
Meeting 2	SCCs and coach developers shared aspects of their coaching/teaching that contradicted their preconceived beliefs. For example, SCCs identified problems in their current coaching that they did not expect or that were more challenging to resolve than expected. The purpose of this was to facilitate SCC’s negotiation of their preconceived interpretations of coaching. SCCs made realizations that coaching problems and contradictions may be result of dominant coaching practices, which may be causing problems rather than solutions.
Post Meeting 2	SCCs were given the research paper “Discipline and punish in the weight room” by Gearity and Mills (2012). SCCs were asked to read and prepare to discuss aspects of their coaching related to the paper.
Meeting 3	SCCs and coach developers discussed the Gearity and Mills (2012) research paper. SCCs made realizations that dominant coaching practices exist, which may cause problems rather than solutions. A PowerPoint presentation delivering Foucault’s concepts was presented with practical examples of how disciplinary practices exist within S&C. A brief discussion was engaged after the presentation. The purpose of this was to have the SCCs question their current coaching practices and to consider how power-knowledge produces problems; that is, to consider that the problems they were trying to solve were created by their own practices, which were informed by dominant discourses.
Post Meeting 3	None
Meeting 4	Coach developers reviewed Foucault’s art of distribution concept (i.e., space) to the SCCs. Coach developers and the SCCs discussed, brainstormed, and collaborated ways to disrupt the art of distribution in the S&C context. The purpose of the brainstorming session was to co-construct ideas that disrupted disciplinary practices, specifically the art of distribution.
Post Meeting 4	Developed from the previous meeting, coach developers gave the SCCs a handout synthesizing methods that could disrupt the art of distribution. Prior to the next meeting, SCCs were asked to implement 1 or 2 methods to disrupt space.
Meeting 5	SCCs shared their experiences with disrupting the art of distribution. Coach developers then reviewed Foucault’s concept control of activity. Coach developers discussed, brainstormed, and collaborated ways to disrupt the control of activity (i.e., time) in the S&C context. The purpose of the brainstorming session was to co-construct ideas that disrupted disciplinary practices, specifically the control of activity.
Post Meeting 5	Developed from the previous meeting, coach developers gave the SCCs a handout synthesizing methods that could disrupt the control of activity. Prior to the next meeting, SCCs were asked to implement 1 or 2 methods to disrupt time.
Meeting 6	SCCs shared their experiences with disrupting the control of activity. Coach developers reviewed Foucault’s concept organization of genesis. Coach developers discussed, brainstormed, and collaborated ways to disrupt the organization of genesis (i.e., flow) in the S&C context. The purpose of the brainstorming session was to co-construct ideas that disrupted disciplinary practices, specifically organization of genesis.
Post Meeting 6	Developed from the previous meeting, coach developers gave the SCCs a handout synthesizing methods that could disrupt the organization of genesis. Prior to the next meeting, SCCs were asked to implement 1 or 2 methods to disrupt flow.
Meeting 7	SCCs shared their experiences with disrupting the organization of genesis. Coach developers reviewed Foucault’s concept combination of forces. Coach developers discussed, brainstormed, and collaborated ways to disrupt the combination of forces in the S&C context. The purpose of the brainstorming session was to co-construct ideas that disrupted disciplinary practices, specifically combination of forces.
Post Meeting 7	Developed from the previous meeting, coach developers gave the SCCs a handout synthesizing coaching method that could disrupt the combination of forces. Prior to the next meeting, SCCs were asked to implement 1 or 2 methods to disrupt efficiency.
Individual Debrief Meeting	SCCs shared their experiences with disrupting the combination of forces. Coach developers discussed and led reflection on the entirety of the Foucauldian intervention and its implementation, and provided encouragement toward continued critical awareness and strategy generation in relation to the curriculum.

S&C Coaches' Learning Process



What facilitated and impeded S&C coaches' learning and doing?

