



**To:** Transport Planners

**From:** Adrian Davis

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**Subject:** School Travel Toolbox: No 11 Do Interventions to Increase Walking Work?

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*Top line:* Walking interventions, particularly those conducted in the school environment, have the potential to increase physical activity in children and adolescents. Particular behavior change techniques proved successful.

Physical activity (PA) levels decline as children move into adolescence, with this decline more notable in girls. As a consequence, many young people are failing to meet current PA guidelines. Walking has been a cornerstone of PA promotion in adults and may provide an effective means of increasing PA levels among younger people. In addition to the role of PA in energy balance, regular PA has been associated with a number of health benefits for children and adolescents, including improvements in skeletal health, mental well-being and indicators of cardiorespiratory and metabolic health. Higher levels of PA and, more specifically, moderate to vigorous intensity physical activity (MVPA) has been associated with improvements in cardiometabolic risk factors, as well as several positive mental health outcomes such as lower levels of anxiety and depression in adolescents.

In a Review which asked whether interventions to increase walking work?, a Systematic Review found twelve studies.<sup>1</sup> The majority assessed interventions delivered within an educational setting, with one study conducted within the family setting. Nine of the included studies reported significant increases in walking in intervention groups versus controls. Eleven categories of behaviour change techniques (BCTs) were employed across interventions. Commonly employed BCTs within successful interventions included goals and planning, feedback and monitoring, social support and repetition and substitution. The researchers reported that the review has identified, for the first time, a number of BCTs that may be effective in promoting walking in this population and that should be utilized by practitioners working to promote PA and included in future interventions to fully assess their effectiveness.

The systematic review highlights that walking interventions may provide an effective means for increasing walking behaviours in younger populations, at least in the short term. The majority of school-based walking interventions were shown to be effective at increasing walking in both children and adolescents. Of the 12 studies included, nine reported increases in walking as a result of the intervention. Specifically, active travel to school interventions have been shown to increase levels of walking in children; however, a lack of studies in adolescents has been highlighted, which may represent a possible focus for future policy in relation to the promotion of active travel to school, particularly within secondary schools. Such findings have implications for those involved in the promotion of PA in this age group. Schools/ teachers can play a key role in providing further opportunities for walking within the school environment, in addition to active travel. Furthermore, this review has highlighted the importance of targeting interventions, either by age or sex.

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<sup>1</sup> Carlin, A., Murphy, M., Gallagher, A. 2016. Do Interventions to Increase Walking Work? A Systematic Review of Interventions in Children and Adolescents, *Sports Medicine*, 46:515–530.