

Reliability and Validity of the Modified Chinese Version of the Children's Leisure Activities Study Survey (CLASS) Questionnaire in Assessing Physical Activity Among Hong Kong Children

Y.J. Huang, Stephen H.S. Wong, and Jo Salmon

This study aimed to examine the reliability and validity of the modified Children's Leisure Activities Study Survey (CLASS) Chinese-version questionnaire in assessing physical activity among Hong Kong Chinese Children. Test-retest reliability was examined in 84 boys and 136 girls aged 9–12 years by comparing data from two administrations of the survey conducted one week apart. Validity was determined by comparing data from the second administration with accelerometer estimates. The results suggested that the questionnaire provided reliable and valid estimates in overall physical activity patterns in Hong Kong Chinese children. However, substantial overestimation was observed in vigorous activity.

Accurate assessment of regular physical activity is essential for discerning the link between physical activity and health outcomes, for monitoring of physical activity recommendations, and determining the effectiveness of promotion strategies in a variety of populations (36). However, obtaining reliable and valid estimates of habitual physical activity behavior remains to be the major challenge in research with children and adolescents. A number of methods of physical activity assessment have advantages and limitations in terms of cost, validity, and practical concerns in free-living situations (22). Self-report instruments continue to be the most commonly used methods for physical activity measures in large population studies because of the low cost and burden brought to the participants (23). Furthermore, self-report instruments may provide valuable information on multiple dimensions of physical activity, i.e., frequency, type, duration, and contexts in which the activity is performed that is not available from other methods.

A variety of self-report questionnaires have been developed specifically for children and adolescents in the last few decades. The instruments vary in the type of administration (self-completed, interviewer-administered, or computer-assisted), the period of recall (usual activity, weekly activity or 1- to 7-d recall),

Huang and Wong are with the Dept. of Sports Science and Physical Education, The Chinese University of Hong Kong, Hong Kong, China. Salmon is with the Center for Physical Activity and Nutrition Research, School of Exercise and Nutrition Sciences, Deakin University, Burwood, Australia.