Table 2. *Learning to Problematize Disciplinary Practices Matrix*

Step to learning to problematize disciplinary practices	Facilitators to Foucauldian thinking							Barriers to Foucauldian Thinking					
	Explanations of technologies of discipline	Vicarious learning	Contradicting questions	Weekly tasks	Anticipating problems	Successful attempts	Normalizing abnormality	Normative disciplinary practices	Fear of abnormality	Fear of chaos	Fanatical towards safety	Envisioning alternatives	Docile athletes
Epiphanic contradictions to disciplinary practices													
• Contraventions to reality	x	x	x	x			x	x	x			x	
• Contradictions to long-standing beliefs	x	x	x	x			x	x	x				
• Issues with problem solving	x	x	x	x	x	x		x	x	x	x		x
• Fallacies in biophysical sciences		x	x				x	x	x		x	x	x
Contemplating new and creative practices													
• Rationalizing overt power	x			x		x							
• Rationalizing invigorated athletes	x	x					x	x	x	x			x
• Rationalizing with biophysical sciences	x	x	x					x	x	x	x	x	
• Rationalizing existing practices	x		x	x		x		x		x	x	x	x
Interacting with catalytic mediators													
• Unplanned disruptions				x	x	x	x	x	x	x			
• Sole creator		x		x	x	x	x	x	x			x	
• Immediate coaching problem		x	x	x	x	x	x	x		x	x	x	x
• Easy implementation				x	x	x		x		x	x		x
• Increase efficiency			x	x	x	x		x	x	x			x

Note. This table contains the steps to learning to problematize disciplinary practices (i.e., main themes and subthemes) on the left and the facilitators and barriers (i.e., themes and subthemes) to the learning process on the top. Individual Xs indicate the facilitator or barrier that implicates the subtheme in learning to problematize disciplinary practices.



Teaching S&C practitioners

Workshops for coaches' professional development in working with adults in sport: golf, rowing, biathlon, speed skating, soccer, swimming, lawn bowling, multi-sport, fitness, S&C coaches





Early Research

Online 10-week course with fitness coaches asynchronous (five 2-week long modules):

- (a) adult learning
 - (b) communicating motor learning skills
 - (c) psychological considerations
 - (d) social issues
 - (e) developing a philosophy for coaching
- High-impact teaching strategies (e.g., Kolb, 2015)
 - Adult learning principles (Knowles et al., 2012)
 - Authentic e-learning (Herrington et al., 2010).
 - Canvas: a robust learning management system

Bottom Line: PD needs to be self-determined (motives), self-paced, reflections on real-life experiences

(Callary, Gearity, & Kuklick, 2021)

Self-assessment for coach development

- **Self-assessment:** Self-determined opportunities for coaches to reflect on their practice, continuing professional development.
- the **Adult-Oriented Sport Coaching Survey (AOSCS;** Rathwell et al., 2021): A self-assessment tool designed to stimulate reflection and coach learning about key psychosocial coaching practices for working with adult athletes.
- Callary et al. (2020) positioned the AOSCS as a tool for **coach learning** and reflection



Considering the Individuality of Athletes

The coach considers and tailors his/her approach to each adult athlete's experiences and motives in the planning, organization, and delivery of practice.

	Time 1	Time 2
Coach:	__.	__.
Your MAs:	__.	__.

Framing Learning Situations

The coach frames learning situations for his/her adult athletes through self-discovery, problem-based scenarios, modeling, and assessments.

Coach:	__.	__.
Your MAs:	__.	__.

Imparting Coaching Knowledge

The coach enriches the learning environment by sharing his/her own relevant athletic experience, coaching knowledge, and professional coaching development.

Coach:	__.	__.
Your MAs:	__.	__.

Respecting Preferences for Effort, Accountability, & Feedback

The coach adapts his/her approach by considering how each adult athlete wishes to be held accountable for working hard and giving effort, and how they wish to receive feedback at practice.

Coach:	__.	__.
Your MAs:	__.	__.

Creating Personalized Programming

The coach considers and tailors aspects of scheduling (practices and competitions), season-long programming, and coaching support at competitions, to an adult athlete's needs and abilities.

Coach:	__.	__.
Your MAs:	__.	__.

Adult-Oriented Coaching Practices

(Rathwell et al., 2020)

