TAAG IMPLEMENTATION OF INTERVENTION DERIVED VARIABLE DICTIONARY

The primary objective of TAAG process evaluation was to determine if intervention goals were met. Intervention goals were defined in terms of fidelity, or the consistency between the established protocols and implementation; and reach, the level of participation in the intervention components. Fidelity goals were 100% for delivery in the intervention by TAAG staff to teachers, and 80% fidelity for delivery by teachers to the students. Reach goals were for 100% of girls to receive TAAG PE and health education, 60% to participate in the health education activity challenges, and for TAAG physical activity programs to systematically increase by at least 5% each semester (See Young, Steckler, Cohen et al, 2007. Process Evaluation Results from a School- and Community-Linked Intervention: The Trial of Activity for Adolescent Girls (TAAG)).

This document contains only the process evaluation variables that have been derived by the Coordinating Center in response to data analysis requests for manuscripts to date. Variables in this dictionary are limited to the 18 intervention schools, and are derived using process evaluation data from teacher questionnaires, classroom observations, student participation logs, and information on program participation. Data for variables labeled as "Year 1" were collected during 2003-2004, during which the baseline sample of sixth-graders was in the 7th grade. Data for variables labeled as "Year 2" were collected during 2004-2005, during which the baseline sample of sixth-graders was in the 8th grade. Year 3 data was collected after June 30, 2005 for the 2005-2006 school year. In Year 3 Program Champions took over the implementation of the intervention, and as a result the data collection instruments were revised to be applicable to the Program Champion-directed intervention, so that the variables available for assessing implementation in Year 3 were not always comparable with variables derived for years 1 and 2. New measures of HEAC implementation and program participation were derived for Year 3. This document will be updated as new variables are added.

Another process evaluation derived dataset, DERWSHOP, contains derived variables measuring dose and reach based on attendance logs for TAAG school staff development workshops.

TAAG Implementation of intervention variables derived from Process Evaluation data Data Dictionary

N = 18 Intervention schools

ID School ID

TMT Treatment Assignment (C/I) - all schools in this dataset are coded I

PHYSICAL EDUCATION IMPLEMENTATION

PE_IMP1 - PE Implementation score, Year 1

Items 3-9 on the POFB/C form where series = '21'. Scoring range varies by item; possible scores are 1=None of the Time, 2=Some of the Time, 3=Most of the Time, 4=All of the Time. Items were standardized to have a mean of 0 and standard deviation of 1 and then summed.

Items and scoring are as follows:

- POFC3 Students were prompted/rewarded for out-of-PE class physical activity (1,2)
- POFC4 Teacher used strategies to minimize management time (1,2,3)
- POFC5 Students were provided with choices (1,2,3)
- POFC6 Students were encouraged or reinforced to be physically active or demonstrate PA skills during class (1,2,3)
- POFC7 Adequate equipment: student ratio existed during activities (1,2,3)
- POFC8 Group sizes were appropriate to activity (1,2,3,4)
- POFC9 Most girls appeared to enjoy PE class (1,2,3,4)

PE_IMP2 - PE Implementation score, Year 2

Same as PE_IMP_SCORE_YR1, where series = '31'.

PE_IMP3 - PE Implementation score, Year 3

Same as PE_IMP_SCORE_YR1, where series = '41'.

PE_IMP_T - PE Implementation score, Years 1 & 2 Combined

Mean of PE_IMP_SCORE_YEAR1, PE_IMP_SCORE_YEAR2

P3YR_IMP - PE Implementation score, Years 1 - 3 Combined

Mean of PE IMP SCORE YEAR1, PE IMP SCORE YEAR2, PE IMP SCORE YEAR3

HEALTH EDUCATION AND ACTIVITY CHALLENGES

<u>HEPCTYR1 – Percent of TAAG lessons taught, Year 1</u>

If teachers answered yes to TI7A4 (Did you teach all 6 lessons to each of your classes during the school year?) the percent of lessons taught = 100. Otherwise, information from the follow-up items (TI7A5A – TI7A5F) asking in how many classes each of the 6 lessons was taught was used, along with a manually created dataset containing the number of class sections each teacher taught. In cases where data on the lessons taught was missing, a value was imputed based on the presence of Activity Challenges data on the Student Participation form.

<u>HEPCTYR2 – Percent of TAAG lessons taught, Year 2</u>

If teachers answered yes to TI8A3 (Did you teach all 6 lessons to each of your classes during the school year?) the percent of lessons taught = 100. Otherwise, information from the follow-up items (TI8A5A – TI8A5F) asking in how many classes each of the 6 lessons was taught was used, along with a manually created dataset containing the number of class sections each teacher taught. In cases where data on the lessons taught was missing, a value was imputed based on the presence of Activity Challenges data on the Student Participation form.

