

March 1993

To: Potential users of SPARK physical activity self-reports

From: James F. Sallis, Ph.D.

Re: Use and scoring of measures

This packet contains the surveys used in the following study: Sallis, J.F., Condon, S.A., Goggin, K.J., Roby, J.J., Kolody, B., & Alcaraz, J.E. (1993). The Development of Self-Administered Physical Activity Surveys for 4th Grade Students. Research Quarterly for Exercise and Sport, 64, 25-31.

These surveys were designed to be implemented in the classroom to 4th and 5th grade children. While they may be useful in assessing older children, they should not be used with younger children.

Table 1 in the article describes the measures that are enclosed, but the number on the forms does not match the numbers in the table. The Yesterday Activity Checklist is labeled Form 3. The Weekly Activity Sum is labeled Form 1. The Weekly Activity Checklist is labeled Form 4. The 7-Day Tally is Form 5.

We recommend using only the Yesterday Activity Checklist or the Weekly Activity Checklist. Each of these showed some evidence of validity, while the others showed no evidence of validity. Though the administration may take a little longer, the Weekly Checklist is preferred because it provides some measure of frequency of participation. If the Yesterday Activity Checklist is chosen, it must be administered on several separate days to provide a reasonable estimate of habitual activity for any individual child. If you just want to compare one group against another, a one-day sample may be sufficient.

The list of activities was developed for use in Project SPARK in Southern California. The most common activities will be different for other geographical areas, and within one area, activities may vary by season. Before using either form, you should interview children of the targeted group to determine which activities should be deleted and which should be added.

We have arranged the activities in groups of low (scored 3 METS), medium (scored 5 METS), and high intensity (scored 9 METS) activities. You should consult a standard reference to classify any activities you add to the list. (I recommend Ainsworth, B.E., et al. (1993). Compendium of Physical Activities: Classification of Energy Costs of Human Physical Activities. Medicine and Science in Sports and Exercise, 25, 71-80.)

To score the surveys, simply multiply the frequencies of each activity by the appropriate MET value, and sum the products. You will come up with a score that is technically METs per 15 minutes, but it should be considered an arbitrary score.

Enclosed is a copy of a Yesterday Activity Checklist with the script used during classroom administration. This should be modified if you are using the Weekly Activity Checklist. This version asks children to write an "H" if the activity feels hard. Our analyses have not found that this additional piece of information adds to the correlation with the accelerometer, and the "H" was not used in the analyses reported in the RQES paper. Therefore, it is not necessary to collect this piece of information, which will simplify the administration.

In administering any of these surveys it is important to:

1. Train interviewers thoroughly and listen to them role play
2. Have interviewers practice on some children before collecting actual data
3. Observe interviewers doing practice administrations or listen to tape recordings to check their technique
4. Tell children the purpose of this survey
5. carefully define the time frame children are being asked to recall. We were only interested in activities done outside of school, but for your study you could ask them to recall the whole day.
6. Conduct a short training in time estimation. This is essential to reduce gross distortions in time estimates, but a brief training will not produce accurate time estimates.
7. Tell students it is OK if they did no activities, and do not look on anyone else's paper
8. Have one person circulate around the room, looking at papers, to make sure students understand the instructions and to answer questions.

We would be happy to receive any formal or preliminary reports of data collected using these surveys. Thank you for your interest in our work.