Considering the Individuality of Athletes

Framing Learning Situations

Imparting Coaching Knowledge

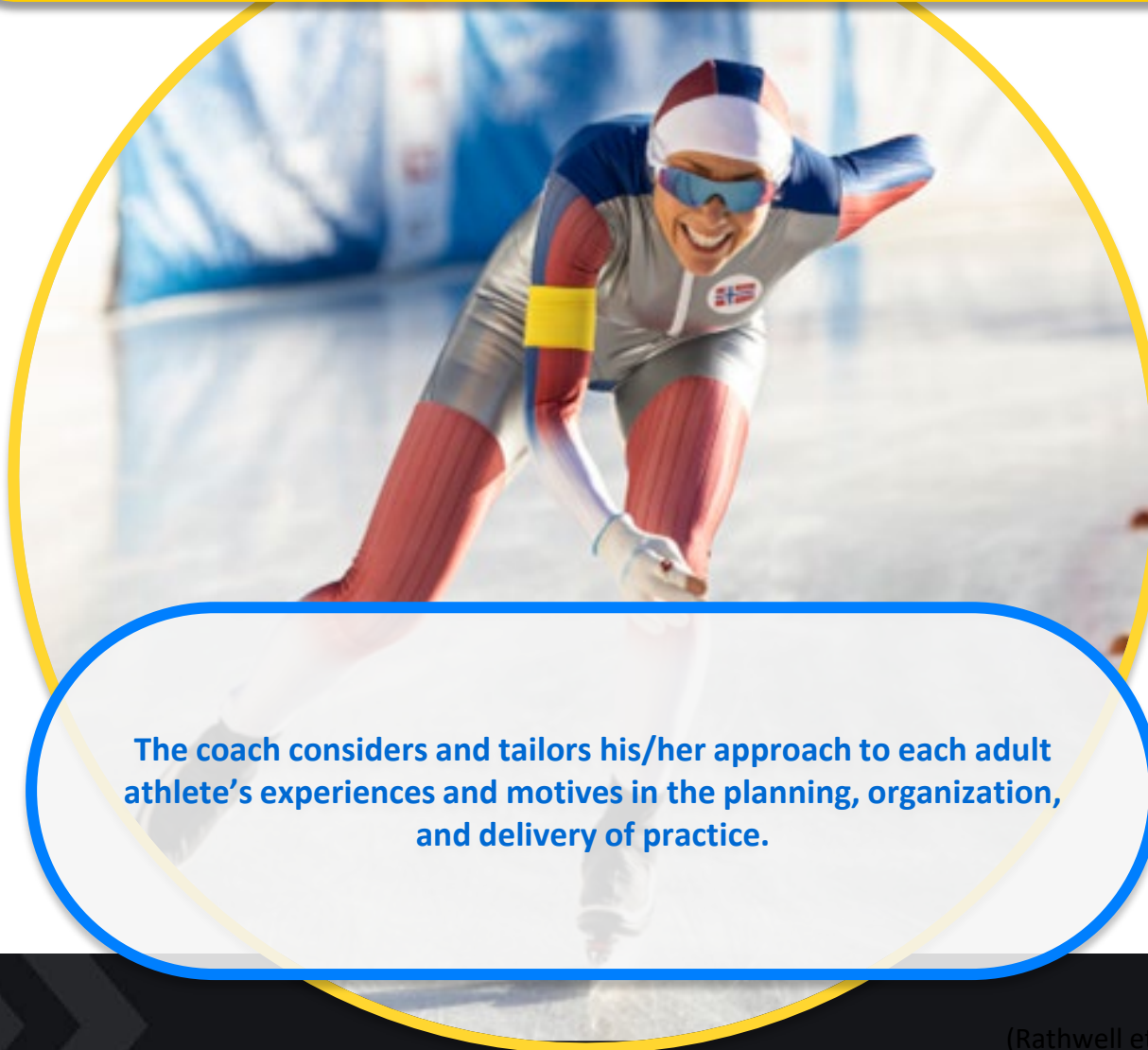
Respecting Preferences for Effort, Accountability, & Feedback

Creating Personalized Programming



1

Considering the Individuality of Athletes



The coach considers and tailors his/her approach to each adult athlete's experiences and motives in the planning, organization, and delivery of practice.



2

Framing Learning Situations



The coach frames learning situations for his/her adult athletes through self-discovery, problem-based scenarios, modeling, and assessments.