HEPCTTS2 – Percent of lessons taught from TS form, Year 2

The sum of TS7A4A – TS7A4F, where Series = '31', divided by 6

HEPCTTS3 - Percent of lessons taught from TS form, Year 3

The sum of TS7A4A – TS7A4F or TS8A4A – TS8A4F, where Series = '41', divided by 6

MN_LSN1 - Mean percentage of girls taught lessons, Year 1

A measure of reach, the number of girls listed on the HEAC student participation forms (SP7A1A="F") divided by the number girls enrolled in the 7th grade (SAFA5A2) in each school.

MN LSN2 - Mean percentage of girls taught lessons, Year 2

A measure of reach, the number of girls listed on the HEAC Student Participation forms (SP8A1A="F") divided by the number girls enrolled in the 8th grade (SAFA5A3) in each school.

MNACCPL1 – Mean number of ACs completed, Year 1

The sum of activity challenges (items SP7A1C – SP7A1G) coded as completed, averaged across girls within schools.

MNACCPL2 – Mean number of ACs completed, Year 2

The sum of activity challenges (items SP8A1C – SP8A1G) coded as completed, averaged across girls within schools.

AC_DONE1 - Mean percentage of ACs completed, Year 1

Number of activity challenges completed on the Student Participation form (items SP7A1C – SP7A1G) divided by 5; averaged across girls within schools.

AC_DONE 2 - Mean percentage of ACs completed, Year 2

Number of activity challenges coded as completed on the Student Participation form (items SP8A1C – SP8A1G) divided by 5; averaged across girls within schools.

AC_GOAL1 - Mean percentage meeting goal of 4 ACs completed, Year 1

If the number of activity challenges (items SP7A1C – SP7A1G) completed is greater than or equal to 4 the numerator variable (GOAL_MET) is coded '1'. The sum of ones is divided by girls enrolled in the school in 7th grade (SAFA5a2).

AC_GOAL2 - Mean percentage meeting goal of 4 ACs completed, Year 2

If the number of activity challenges (items SP8A1C – SP8A1G) completed is greater than or equal to 4 the numerator variable (GOAL_MET) is coded '1'. The sum of ones is divided by girls enrolled in the school in 8th grade (SAFA5a3).

ALL_COM1 - Reach for Activity Challenge: Percent completing all 5 ACs, Year 1

If all five activity challenges (items SP7A1C – SP7A1G) are coded as completed, the numerator is coded '1'. The sum of '1's across all completed forms within each school, divided by the number of girls enrolled in 7th grade (SAFA5a2).

ALL_COM2 - Reach for Activity Challenge: Percent completing all 5 ACs, Year 2

If all five activity challenges (items SP8A1C – SP8A1G) are coded as completed, the numerator is coded '1'. The sum of '1's across all completed forms within each school, divided by the number of girls enrolled in 8th grade (SAFA5a3).

HE IMP1 - HEAC Implementation score, Year 1

Mean of MEAN_LESSON_YR1 and AC_GOAL_YR1

HE_IMP2 - HEAC Implementation score, Year 2

Mean of MEAN_LESSON_YR2 and AC_GOAL_YR2

HE_IMP_T - HEAC Implementation score, Years 1 & 2 Combined

Mean of HEAC_IMP_SCORE_YEAR1 and HEAC_IMP_SCORE_YEAR2

<u>HEIMP2_1 – New HEAC Implementation score, Year 1</u>

Mean of HE_PCT_YR1, MEAN_LESSON_YR1 and AC_GOAL_YR1

HEIMP2_2 – New HEAC Implementation score, Year 2

Mean of HE PCT YR2, MEAN LESSON YR2 and AC GOAL YR2

HEAIMP1 – Alternative HEAC Implementation score, Year 1

Mean of HE_PCT_YR1 and PCT_AC_COMPLETE_YR1

HEAIMP2 - Alternative HEAC Implementation score, Year 2

Mean of HE_PCT_YR2 and PCT_AC_COMPLETE_YR2

HE2TIMP2 - New HEAC Implementation score, Years 1 & 2 Combined

Mean of HEAC_IMP_SCORE2_YR1 and HEAC_IMP_SCORE2_YR2

Health Education and Activity Challenges, Year 3

In year 3, the year following the intervention, Program Champions implemented the intervention, and the data collection protocol was revised accordingly. Form changes for the Program Champion-directed intervention resulted in discontinuity in the measures of implementation for Health Education and Activity Challenges in Year 3. The following implementation measures were derived by combining teacher survey data for 7th and 8th grade, excluding records for teachers who did not teach TAAG lessons (TS7A1/TS8A1='N') because they were not aware of TAAG (TS7A2A/TS8A2A=1) or because no one asked them to teach TAAG lessons (TS8A2B/TS8A2B=1). Teachers who did not teach TAAG lessons for some other reason, such as not having enough time, were included.

LSN_FID3 - Percent of teachers who taught TAAG lessons, Year 3

The number of teachers who taught lessons (TS7A1/TS8A1 - "Did you teach any TAAG lessons this school year" ='Y') divided by the number of TS forms meeting the above inclusion criteria.

