



Influences on Children's Activity

Regular physical activity in childhood has important health consequences. It contributes to positive mental and physical well-being. It helps maintain a healthy body weight. It may also reduce the risk of a range of adult chronic diseases—many of which develop slowly and insidiously from their origins in childhood.

With all these benefits, great efforts have been made over the years to help children and youth be more active and fit. Motivation is the key, and doing it right comes from knowing the “triggers.”

James Sallis and colleagues, in a review article in *Medicine & Science in Sports & Exercise*, put it this way: “To develop effective physical activity interventions in youth, influences on, and determinants of, activity levels need to be well understood.” These are nicely summarized by Sallis and others in the research literature and in Sallis and Owen's recently published book, *Physical Activity and Behavioral Medicine*.

Correlates of Physical Activity

Sallis's review article examined 108 studies, evaluating 40 variables for children (ages 3–12) and 48 variables for adolescents (ages 13–18).

Variables were only considered in their analysis if they had appeared in three or more of the studies reviewed. Variables were grouped as follows: demographic and biological, psychological, behavioural, social, and physical environment.

If a correlation between the variable and physical activity was established in:

- fewer than 34% of studies, no association was deemed to be present;
- 34–59% of the studies, this meant an indeterminate association;
- more than 60% of the studies, a positive (or negative) association was recorded.

Findings of many of the studies were inconsistent. Nevertheless, there are many significant correlates in both the children and adolescent populations worth considering.

Working with Children

Fifty-four studies were examined, with the mean number of variables considered being 5.9. About 60% of reported associations were statistically significant.

The following modifiable variables were positively associated with physical activity: intention to be physically active, preference for physical activity, healthy diet, previous physical activity, access to facilities and equipment, and time spent outdoors.

The most consistent negative correlate was perceived barriers to physical activity. Parental physical activity was examined in 29 studies, with 38% showing a positive association—thus ranking it as indeterminate in the analysis.

Understanding Adolescents

The review for this age group involved 54 studies as well. The mean number of variables examined was 7.4; 62% of variables had statistically significant associations.

Modifiable psychological and behavioural variables positively associated with physical activity were: achievement orientation, perceived competence, intention to be active, “sensation seeking,” previous physi-

cal activity, and participation in community sports. Social/cultural and physical environment variables with a positive association were: parental support, support from “significant others,” physically active siblings, and opportunities to exercise.

Negatively correlated with physical activity were depression and being sedentary after school and on weekends. Parental physical activity was significant in only 33% of the studies.

Keys to Success

The determinants discussed here are correlated with physical activity and may have a causal effect on participation. Professionals designing youth activity programs are encouraged to create programs that attempt to change the most consistent correlates.

Non-modifiable determinants include age, gender, and ethnic background. These determinants help to identify groups at increased risk of inactivity and, in turn, guide motivational and programming efforts. This includes focusing on early adolescence, when there is a precipitous drop in participation, being sensitive to the specific needs and interests of girls, who are generally less active than boys, and providing adequate opportunity for children in minority ethnic groups.

Addressing modifiable determinants will have a real impact, too. Sallis and Owen confirm this, saying, “Interventions that provide enjoyable activities that build perceptions of competence or self-efficacy, reduce perceptions of barriers, stimulate parental assistance, and increase the time that children spend outdoors will be relatively effective.”

For More Info ...

Sallis, J.F., Prochaska, J.J., & Taylor, W.C. (2000). A review of correlates of physical activity of children and adolescents. *Medicine & Science in Sports & Exercise*, (32) 5, 963–975.

Sallis, J.F., & Owen, N. (1999). *Physical activity and behavioral medicine*. Thousand Oaks, CA: Sage Publications.

Theory into Action

School and community efforts must strongly support regular physical activity for children and youth. Here are some key steps:

- In school programs, promote lifetime physical activities, particularly those that can be done alone or with one other person.
- In the community, provide safe, clean, accessible outdoor play spaces for younger children and accessible, enjoyable activity programs for youth.
- Encourage parents to make sure their children get at least one hour of physical activity every day.

