NOVEMBER 2021

Canadian Disability Participation Project

The CDPP is an alliance of university, public, private and government sector partners working together to enhance community participation among Canadians with physical disabilities. The research team for this project has expertise in quality participation and coaching in disability sport.



Development of a Story-Based Practical Resource for Coaches and Coach Educators in Disability Sport

This document's purpose is to summarize Canadian Disability Participation Project (CDPP) research that uses a creative nonfiction to model and teach behaviours that foster quality sport experiences for athletes with disabilities to coaches in entry level and developmental disability sport. Specifically, we summarize research outlining the process of developing a practical learning tool that provides disability sport coaches with best practices for facilitating quality experiences for athletes with a disability.



Photo Copyright Denise Militzer/Canadian Women & Sport

Importance of Coaches

Despite the various benefits it provides, sport participation is low among persons with disabilities.^{1,2} When exposed to quality experiences (i.e., positive, satisfying, and/or enjoyable experiences),³ persons with disabilities are more likely to continue sport participation, and enjoy its benefits.^{4,5} Coaches play a key role in shaping the sport experiences of athletes with a disability, representing an important point of intervention for enhancing the quality of athletes' experiences in disability sport.

While research regarding disability sport coaching exists,⁷ little has been translated into evidence-informed interventions that develop coaches' knowledge and practice. Evidence-informed learning tools for coaches of athletes with disabilities are necessary not only for coach education, but for the potential to impact athletes' experiences and outcomes.⁶

Bridging the Gap

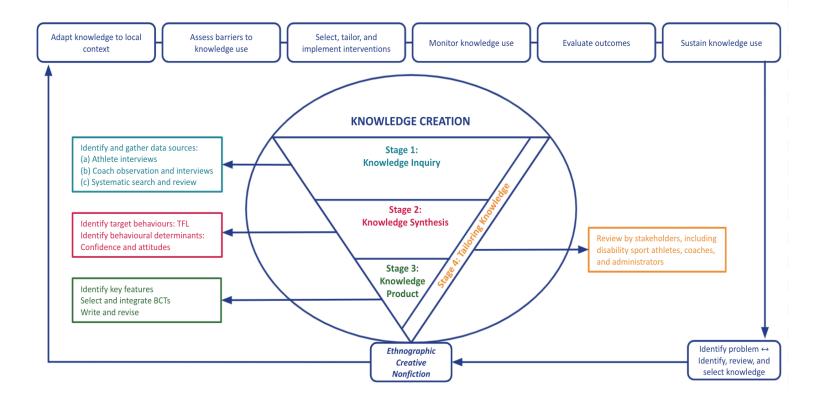
To bridge the gap between research and practice, CDPP researchers took a systematic, rigorous, and detailed approach for developing a story-based learning tool grounded in the Knowledge to Action (KTA) framework. The KTA framework includes two concepts: *knowledge creation*, which involves refining primary studies into knowledge tools or products by synthesizing existing knowledge, and the *action cycle*, which leads to the implementation of knowledge.⁸

A creative nonfiction is a story grounded in research findings and composed using the techniques of fiction that can deliver knowledge from a large body of literature.^{9, 10} The researchers chose this genre to align with the social relational model of disability – which emphasizes the subjective experiences of individuals with impairment – and to address the embodied experience of disability sport coaching.⁶ Additionally, storied forms of research have the added advantage of being accessible to individuals beyond the academic domain, including coaches and coach educators.^{11, 12}

Developing an Evidence-Informed Learning Tool

Using the KTA as a guiding framework, researchers developed a creative nonfiction in a four-stage process, outlined in the figure below. The first three stages represent *knowledge creation*, during which researchers identified relevant sources of knowledge (Stage 1) synthesized that knowledge (Stage 2), and used the synthesized knowledge to generate an initial draft of the story (Stage 3). The fourth stage represents the *action cycle*, during which a panel of stakeholders read the story and provided feedback which researchers incorporated into the story prior to unveiling a final version for dissemination and evaluation (Stage 4).

cdpp.ca



Stage 1: Knowledge Inquiry

The objective of Stage 1 was to identify relevant sources of first-generation knowledge. The researchers performed a systematic search and review of the literature, identifying 23 articles focused on quality experiences and/or coaches in disability sport. The articles represented a wide range of methodologies (e.g., focus groups, observational studies, etc.) and included athletes and coaches of athletes with physical, sensory, and intellectual disabilities.