3

Imparting Coaching Knowledge

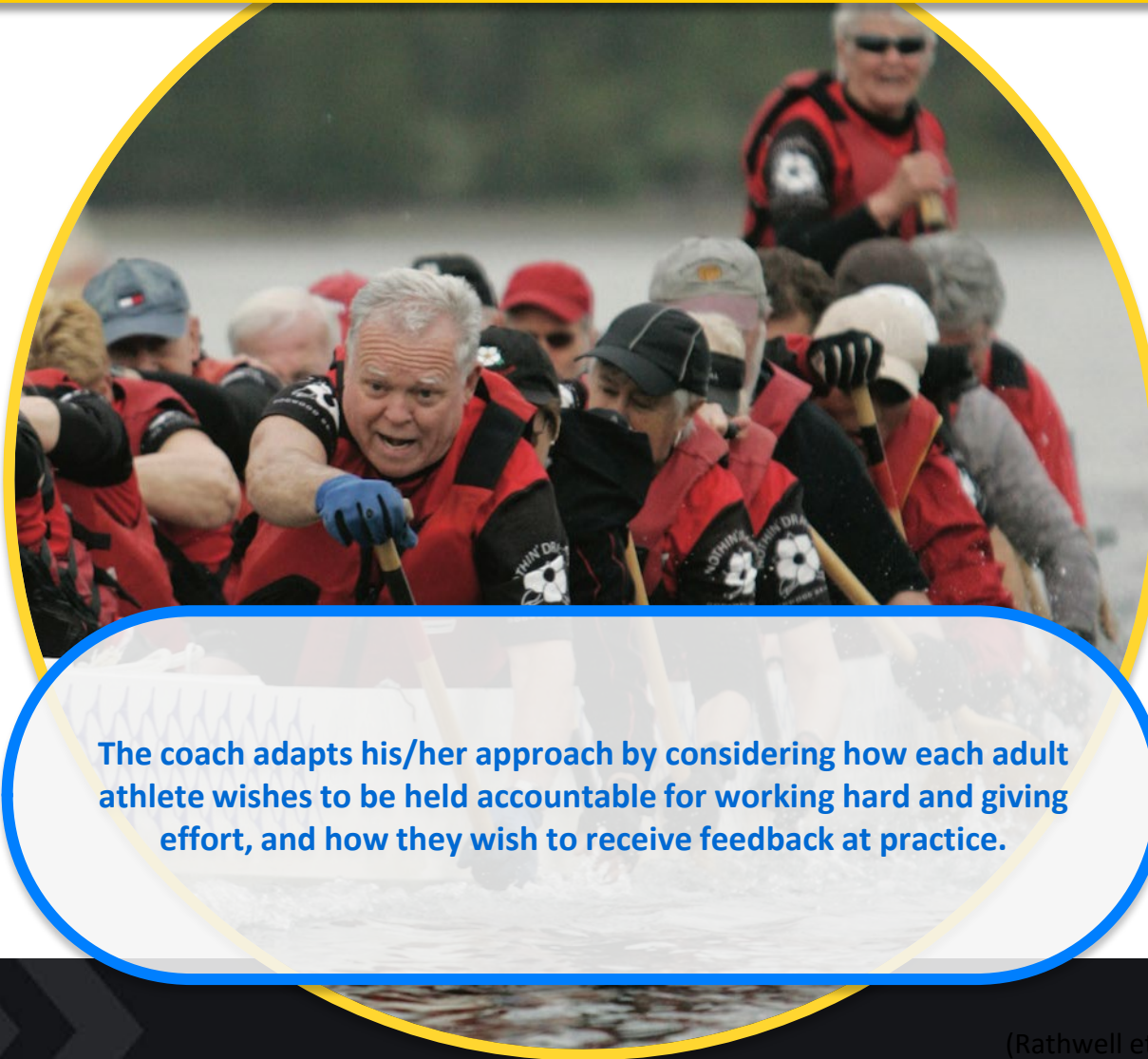


The coach enriches the learning environment by sharing his/her own relevant athletic experience, coaching knowledge, and professional coaching development.



4

Respecting Preferences for Effort, Accountability, & Feedback



The coach adapts his/her approach by considering how each adult athlete wishes to be held accountable for working hard and giving effort, and how they wish to receive feedback at practice.



5

Creating Personalized Programming



The coach considers and tailors aspects of scheduling (practices & competitions), season-long programming, and coaching support at competitions, to an adult athlete's needs and abilities.



AOSCS DEVELOPMENT

- Psychometrically valid and reliable (Rathwell et al., 2020)
- Associated with positive outcomes (Motz et al., 2019)
 - Basic Needs Satisfaction in Sport Scale (Ng et al., 2011);
 - Psychological Needs Thwarting Scale (Bartholomew et al., 2011);
 - Coach-Athlete Relationship Questionnaire (Jowett & Ntoumanis, 2004)
- Invariant across different groups of athletes (Motz et al., 2022)
- Relevant and useful to coaches (Callary et al., 2022)

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 ORIGINAL RESEARCH

The Adult-Oriented Sport Coaching Survey: An Instrument Designed to Assess Coaching Behaviors Tailored to Adult Athletes

