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*“They Believe I Can Do It!... Maybe I Can!”: The Effects of Interpersonal Feedback on Relation-Inferred Self-efficacy, Self-efficacy and Intrinsic Motivation in Children’s Sport*

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### **Project Summary**

Most children begin their formal involvement in sport around 8-10 years of age with the main reasons for participation being “having fun” and “learning and improving skills”. Yet, many children disengage from sport after only a short time with a major reason for dropping out being they were “not having fun” anymore. Many children lose motivation to participate because they doubt their abilities to improve or be successful. Because children who are learning sport skills often lack the experience and knowledge necessary to gauge how well they are doing, communication from coaches or instructors is an instrumental factor determining how competent and motivated they feel. Beliefs in our own abilities, or self-efficacy, guide what tasks we choose to do and the degree to which we persist at those tasks. Self-efficacy beliefs arise, in part, through our interactions with others, and are influenced by the perceptions we have about what others perceive our abilities to be.

All of us have had experiences during which we felt other people believed in our abilities to accomplish certain things. These people may have been parents, teachers, coaches, relationship partners or friends. Our perceptions of another person’s confidence in our abilities are called relation-inferred self-efficacy beliefs (RISE). RISE is thought to play an instrumental role in the development of self-efficacy as well as intrinsic motivation. Here, we were interested in children’s perceptions about what their coaches or instructors believe about their abilities and how these RISE perceptions might affect how children feel about themselves and their sport experiences.

We carried out three phases of research to investigate children’s RISE beliefs and the effects of interpersonal communication on RISE, self-efficacy, and intrinsic motivation. Phase 1 explored children’s perceptions about the types of interpersonal communication that influence RISE. Phase 2 investigated how providing children with RISE-relevant communication affects their self-efficacy, intrinsic motivation, and behaviour. Phase 3 looked at how sport instructors and coaches would pick up on ways to deliver RISE-based communication in their interactions with sport participants and the effects of RISE-based communication on children’s self-efficacy and intrinsic motivation in a naturalistic sport environment.

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### **Research methods**

Phase 1. Two qualitative interview studies involving 89 sport participants were carried out. The primary discussion involved children identifying specific examples of verbal and nonverbal behaviours that coaches, instructors and others (e.g., parents, peers) say or do that help them develop perceptions of RISE.

Phase 2a. Using examples of RISE communication behaviours from Phase 1, we carried out two controlled experiments. In both studies, children performed sport-relevant tasks (dart-throwing and endurance handgrip exercise). All were given generic positive encouragement and some also received RISE-based communication.

Phase 2b. Youth recreational sport participants (soccer, hockey, ringette) completed surveys about the frequency with which their coaches provided RISE-relevant communication during practices and games as well as measures of RISE and self-efficacy for playing their sport.

Phase 3. Using examples of RISE-communication behaviours from Phases 1 and 2, we developed and conducted an educational workshop designed to facilitate RISE-communication between coaches and participants. We video/audio taped coaches' behaviours during coaching sessions and surveyed participants' perceptions of RISE, self-efficacy and enjoyment before and after the workshop.

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### Research results

Phase 1. Results showed participants easily identified specific examples of verbal and nonverbal behaviours from coaches and instructors they interpreted and used to develop RISE.

- Examples include verbal interactions such as a coach saying: "I believe you can do this" and non-verbal interactions such as a coach providing opportunities to demonstrate skills or lead peers in practice.

**Conclusion: Exposing children to specific verbal and non-verbal cues may affect their perceptions of RISE.**

Phase 2a. Results showed that providing children with RISE-relevant communication in addition to positive encouragement when they are performing or learning new motor skill tasks leads to greater RISE compared to children who do not receive RISE-relevant feedback.

- For the skill-based task (dart-throwing), children who received RISE-communication reported greater RISE as well as self-efficacy for future performance. They also reported enjoying the dart task more than children who did not receive RISE feedback although there were no differences in performance.
- For the effort-based task (endurance handgrip squeezing), children who received RISE-communication reported greater RISE. Self-efficacy for future performance did not increase; however, performance on the endurance task increased dramatically compared to their earlier performances with no differences in enjoyment.

**Conclusion: Exposing children to RISE-relevant cues leads to predictable increases in RISE as well as self-efficacy, intrinsic motivation, and task persistence.**

Phase 2b. Children who reported receiving more frequent RISE-relevant communication from their coaches reported higher levels of RISE and self-efficacy.

**Conclusion: Providing more frequent RISE-relevant communication to youth sport participants may be important for developing RISE and enhancing self-efficacy.**

Phase 3. After participating in the class-based workshop, sport coaches reported greater awareness of RISE-relevant communication, stronger beliefs in the importance of providing RISE-relevant communication, and greater intentions to use RISE-relevant communication with youth participants. Video/audio data showed increases in the use of RISE-relevant communication during practice sessions that followed the workshop compared to those preceding the workshop. Children reported greater RISE and self-efficacy following their coaches' participation in the workshop.

**Conclusion: Coaches are receptive to learning and incorporating RISE-relevant communication in their coaching sessions with sport participants. Using RISE-relevant communication while instructing sport skills enhances sport participants' RISE and self-efficacy.**

OVERALL, THE RESULTS SUGGEST EXPOSURE TO SPECIFIC COMMUNICATION CUES FROM COACHES INCREASES RISE AND, IN TURN, MAY LEAD TO GREATER SELF-EFFICACY, TASK ENJOYMENT, AND TASK PERSISTENCE WHEN CHILDREN ARE ACQUIRING SPORT SKILLS IN COACHING AND INSTRUCTIONAL SPORT ENVIRONMENTS. COACHES AND SPORT CAMP LEADERS ARE RECEPTIVE TO EDUCATIONAL AND EXPERIENTIAL INITIATIVES AIMED TO ENHANCE THEIR USE OF RISE-RELEVANT COMMUNICATION WITH SPORT PARTICIPANTS.

CAUTION SHOULD BE EXERCISED WHEN INTERPRETING THE FINDINGS, AS THEY ARE LIMITED TO YOUTH RECREATIONAL SPORT PARTICIPANTS AND COACHES. IT IS NOT KNOWN HOW MUCH RISE-RELEVANT COMMUNICATION IS NECESSARY TO INCREASE RISE OR WHETHER EXCESSIVE EXPOSURE MAY HAVE DETRIMENTAL CONSEQUENCES. IT IS ALSO UNKNOWN WHETHER THE TIMING OF RISE-RELEVANT COMMUNICATION MAY BE AN IMPORTANT FACTOR AFFECTING ITS INTERPRETATION.

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### **Policy implications**

Engaging positive interpersonal experiences between coaches and athletes is an important aspect of building confidence and encouraging motivation for sport participants. Sport coach training programs should consider incorporating content (e.g., training modules, workshop activities) that educate coaches about the effects of providing RISE-relevant feedback or communication to athletes and interactive experiences (e.g., role-playing) that will give coaches confidence in their own abilities to incorporate RISE communication in their coach-athlete interactions.

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### **Next steps**

RISE perceptions are not unique to the sport environment and should be investigated in other interpersonal settings such as healthcare, rehabilitation, and education. RISE communication may be particularly influential when people are adapting to new situations or when they doubt their personal abilities to make changes or persist when they encounter challenges.

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### **Key stakeholders and benefits**

- Coaching Association of Canada
- Community Sport Programs (e.g., Minor League Soccer, Hockey, Baseball)
- Recreational Sport Camps
- Sport coach training organizations (e.g., Canadian Ski Coaches' Federation)
- Provincial/territorial teaching organizations (e.g., Ontario Teachers' Federation)