1. Purpose of Data Collection:

SAPAC stands for Self Administered Physical Activity Checklist. It helps investigators to collect information from students about their participation in various physical activities and selected sedentary activities during a school

In CATCH III, SAPAC was administered three times, once each at grade 6, 7, and 8. The SAPAC form, with variable labels, is attached at the end of the data documentation. For more detail please refer to the CATCH III procedures manual.

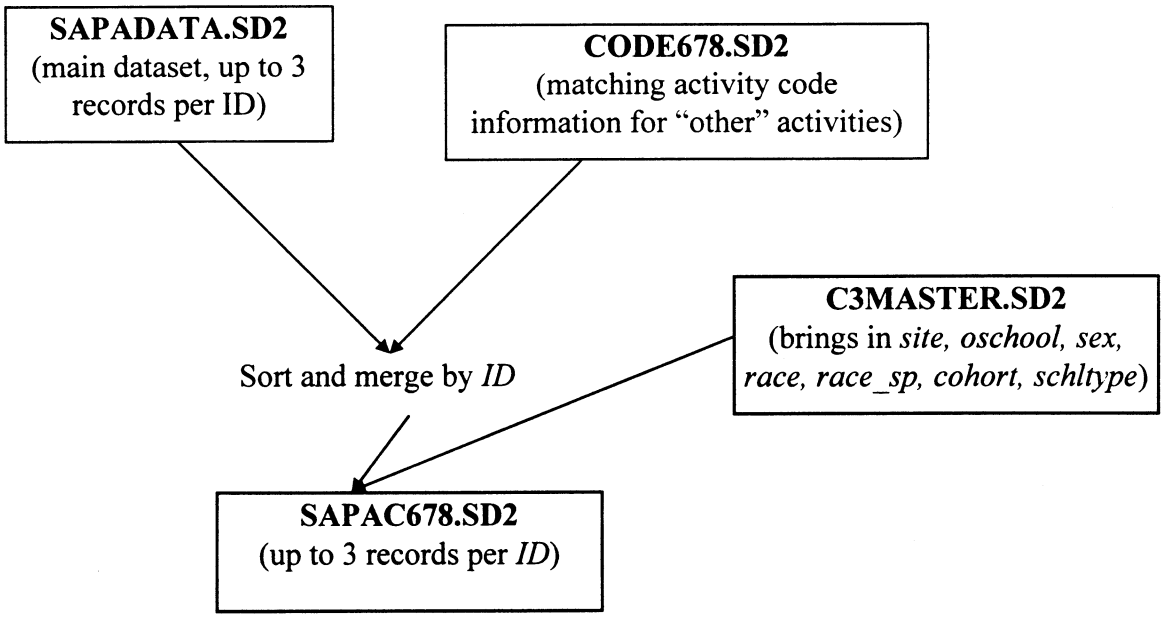
2. Structure of the SAPAC data set:

The original SAPAC file **sapadata.sd2** consists of information students reported on the SAPAC data entry form and contains up to three records per ID. The final SAS data set **sapac678.sd2**, was created by merging sapadata.sd2 and **code678.sd2**, a small SAS data set which contains coding information for "other" activities for grade 6,7 and grade 8. This step allows the minutes in "other" activities to be accounted for in all the "computed" minutes in the final data file. Student characteristics such as sex, race, type of intervention were also brought in from the master data set **c3master.sd2**. The final SAPAC data set, **sapac678.sd2** contains up to 3 records per student. Not all students completed SAPAC at all three grades. The student is included in the dataset as long as they completed at least one SAPAC form.

Main steps in creating the final SAPAC dataset are shown in the following diagram. More details can be found below as well as in the attached SAS LOG file: sapac678.log.

Steps in Making the SAPAC Data set for Documentation Purpose

All data sets are stored in *s:\catch\minhua\data directory*



Note: Bold typed letters indicate data set names. Italicized letters indicate variable names.

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Notes on creating the final SAPAC data set-**sapac678.sd2:**

The creation of the final SAPAC file started with the SAS data set **sapadata.sd2,** which was converted directly from the Dbase file sapadata.dbf by DBMS/copy. This dataset stored the original data information from data entry. All the variables from the SAPAC form were kept in this data set, with a total of 12237 records and 197 variables. Out of 12237 SAPAC students(include repeated counts) from the three grades, 11557 attended school the previous day, indicated by a value of 2(Yes) in the variable ATTEND. The other SAS data set, **code678.sd2** stored coding information for "other" physical activities reported by the students. This data set contained only student ID, the activities they specified in sapadata.sd2(variables B25_SP, B26_SP, B27_SP) and a numeric code for each of these activities supplied by CATCH physical activity specialists. The codes identified which of the 24 listed activities the "other" activity was most closely matched to. For example, one value in field B25_SP was "wrestling with brother" , and the code for it in code25 was 15, which meant that it was the equivalent of activity 15 "active games" on the SAPAC form. The time spent on this activity was then accounted for in the computed minutes for activity 15("MINS15"). There were a number of activities whose codes were zero, indicating that these did not count as physical activities, such as "washing hair" or "playing piano". The codes were assigned missing values if a student did not specify any other activities.