To fill gaps in the literature, researchers conducted three original studies.

These focused on:

- a) athletes' perceptions of what constitutes quality experiences in disability sport,¹³
- b) athletes' perceptions of how coaches shape the quality of their disability sport experiences,⁶ and
- c) cases studies of effective disability sport coaches in Canada.

Participants in these studies represented a wide range of ages, disability types, sport types, and competitive levels. Collectively, researchers included 26 studies in the knowledge synthesis process. The creative nonfiction was constructed using these studies as the pool of evidence.

Stage 2: Knowledge Synthesis

The objective of Stage 2 was to identify coach behaviours and salient determinants of those behaviours that shape the quality of athletes' experiences in disability sport. In the final narrative learning tool, researchers selected 13 leadership behaviours and two behavioural determinants for inclusion.

Leadership Behaviours

Researchers synthesized the findings from Stage 1, identifying a total of 43 different coaching behaviours. Of these behaviours, 33 were associated with positive experiences/outcomes and 10 were associated with negative experiences/outcomes.

Researchers sorted these behaviours into categories corresponding to the full range leadership model, a model outlining three styles of leadership behaviours: transformational (i.e., the most active and effective leadership style), transactional, and laissez-faire.

Researchers added two additional categories to reflect behaviours not included in the full range leadership model: professional competence¹⁴ and leader toxicity. They included only transformational leadership behaviours in the narrative learning tool. In total, researchers included 13 coach behaviours that foster quality experiences for athletes with a disability.

Behavioural Determinants

Determinants most likely to influence coaches' use of leadership behaviours were also selected for inclusion in the tool. The researchers identified four determinants of coach behaviours (i.e., knowledge, experience, confidence, and attitudes), but focused on coaches' confidence (i.e., beliefs about capabilities) and attitudes (i.e., favourable or unfavorable evaluations of the behaviour and related outcomes) in the narrative tool.

Stage 3: Development of Knowledge Product

The objective of this stage was to craft an initial version of the creative nonfiction. Researchers developed the story-based learning tool to:

- a) introduce the 13 coach behaviours,
- b) increse confidence in coaches' ability to athletes with disabilities, and
- c) promote positive attitudes toward disability and disability sport.

To assist with the process of coach learning, researchers incorporated behaviour change techniques (BCTs) into the story. BCTs target behavioural determinants, enhancing the likelihood of behaviour change occurring,¹⁵ and offering a useful mechanism for improving coaches' use of target behaviours.

Key decisions regarding setting, characters, and plotline of the story were also made during this stage based on the experience of the researchers and stakeholder input. The creative nonfiction was set in the context of a para-swimming club at the developmental competitive level. Researchers developed athlete characters to reflect the complexity and nuance of these differences, while drawing on existing narratives of athletes with disabilities for guidance.¹³ The plotline of the creative nonfiction centered around an inexperienced coach, who initially lacks confidence in his abilities, learning from a mentor coach, who models transformational coaching behaviours with her athletes.

Stage 4: Tailoring Knowledge

During this stage, researchers made revisions to the initial drafts of the story using researcher and stakeholder feedback. They revised the tool multiple times until all researchers agreed the story was ready for review by a panel of 7 stakeholders. Stakeholders included two athletes with disabilities, three disability sport coaches, and two administrators in disability sport organizations who had experience overseeing coach education and development.

The story was continuously revised and reviewed until all reviewers (co-authors and stakeholders) had approved the final version. The final story-based practical resource can be found on the cdpp website.