Scott Rathwell,¹ Bradley W. Young,² Bettina Callary,³ Derrik Motz,¹ Matt D. Hoffmann,^{2,3} and Chelsea Currie^{2,3}

¹University of Lethbridge; ²University of Ottawa; ³Cape Breton University

Adult sportspersons (Masters athletes, aged 35 years and older) have unique coaching preferences. No existing resources provide coaches with feedback on their craft with Masters athletes. Three studies evaluated an Adult-Oriented Coaching Survey. Study 1 vetted the face validity of 50 survey items with 12 Masters coaches. Results supported the validity of 48 items. In Study 2, 383 Masters coaches completed the survey of 50 items. Confirmatory factor analysis and exploratory structural equation modeling indicated issues with model fit. Post hoc modifications improved fit, resulting in a 22-item, five-factor model. In Study 3, 467 Masters athletes responded to these 22 items reflecting perceptions of their coaches. Confirmatory factor analysis (comparative fit index = .951, standardized root mean square residual = .036, and root mean square error of approximation = .049) and exploratory structural equation modeling (comparative fit index = .977, standardized root mean square residual = .019, and root mean square error of approximation = .041) confirmed the model. The resultant Adult-Oriented Sport Coaching Survey provides a reliable and factorially valid instrument for measuring adult-oriented coaching practices.

The AOSCS-A is invariant across groups of age, gender, competition, and sport

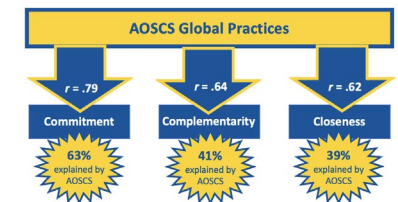
- Accurately measure the AOSCS-A across select groups of MAs
- Gives AOSCS-A users (e.g., coaches, researchers, etc.) confidence in measuring adult-oriented coaching practices irrespective of age, gender, competition level, and sport
- Allows for group-based comparisons using the AOSCS-A in the future (Motz et al., 2022)

Autonomy and Competence



Motz et al., 2019

Coach-athlete Relationship



Motz, Rathwell, Young, Hoffmann, Currie & Callary, 2019



FIRST EDITION

COACHING MASTERS ATHLETES

Advancing Research & Practice in Adult Sport

Edited by BETTINA CALLARY, BRADLEY W. YOUNG,
& SCOTT RATHWELL



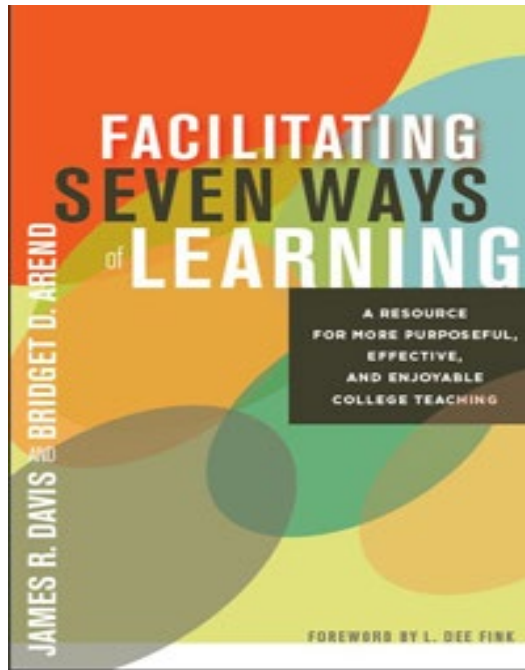
www.CoachingMastersAthletes.com

Bettina_Callary@cbu.ca



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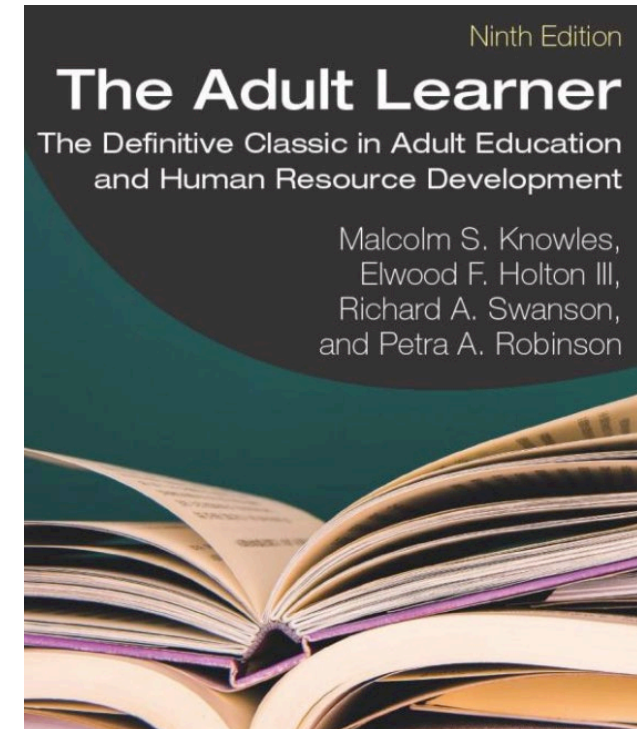
General Teaching & Learning Resources



