FACTORS INFLUENCING IMPLEMENTATION OF PHYSICAL ACTIVITY INTERVENTIONS IN YOUTH-SERVING ORGANIZATIONS

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ABSTRACT

In the past decade, numerous interventions have been developed and tested to increase physical activity in children and adolescents. Among these interventions, those that reported higher levels of program implementation appear to have better program outcomes. However, relatively little is known about the specific factors that contributed to successful implementation in youth physical activity interventions. The overall purpose of this dissertation was to identify a set of core factors that are most important in explaining implementation of physical activity interventions in youth-serving settings. Three studies, a cross-sectional expert panel study and two prospective observational studies, were conducted to address the purpose of this dissertation.

In the first study, an expert panel was convened to identify factors that are most important in achieving successful implementation of physical activity interventions in youth-serving organizations. Five recognized experts participated in a four-round, modified Delphi process to identify factors related to implementation of youth physical activity interventions, and quantify the importance of the identified factors. Experts’ opinions were translated into Bayesian predictive models for factor selections. These processes resulted in a final list of 15 factors, in which five factors were classified as organizational characteristics, six factors as implementation process, two factors as
provider characteristics, and two factors as program characteristics and community-level factors, respectively.

In the second study, Bayesian path analyses were used to examine the direct and indirect effects of preschool characteristics, teacher characteristics, and quality of implementation processes on level of implementation of a previously completed physical activity intervention undertaken in 17 preschool classrooms. The only significant association was the direct effect between preschool characteristics and level of implementation. In the third study, Bayesian path analyses were employed to examine the direct and indirect effects of organizational characteristics, wellness team characteristics, and quality of implementation processes on level of implementation of a previously studied physical activity intervention carried out in 29 residential children's homes (RCHs). Results revealed that organizational characteristics and wellness team characteristics are directly associated with level of implementation. However, quality of implementation processes was neither directly nor indirectly associated with level of implementation.

Overall, this dissertation found consistent evidence supporting the direct contribution of organizational characteristics in achieving successful implementation of physical activity interventions in youth-serving organizations. However, effects of provider characteristics and quality of implementation processes on level of implementation appear to vary across interventions with different design, at different implementation stages, and in different implementation settings.