

A Mixed-Method Longitudinal Study of Children's Swimming Competence: Testing an Integrated Health Psychology Model of Motivation and Social Cognition

Swimming is one of the most popular types of leisure-time physical activity for the general public. Being able to swim indeed opens up the opportunity for children to engage in other aquatic sports and to protect themselves against drowning for the rest of their lives. In this study, we aim to conduct a mixed-method longitudinal study to examine the long-term effects of sport competence training on children's competence, motivation, social cognitive beliefs, intention, and behavioral adherence of swimming. This longitudinal study will be derived from the Integrated Model of Self-Determination Theory and the Theory of Planned Behavior, and a mixed-method design (with both quantitative and qualitative assessments) will be adopted to formally examine the effects of sport competence on the pathways and variables of the Integrated Model. In particular, 179 child participants (age 5 to 9 year-old; sample size estimated by statistical power analysis for structural equation modeling) who have recently taken part in a learn-to-swim program either in registered swimming club/ government swimming classes, or with certified swimming instructors. They (under the assistance of their parents/guardians) will be asked to complete a survey with validated scales of the Integrated Model, and analysis of their body dimension/ composition at baseline, 3-month, and 12-month. A sub-sample (with approximately 25 parent-child dyads) will take part in a guided qualitative interview at 12-month follow-up. The quantitative data in our study will be analyzed by partial least square structural equation modeling. The qualitative data will be analyzed by thematic content analysis. The findings will not only reveal the predictive power of the integrated model and the effects of sport competence training on children's sporting experience, but they also offer critical insights of how personal and external factors facilitate or impair children's sport competence and experience in sport. Overall, this mixed-method project will produce original and important data that will enrich the understanding of the long-term psychological and behavioral impacts of sport trainings on children's sport participation. The findings will have substantial social, cultural, and public health values.