P1-7: The Children’s Computerized Physical Activity Recall (C-CPAR): Test-Retest Reliability and Usability in a Diverse Group of 7th-9th Grade Adolescents

Author List:
Presenting Author: Patricia F. Pearce
Additional Author: Justine J. Reel, Jacquelyn W. Blaz, Sarah J. Iribarren, Sonya SooHoo

Presenting Author: Patricia F Pearce
Address: 1701 University Blvd.
Birmingham, Alabama 35294-1210
United States
Ph: 205-541-8988
Fax:
Email: ppearce@uab.edu
Institution: University of Alabama at Birmingham

Additional Author: Justine J Reel
Address: University of Utah College of Health, 1901E. South Campus Dr. #2120
Salt Lake City, Utah 84112
United States
Ph: 801-581-8114
Fax:
Email: Justine.Reel@hsc.utah.edu
Institution: University of Utah

Additional Author: Jacquelyn W Blaz
Address: University of Utah College of Nursing, 10 S. 2000 East
Salt Lake City, Utah 84112-5880
United States
Ph: 801-793-5704
Fax:
Email: Jacquee.Blaz@nurs.utah.edu
Institution: University of Utah

Additional Author: Sarah J Iribarren
Address: University of Utah College of Nursing, 10 S. 2000 E.
Salt Lake City, Utah 84112-5880
United States
Ph: 801-661-0990
Fax:
Email: Sarah.Iribarren@nurs.utah.edu
Institution: University of Utah
Abstract:

Introduction: The Children’s Computerized Physical Activity Reporter (C-CPAR) is a computerized questionnaire designed for 24-hour self-reported physical activity, with content and format created with children, for children. This presentation is to report C-CPAR reliability, validity, and usability from a descriptive psychometric study.

Method(s): The convenience sample of adolescents (N=155; mean age= 13.2 years; 7-9th grades) in a public school-based study participated. Ethnicity was: Caucasian (n=71; 46%), Hispanic (n=61; 39%), African-American (n=11; 7%), Native American (n=8; 5%), Asian (n=3; 2%), Pacific Islander (n=1; 1%). Randomized into four groups, each participant completed one of four sequences of questionnaires (paper-based PDPAR and C-CPAR) over 5-days, including completion of two 24-hour-recalls daily for four days (Days 2-5), while wearing accelerometers (Actical) over 5 days. Each completed a 4-item, Likert-scale usability questionnaire.

Results: Eighty-five percent of reported activity items were sedentary or low energy expenditure activities. Moderate, significant correlations were positive between total C-CPAR activities reported (ICC=0.73; 0.64-0.80), and total minutes moderate to vigorous activity (ICC=0.69; 0.59-0.78). Children completed the C-CPAR quickly (mean=13 minutes) and wore the accelerometer without difficulty. Comments about the C-CPAR ease of use, efficiency, and content were positive.

Discussion & Conclusions: This study demonstrates moderate preliminary test-retest reliability and validity, and high usability. The most common technique for assessing physical activity is self-report questionnaire, but psychometric data are equivocal. A reliable, valid, and usable self-report tool is essential for researchers and clinicians in order to understand physical activity of children. A computerized physical activity recall such as the C-CPAR streamlines data collection and provides a questionnaire using technology that is familiar to children and adolescents, and that they like to use. The C-CPAR could be used for assessment and intervention in clinical practice, or for research studies in which self-reported physical activity is useful.
Abstract History:
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

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No, I (or a member of my immediate family) have not received something of value* from or own stock (or stock options) in a commercial company or institution related directly or indirectly to the subject of my presentation.

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ppearce@uab.edu