AC_FID3 - Percent of teachers who taught TAAG lessons and included ACs, Year 3

The number responding 'Y' for TS7A1/TS8A1 and 'A' or 'B' (included activity challenges, 'Yes' or 'sometimes') for TS7A5/TS8A5, divided by the number of TS forms meeting the above inclusion criteria.

LSN RCH3 - Percent of girls taught TAAG lessons in Year 3

The numerator is the number of girls taught lessons (TS7A3A and TS8A3A), summed across teachers who reported teaching TAAG lessons (TS7A1= 'Y' or TS8A1= 'Y') within school. This sum is divided by the sum of SAFA5a2a (7th grade girls enrolled) and SAFA5a3a (8th grade girls enrolled). (Note: 2/66 records are missing TS7A3A and 1/16 are missing TS8A3A).

HEIMP 3 – HEAC Implementation score, Year 3

Mean of HE_PCT_TS_YR3, LESSON_FIDELITY_YR3, AC_FIDELITY_YR3 and LESSON_REACH_YR3

PROGRAM PARTICIPATION

MN_SESS1 - Mean number of program sessions per week, year 1

Mean of "total number of sessions this week" (PSLB1) from the Weekly Program Summary Attendance Log.

MN_SESS2 - Mean number of program sessions per week, year 2

Mean of "total number of sessions this week" (PSLB1) from the Weekly Program Summary Attendance Log.

MN_ATT1 - Mean program attendance, year 1

The total number of girls in grades 6 – 8 who participated in program sessions per week during semesters 1-2 from the Program Attendance Logs, divided by the number of sessions given in the same week, averaged across forms entered within school.

MN_ATT2 - Mean program attendance, year 2

The total number of girls in grades 6-8 who participated in program sessions per week during semesters 3-4 from the Program Attendance Logs, divided by the number of sessions given in the same week, averaged across forms entered within school.

PPA_IMP1 - PPA Implementation score, Year 1

The product of MEAN_PROG_SESSIONS_YR1 and MEAN_PROG_ATTENDANCE_YR1

PPA_IMP2 - PPA Implementation score, Year 2

The product of MEAN_PROG_SESSIONS_YR2 and MEAN_PROG_ATTENDANCE_YR2

PPA_IMPT - PPA Implementation score, Years 1 & 2 Combined

Mean of PPA_IMP_SCORE_YR1 and PPA_IMP_SCORE_YR2

Program Participation, Year 3

PRO_SCH3 - Programs per school, year 3

The number of PIFD forms in the database per school.

MN SESS3 - Mean number of program sessions per week, year 3

The school-level mean of PIFD5 (Average number of times each program met per week).

MN_MIN3 - Mean average minutes per program session, year 3

The school-level mean of PIFD6 (Average number of minutes per session).

MN_CATT3 - Mean categorical session attendance (5,15,25,35,45,50), year 3

PIFD8C is recoded as follows: A=5, B=15, C=25, D=35, E=45, F=50, and school-level means for session attendance are calculated.

PPA_IMP3 - PPA Implementation score, Year 3

Product of PROGRAMS_PER_SCHOOL_YR3, MEAN_PROG_SESSIONS_YR3, MEAN_MINS_PER_SESSION_YR3 and MEAN_CAT_ATTENDANCE_YR3

Total Scores combining scores for PE, HEAC and Program Participation

TOTIMP_1 - PE, HEAC, PPA Implementation score, Year 1

Sum of PE_imp_score_year1, HEAC_imp_score_year1 and PPA_imp_score_year1

TOTIMP 2 - PE, HEAC, PPA Implementation score, Year 2

Sum of PE_imp_score_year2, HEAC_imp_score_year2 and PPA_imp_score_year2

<u>TOTIMP_3 – PE, HEAC, PPA Implementation score, Year 3</u>

Sum of PE_IMP_SCORE_YR3, HEAC_IMP_SCORE_YR3 and PPA_IMP_SCORE_YR3

TOTIMP2Y - PE, HEAC, PPA Implementation score, Years 1 & 2 Combined

Sum of PE_2YRtot_imp_score, HEAC_2YRtot_imp_score and PPA_2YRtot_imp_score

<u>TIMP2_1 - PE, HEAC, PPA Implementation score, Year 1 - #2</u>

Sum of PE_IMP_SCORE_YR1, HEAC_IMP_SCORE2_YR1, PPA_IMP_SCORE_YR1

TIMP2_2 - PE, HEAC, PPA Implementation score, Year 2 - #2

Sum of PE_IMP_SCORE_YR2, HEAC_IMP_SCORE2_YR2 and PPA_IMP_SCORE_YR2

TIMP2_2Y - PE, HEAC, PPA Implementation score, Years 1 & 2 Combined - #2

Sum of PE_2YRTOT_IMP_SCORE, HEAC_2YRTOT_IMP_SCORE2 and PPA_2YRTOT_IMP_SCORE