

The role of sport managers in the transfer of sport science to high performance coaching in Canada

Ian L. Reade,
Katie Spriggs,
Wendy M. Rodgers
University of Alberta

Funded by the University of Alberta Endowment Fund for the Future

Knowledge Transfer in High Performance Sport

- Main questions:
 - Where do coaches get their information?
 - How do coaches access information?
 - Do some coaches have better access to information
 - Sport specific differences
 - How can a sport manager improve knowledge transfer to coaches?

Foundational work:

- Pilot study of university coaches:
 - Coaches believe that
 - Relevant sport science information is available
 - Sport science information is not easy for them to access

Focus of this study:

- What are the barriers/facilitators to coaches accessing current and relevant sport science information
 - From
 - Sport scientists
 - Other coaches

Method

- Questionnaire to 500+ CIS Head Coaches in both French and English; 182 responses
 - 60% coached female teams
 - 63% over 10 years of coaching experience
 - 40% Masters' or PhD
- Brief interviews (15 minutes)
- 42 CIS coaches from across Canada
- Representing
 - 7 different sports (BB, VB, Track, Rugby, Swimming, Soccer, Hockey)
 - 35% female coaches;

Interview questions

- What new ideas are coaches using and why
- Relationship to sport scientists or mentor coaches
 - Who
 - How
 - Where
- Where coaches find information
 - Sources
 - Resources
- What difficulties/barriers they have accessing information
- What facilitates their access and application of new knowledge
- Once they find it, do they share it
- Suggestions for improvement of knowledge transfer

Knowledge Transfer

- Knowledge considered here is not limited to new knowledge
 - knowledge may have been in existence for a long period of time
 - but may be new to a coach
 - Written form
 - Verbal form
 - Other temporary forms
- Knowledge may exist in a unique and perishable form!!!

Procedures

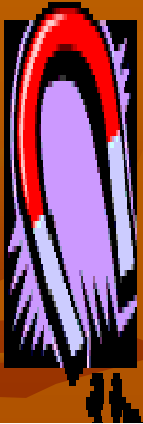
- Qualitative data were analyzed from a grounded theory perspective
- An inductive analytical process was used to identify themes
 - development of this conceptual model
- The conceptual model summarizes the key variables identified that either facilitate or inhibit
 - Coach access to sport science
 - Coach utilization/application of sport science

MOCASSIN

- Model of Coaches Acquisition of Sport Science Information
- The model employs a metaphor of iron ore as the knowledge, and a magnet as the coach
- The Common Knowledge sits near the surface where the magnet can easily attract it
- Other knowledge (ore) lies deeper and the magnetic pull must be stronger

Common Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice



Common Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas



Level of Motivation to Seek Knowledge

Conductivity Zone

Common Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas

HP Athletes demand

Level of Motivation to Seek Knowledge

Winning/success

Conductivity Zone

Common Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas

HP Athletes demand

Level of Motivation to Seek Knowledge

Winning/success

Conductivity Zone

Common Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas

Level of Motivation to Seek Knowledge

+ Accountability

Paid, evaluated



Conductivity Zone

Common Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas

Level of Motivation to Seek Knowledge

+ Accountability

Productivity Zone

Common Knowledge; 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas



Level of Motivation to Seek Knowledge

Accountability

+ Contacts – ex-athletes;coaches;academics

Conductivity Zone

Common Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas

Level of Motivation to Seek Knowledge

Accountability

+ Contacts – ex-athletes;coaches;academics

Conductivity Zone

Common Knowledge; 10% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas



Level of Motivation to Seek Knowledge

Accountability

Contacts – ex-athletes; coaches; academics

+ Environment – proximity/access

Conductivity Zone

Common Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas

Level of Motivation to Seek Knowledge

Accountability

Contacts – ex-athletes; coaches; academics

+ Environment – proximity/access

Productivity Zone

Common Knowledge 90% of Coaches Implement

Progressive Knowledge Implementation in Coaching Practice

Radical Knowledge; Newest Ideas





Level of Motivation to Seek Knowledge

Accountability

Contacts – ex-athletes;coaches;academics

Environment – proximity/access

+ Coach can translate (education+experience)

Conductivity Zone

Common Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas

Level of Motivation to Seek Knowledge

Accountability

Contacts – ex-athletes; coaches; academics

Environment – proximity/access

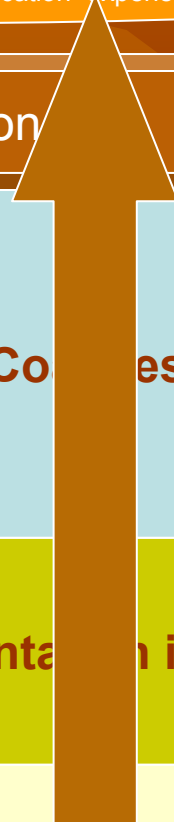
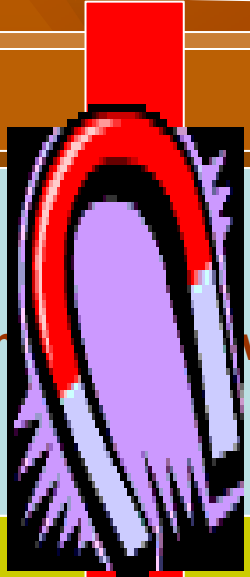
+ Coach can translate (education+experience)

Conductivity Zone

Conventional Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas





Level of Motivation to Seek Knowledge

Accountability

Contacts – ex-athletes;coaches;academics

Environment – proximity/access

Coach can translate (education+experience)

+ Coach can incorporate (education+experience)

Conductivity Zone

Common Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas

Level of Motivation to Seek Knowledge

Accountability

Contacts – ex-athletes;coaches;academics

Environment – proximity/access

Coach can translate (education+experience)

+ Coach can incorporate (education+experience)

Conductivity Zone

Conventional Knowledge: 90% of Coaching Practice

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas



Role of sport managers: supporting coach development

- What's the Conductivity Zone:
 - Funding
 - Packaging
 - Creating accountability processes
 - Motivate the coach to seek information
- Put the coach into a learning environment
 - E.g. – locate them at a University or College
 - Develops proximity between the coach and the science
- Encourage academic upgrading
- Encourage and support networking and sharing
 - Winning, recognition, job security
- Encourage and support “novelty”
 - Demonstrating application/incorporation of evidence based practice
- Develop organizational initiatives in CAC, CIS, COC

Role of organizations

- Take responsibility to support MOCASSIN
- CAC
 - Research
- CIS
 - Sharing, networking
- Universities
 - Research and dissemination



Level of Motivation to Seek Knowledge

Accountability

Contacts – ex-athletes; coaches; academics

Environment – proximity/access

Coach can translate (education+experience)

+ Coach can incorporate (education+experience)

Conductivity Zone

**Transfer is facilitated through strategic action by
sport managers and
Sport organizations**

Common Knowledge: 90% of Coaches Implement

Progressive Knowledge; 50% Implementation in Coaching Practice

Radical Knowledge; Newest Ideas

Future directions

- Empirical support for the model
 - Underway
- Implementation projects with a goal of increasing coach access to/use of sport science
 - Development of suitable benchmarks
- Modules on the premise that all knowledge is not equal; Common, Progressive and Radical sport science knowledge