Davis & Arend (2012)
<https://sevenwaysoflearning.com/the-seven-ways/>

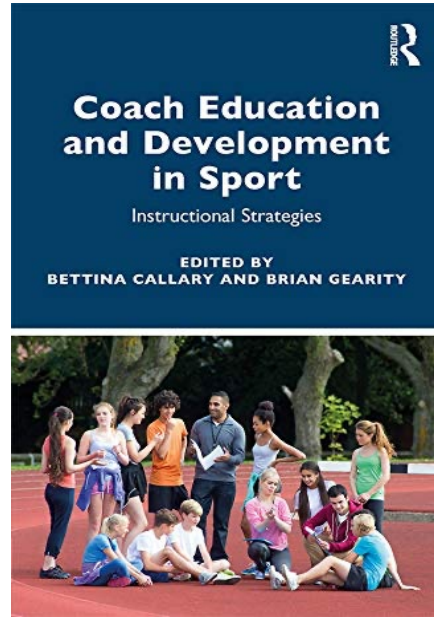
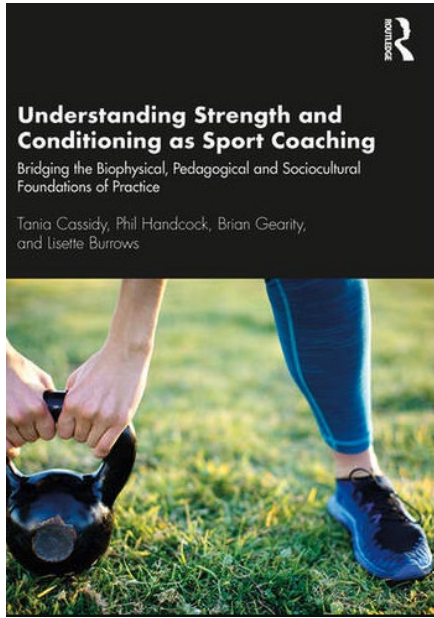


Scholarship of Teaching & Learning SoTL

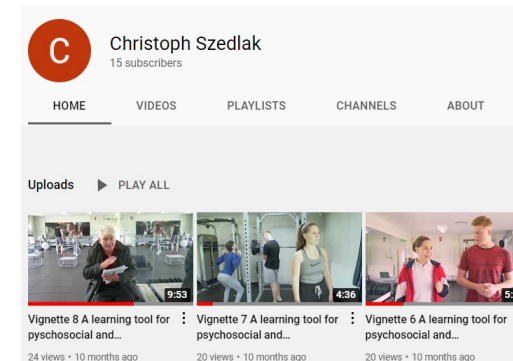


Knowles et al. 2020

Resources



Vignette 1 & 4 – Psychological
Vignette 2 & 5 – Pedagogical
Vignette 6 & 7 – Sociocultural
Vignette 3 – Philosophical & psychological
Vignette 8 – Philosophical & sociocultural



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PAR Reflections

What next?
PAR?



Educate

1. How performance & hegemonic masculinity discourse impact on coaching practice?
2. Addressing current DEI issues?

Widen collaboration



England
Rugby



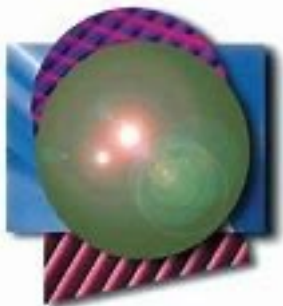
Reflections

@DrGearity DrChrisSzedlak @BettinaCallary

Where you at S&C?



**SPORT MANAGEMENT
EDUCATION JOURNAL**



Strategy & Execution



Points of Entry

1. Specific journal?
2. Funded research
3. Teacher training /
prof. dev.
4. Awards & honors
5. Conferences & Clinics



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