

Pagani, Linda S. Ph.D.

Université de Montréal

**Kianoush Harandian M.Sc., Benoit Gauthier M.Sc., Laurie-Anne Kosak B.Sc.,
Beatrice Necsa B.A., Julie Charbonneau M.Sc., Mark Tremblay Ph.D.**

Insight Grant 2017

Extracurricular sport improves long-term chances of academic success in boys and girls

Acknowledgments/Funding sources: We would like to gratefully acknowledge the important contribution of Frédéric Nault-Brière to this research (deceased, June 2020). This work was supported by the Social Sciences and Humanities Research Council (LSP as PI, grant number 435-2017-0784) and Sport Canada Research Initiative (LSP as PI, grant number 862-2017-0009). Moreover, in addition to acknowledging the funding to these specific secondary analyses, we acknowledge the generous funding provided by the Fondation Lucie et André Chagnon, the Institut de la Statistique du Québec, the Ministère de l'Éducation et de l'Enseignement supérieur, the Ministère de la Famille, the Institut de recherche Robert-Sauvé en santé et en sécurité du travail, the Centre hospitalier universitaire Sainte-Justine, and the Ministère de la Santé et des Services sociaux du Québec. These original sponsors funded the larger public data set that constitutes the original Quebec Longitudinal Study of Child Development. Source: Data compiled from the final master file 'E1-E20' from the Quebec Longitudinal Study of Child Development (1998–2015), ©Gouvernement du Québec, Institut de la statistique du Québec.

Background. Academic attainment is associated with healthy behavior. Research has yet to provide compelling evidence that healthy behavior might also influence academic performance. As an important parental/community investment, extracurricular childhood sport intends to promote both physical/mental health. Few longitudinal studies have tested whether extracurricular sport predicts later academic success.

Objective. Using a prospective-longitudinal birth cohort of 746 girls and 721 boys, we examined the unique contribution of extracurricular childhood sport to later indicators of academic success in adolescence. We hypothesized that persistent participation would promote educational success.

Method. As a predictor, mothers reported on whether the child participated in sports or organized physical activities with a coach/instructor from ages 6 to 10 years. Developmental trajectories were then generated using longitudinal latent class analysis. From ages 12 to 17 years, youth reported on academic indicators of success over the last 6 months. These were linearly regressed on trajectories of participation in organized sport, while controlling for pre-existing and concurrent child and family confounds.

Results. Consistent participation in organized sport significantly predicted improvements in prospects for academic success from middle school onward, especially showing increments in aspirations and reductions in academic failure and dropout risk through to the senior year of high school for girls and boys.

Discussion. Consistent extracurricular sport participation in middle childhood begets later youth flourishing by improving human capital potential. As a health strategy, supporting organized/structured physical activity venues forecast improvements in population health prospects for boys and girls, potentially improving overall well-being throughout their development.

Key words: Extracurricular sport; physical activity; sport; academic achievement; child development; education; human capital.