In Summary

Using the KTA framework as a guide, researchers identified and included 13 leadership behaviours and two behavioural determinants in the development of a creative nonfiction tool. The goal of this research was to outline a systematic approach for translating knowledge from the academic world into an accessible format for disability sport coaches. We recommend coach educators and researchers use the process presented as a template to develop their own evidence-informed stories as tools for learning. Provided that stories have the potential to engage coaches and teach behaviours that will improve the quality of athletes' experiences in disability sport, our creative nonfiction represents a novel and innovative tool for developing coaches and enhancing athletes' disability sport participation.



References

- 1. Dehgansai, N., Lemez, S., Wattie, N., & Baker, J. (2017). A systematic review of influences on development of athletes with disabilities. Adapted Physical Activity Quarterly, 34, 72-90.
- 2. Sport England (2017). Active Lives Online [Active Lives Survey Analysis Tool]. Available from https://activelives.sportengland.org
- 3. Evans, M. B., Shirazipour, C., Allan, V., Zanhour, M., Sweet, S., Martin Ginis, K. A., & Latimer-Cheung, A. E. (2018). Integrating insights from the disability sport community to understand optimal experiences: The Quality Parasport Participation Framework.
- 4. Caron, J., Martin Ginis, K. A., Rocchi, M., & Sweet, S. N. (2019). Development of the Measure of Experiential Aspects of Participation for People with Physical Disabilities. *Archives of Physical Medicine and Rehabilitation*, 100(1), 67-77.
- 5. Martin, J. J. (2006). Psychosocial aspects of youth disability sport. *Adapted Physical Activity Quarterly*, 23, 65-77.
- 6. Allan, V., Evans, M. B., Latimer-Cheung, A. E., & Côté, J. (2020). From the athletes' perspective: A social-relational understanding of how coaches shape the disability sport experience. *Journal of Applied Sport Psychology*, 32(6), 546-564.
- 7. Martin, J. J., & Whalen, L. (2014). Effective practices of coaching disability sport. *European Journal of Adapted Physical Activity*, 7, 13-23.
- 8. Graham, I. D., Logan, J., Harrison, M. B., Straus, S. E., Tetroe, J., Caswell, W., & Robinson, N. (2006). Lost in knowledge translation: time for a map? *Journal of Continuing Education in the Health Professions*, 26(1), 13-24.
- 9. Ellingson, L. (2009). Engaging in crystallization in qualitative research. London, UK: Sage.

- 10. Smith, B., Tomasone, J. R., Latimer-Cheung, A. E., & Martin Ginis, K. A. (2015). Narrative as a knowledge translation tool for facilitating impact: translating physical activity knowledge to disabled people and health professionals. *Health Psychology*, 34(4), 303.
- 11. Sparkes, A. C. (2002). Telling tales in sport and physical activity: a qualitative journey. Champaign, IL: Human Kinetics.
- 12. Smith, B., Papathomas, A., Martin Ginis, K. A., & Latimer-Cheung, A. E. (2013). Understanding physical activity in spinal cord injury rehabilitation: translating and communicating research through stories. *Disability and Rehabilitation*, 35(24), 2046-2055.
- 13. Allan, V., Smith, B., Côté, J., Martin Ginis, K. A., & Latimer-Cheung, A. E. (2018). Narratives of participation among individuals with physical disabilities: A lifecourse analysis of athletes' experiences and development in disability sport. *Psychology of Sport and Exercise*, 37, 170-178.
- 14. Côté, J., & Gilbert, W. (2009). An integrative definition of coaching effectiveness and expertise. *International Journal of Sports Science & Coaching*, 4, 307-323.
- 15. Michie, S., Johnston, M., Francis, J., Hardeman, W., & Eccles, M. (2008). From theory to intervention: Mapping theoretically derived behavioral determinants to behaviour changes techniques. *Applied Psychology*, 57(4), 660-680.

This KT bulletin was prepared by Hannah Strasdin, Stephanie M. Flood, MSc, and reviewed by Veronica Allan, PhD, York University.

November, 2021 - Version 1.0

This bulletin was supported by a Partnership Grant from the Social Sciences and Humanities Research Council of Canada (grant number 895-2013-1021) for the Canadian Disability Participation Project (www.cdpp.ca).