The final data set **sapac678.sd2** was a result of merging **sapadata.sd2** first with **code678.sd2**, by ID, and then with c3master.sd2 to bring in characteristics such as sex, race, site, schltype(type of intervention), and oschool(original school at baseline). A number of new variables were created. The first set of variables were created to describe the individual activities, such as MET1 to MET27, MINS1 to MINS24, and PRATE1 to PRATE24. The METs variables, MET1 through MET27, were physical activity group/category codes for activity 1 through 27, ·pectively, and reflects the energy cost of activities. These were taken from a published compendium by Ainsworth. ɔ reference 1). Similarly, MINS1 through MINS24 were total computed minutes spent in the whole day on activity 1(bicycling) to 24(running). Minutes spent on student-specified activities 25 through 27 were added to the total minutes in activity 1 to 24 which they matched to, based on variables CODE25 to CODE27. As a result the minutes spent on activities 25 to 27 were 0 and it was not necessary to create MINS25 to MINS27. In addition, based on MINS1 to MINS24, a participation indicator was created with values of 1(yes) or 0(no) for each of the twenty one activities. If a student spent more than 0 minute on an activity his participation indicator had a value of 1. The second set of new variables were summed minutes of the 24 activities by time period, before, during and after school, or by intensity category or both. There were two ways of classifying by intensity category: by breathing intensity or by the range of METs. An example of variables based on breathing category reported by students was MODMINS, which was the sum of minutes of all activities where the student reported breathing hard "some" of the time. An example of variables based on METs was LMETMINS(light MET minutes), which was sum of minutes spent on activities whose METs are less than 4.5. Variables like TOT_MINS(total minutes), BEF_TOT(before school minutes) and SEDMINS, SEDHOURS were total computed minutes combining time spent on all 24 activities. All new variables created are explained in more detail in the table below:

Table 1. New variables created in **sapac678.sd2.**

Variables created	Definition	How variables were created
CODE25 to CODE27	matching activity code for activity 25 to 27	filled in by CATCH physical activity experts
MET1 to MET27	METs of activity 1 to 27	taken from compendium by Ainsworth et. al[1]
MINS1 to MINS24	total computed minutes spent in a day on activity 1 to activity 24, respectively	e.g, MINS1: sum of before, during, after school minutes in activity1(b1a, b1c, b1f) and activity 25 to 27 if their codes are 1.
PRATE1 to PRATE24(binary)	participation indicator in activity 1 to 24	If students did activity I then the value of pratei is 1, otherwise 0.
BEF_TOT, DUR_TOT, AFT_TOT	total computed minutes of physical activities before, during and after school, respectively	by summing up b1a, b2a, to b25a for before school, b1c to b27c for during school, and b1f to b27f for after school minutes.
TOT_MINS	total computed minutes of physical activities for the day	
BEF_LMET, DUR_LMET, AFT_LMET, LMETMINS	before, during, after school and total light MET minutes	light MET minutes are minutes on activities where METs < 4.5.
BEF_MMET, DUR_MMET, AFT_MMET, MMETMINS	before, during, after school and total moderate MET minutes	sum of moderate MET minutes on activities where 4.5<= METs < 6.
BEF_HMET, DUR_HMET, AFT_HMET, HMETMINS	before, during, after school and total heavy MET minutes	heavy MET minutes are minutes on activities where METs >= 6.0.
BEF_LGT, DUR_LGT, AFT_LGT, LGTMINS	before, during, after school and total light minutes	sum of light minutes- minutes on activities where students reported breathing hard "none" of the time.
BEF_MOD, DUR_MOD, AFT_MOD, MODMINS	before, during, after school and total moderate minutes	Moderate minutes are minutes on activities where students reported breathing hard "some" of the time.
BEF_VIG, DUR_VIG, AFT_VIG, VIGMINS	before, during, after school and total vigorous minutes	sum of vigorous minutes-minutes on activities where students reported breathing hard "most" of the time.
MV_MINS	moderate to vigorous physical activity minutes	sum of MODMINS and VIGMINS
SEDHOURS, SEDMINS	total minutes reported on TV/video and video games	Sum of minutes on TV and video games before and after school

References:

1. Ainsworth, B.E., Haskell, W.L., Leon, A.S., Jacobs, D.R., Montoye, H., Sallis J.F., and Paffenbarger. R. S. Compendium of physical activities: Classification of energy costs of human physical activities. Med. Sci. Sports Exerc. 25: 71-80, 1993.

Note for Statistical Analyses:

Please note that usually, in the statistical analyses, those students who did not attend school were excluded, since SAPAC is designed to collect information for a typical school day. In addition, those with more than 630 total minutes of physical activities for the day(extreme values) were also excluded. For sedentary minutes, more than 720 minutes a day were considered extreme minutes.