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Monitoring Activities of Teenagers to Comprehend their Habits (MATCH) Study

Project Summary

The "Monitoring Activities of Teenagers to Comprehend their Habits" (MATCH) study aims at generating a better understanding of how sport participation evolves during childhood and adolescence. In this investigation, emphasis is placed on the stratification of analyses by sport type. 843 Grade 5 and 6 children were recruited in the 2011-12 school year. Since then, participants answered questionnaires three times per year. Data are also collected from school audits, phone interviews with parents, and individual yearly interviews among a subsample of 25 participants. Follow up will continue until 2018. Although the main analyses are to come, early results show that: We were able to distinguish five different sport participation profiles among active youth. Types of sports in which youth engage are influenced by motives, basic psychological needs, school environment, school policies, various barriers as well as sports in which their parents participate.

Research Methods

A total of 837 grade 5 and 6 students were recruited in 17 New Brunswick (NB) schools. MATCH participants complete self-report questionnaires every four months from grade 5 or 6 until the end of grade 11. The initial data collection was completed in fall 2011. Questionnaires collect information on types of sports practiced and frequency, and on potential determinants of participation. Beginning in spring 2013, a sub-sample of 25 adolescents took part in individual interviews. These are repeated annually in a private room provided by schools. Parents (or guardians) of students took part in a telephone-administered questionnaire. Finally, a school environment assessment was conducted for every school in collaboration with school representatives.

Research Results

The main analyses are ongoing. Here are results from the first two years of the study:

- More boys and girls participated in non-organized (80.2% and 77.8%) and individual sports (75.6% and 80.4%) than organized (44.5% and 44.6%) and group-based sports (60.3% and 53.7%).
- Students who endorsed enjoyment motives were more likely to engage in organized sports and those with higher competence motives were more likely to participate in group-based sports as well as achieve physical activity recommendations.
- Schools with favorable active commuting environments had higher levels of participation in organized sports.
- School with policies supporting sport participation had higher levels of participating in non-organized physical activities.
- Perceived barriers towards sports were best represented as two interrelated factors representing
 internal (e.g., "I am not interested in sports") and external (e.g., "I need equipment I don't have")
 dimensions. Girls reported more external barriers compared to boys. Adolescents who were meeting
 current Moderate-to-vigorous physical activity (MVPA) guidelines reported fewer barriers than
 adolescents not meeting guidelines. Perceived internal barriers were inversely related to MVPA.

- There was a positive association between psychological need satisfaction of competence, autonomy, relatedness and MVPA. Longitudinally: as psychological need satisfaction increased over time, so does MVPA levels.
- Parents' participation in racket sports was associated with a significantly higher likelihood of youth
 participating in racket sports. There were no significant associations for the other types of physical
 activities. The probability that parents and youth participated in the same types of activities was
 moderate to high, whereas the probability that neither parents nor youth participated in a particular
 type of activity was low to moderate.
- Our first round of qualitative interviews led to the identification of five distinct sports participation
 profiles: specialists, regulars, explorers, outdoor enthusiasts, and accidentally actives. These were
 distinguishable based on preferred types of sports, commitment towards various types of sports,
 variety in types of sports practiced, and contexts in which sports are practiced (e.g., individual vs
 group, organised vs unstructured, competitive vs recreational). Participants in these profiles were also
 distinguishable based on motivation for sport participation and basic psychological need satisfaction
 of competence, autonomy, and relatedness.

Policy Implications

Recognizing the importance attributed by children to enjoyment motives, sport practitioners, schools and communities hoping to increase participation in <u>organized</u> sports should aim at making their activities interesting, fun, and stimulating.

To increase participation in <u>group-based</u> sports, interventions may need to incorporate consideration of competence motives by reinforcing skill development and enhanced performance and offering realistic and attainable challenges through sport participation opportunities.

To increase satisfaction of psychological needs (i.e. Competence, relatedness and autonomy) which in turn can increase MVPA among youth, Schools should: 1- Provide opportunities (e.g. recess, lunch) for youth to practice new skills with the help of a sport professional and encourage them to keep practicing these skills in order to become more at ease and feel more confident (competence), 2- Allow students to choose activities according to their interests. This will group together youth with similar objectives and facilitate development of relationships (relatedness), and 3- Offer opportunities for youth to choose the activity in which they want to engage without questioning their motives or trying to control the outcomes.

School environment were strongly related to sport participation, and most specifically to participation in <u>organised</u> sports. Schools and school boards could work together to implement active commuting programs, such as "Walking school bus" programs, active transportation days, and modify policies or create infrastructures that promote active commuting to school, such as allowing skateboards on school premises, offering bike racks, and ensuring that crossing guards are present at pedestrian crossings.

Parents' sport participation may have an influence on types of activities practiced by youth, especially for <u>activities that are relatively less popular</u> among youth. Communities and sport organizations should offer more opportunities for parents to be active such as adult sports teams and walking/running/biking clubs as a strategy for increasing sport participation in youth.

Internal barriers to sports appear to have a larger influence on MVPA than external barriers: Programs aimed at increasing sport participation in youth should be discussed with youth, and their barriers, specifically their internal barriers should be taken into consideration prior to implementation.

Next Steps

With recently announced renewal of funding, MATCH will be pursued for three more years. This will enable the follow up of adolescents at a critical period of behavioural shaping, when fewer individuals consolidate adherence to different types of sports. During this period we will also continue to analyse data collected so far. Among others, planned analyses will allow to:

- Describe the association between type of motive and maintenance of different types of sports in youth;
- Test if change in motives is associated with change in level of participation in different types of sports;
- Test if change in basic psychological needs satisfaction is associated with change in the practice of different types of sports;
- Explore the sport participation related experiences of participants in various types of sports;
- Better understand the processes underlying the Sport development model.

Key Stakeholders and Benefits

Information emanating from the MATCH study is relevant for a wide variety of potential knowledge users, including:

- Sport New Brunswick
- The Healthy Eating Physical Activity Coalition
- Department of Education and Early Childhood Development of the Government of New Brunswick
- Department of Healthy and Inclusive Communities of the Government of New Brunswick
- ParticipACTION
- Canadian School Boards Association
- Public Health Agency of Canada
- Active Healthy Kids Canada