

ANGER: Add up the scores from questions 1 through 8 (no reverse-scoring is needed.) Impute if 1 or 2 of the 8 responses are missing by multiplying the existing sum by the factor $(8/(8-\text{number of missing responses}))$. Use the table below to select the appropriate T-score for each raw summary score:

anger_raw_score	anger_t_score
8	32.4
9	37.3
10	40.2
11	42.5
12	44.4
13	46
14	47.6
15	49.1
16	50.5
17	51.8
18	53.1
19	54.4
20	55.7
21	56.9
22	58.2
23	59.4
24	60.7
25	61.9
26	63.2
27	64.5
28	65.7
29	67
30	68.3
31	69.6
32	70.9
33	72.3
34	73.7
35	75.1
36	76.7
37	78.3
38	80.2
39	82.3
40	85.2

ANGER SAS Code:

```
/* use imputation if 1 or 2 of 8 is missing
   If more than 2 are missing, set total score to missing */

data anger_h2;
set anger_h1;
array quests(8) anger_q1-anger_q8;

nummiss = nmiss(of anger_q1-anger_q8);

if nummiss in (0 1 2) then raw_promis_anger = (sum(of anger_q1-anger_q8))*8/(8-nummiss);
promis_anger = round(raw_promis_anger, 1);
drop nummiss raw: ;
run;

/* merge with the conversion table for calculating t-scores */

proc sort data=anger_tscore_xref nodupkey;
by anger_raw_score;
run;

proc sort data=anger_h2;
by anger_raw_score;
run;

data anger_h3;
merge anger_h2 (in=a) anger_tscore_xref (in=b);
by anger_raw_score;
if a and b ;
rename anger_raw_score = promis_anger;
rename anger_t_score = promis_anger_tscore;
run;
```

FATIGUE: Add up the scores from questions 1 through 7 after reverse-scoring question 7 only. Impute if 1 of the 7 responses is missing by multiplying the existing sum by the factor 7/6. Use the table below to select the appropriate T-score for each raw summary score:

fatigue_raw_score	fatigue_t_score
7	29.4
8	33.4
9	36.9
10	39.6
11	41.9
12	43.9
13	45.8
14	47.6
15	49.2
16	50.8
17	52.2
18	53.7
19	55.1
20	56.4
21	57.8
22	59.2
23	60.6
24	62
25	63.4
26	64.8
27	66.3
28	67.8
29	69.4
30	71.1
31	72.9
32	74.8
33	77.1
34	79.8
35	83.2

FATIGUE SAS code:

```
data fatigue_h2;
    set fatigue_h1;
array quests(7) fatigue_q1-fatigue_q7;

nummiss = nmiss(of fatigue_q1-fatigue_q7);

fatigue_q7rev = 6 - fatigue_q7;

if nummiss in (0 1) then raw_promis_fatigue = (sum(of fatigue_q1-fatigue_q6 fatigue_q7rev))*7/(7-
nummiss);
fatigue_raw_score = round(raw_promis_fatigue, 1);
drop nummiss raw: fatigue_q7rev;
run;

/* merge with the conversion table for calculating t-scores */

proc sort data=fatigue_tscore_xref nodupkey;
by fatigue_raw_score;
run;

proc sort data=fatigue_h2;
by fatigue_raw_score;
run;

data fatigue_h3 ;
merge fatigue_h2 (in=a) fatigue_tscore_xref (in=b);
by fatigue_raw_score;
if a and b;
rename fatigue_raw_score = promis_fatigue;
rename fatigue_t_score = promis_fatigue_tscore;
run;
```

SLEEP: Add up the scores from questions 1 through 8 after reverse-scoring questions 2, 3, 7, and 8. Impute if 1 or 2 of the 8 responses are missing by multiplying the existing sum by the factor $(8/(8 - \text{number of missing responses}))$. Use the table below to select the appropriate T-score for each raw summary score:

promis_sleep	promis_sleep_tscore
8	28.9
9	33.1
10	35.9
11	38
12	39.8
13	41.4
14	42.9
15	44.2
16	45.5
17	46.7
18	47.9
19	49
20	50.1
21	51.2
22	52.2
23	53.3
24	54.3
25	55.3
26	56.3
27	57.3
28	58.3
29	59.4
30	60.4
31	61.5
32	62.6
33	63.7
34	64.8
35	66.1
36	67.5
37	69
38	70.8
39	73
40	76.5

SLEEP SAS code:

```
data sleep_h2;
    set sleep_h1;
array quests(8) sleep_q1-sleep_q8;

nummiss = nmiss(of sleep_q1-sleep_q8);

sleep_q2rev = 6 - sleep_q2;
sleep_q3rev = 6 - sleep_q3;
sleep_q7rev = 6 - sleep_q7;
sleep_q8rev = 6 - sleep_q8;

if nummiss in (0 1 2) then raw_promis_sleep = (sum(of sleep_q1 sleep_q2rev sleep_q3rev sleep_q4
    sleep_q5 sleep_q6 sleep_q7rev sleep_q8rev))*8/(8-nummiss);
promis_sleep = round(raw_promis_sleep, 1);
drop nummiss raw: sleep_q2rev sleep_q3rev sleep_q7rev sleep_q8rev;
run;

/* merge with the conversion table for calculating t-scores */

proc sort data=sleep_tscore_xref nodupkey;
by promis_sleep;
run;

proc sort data=sleep_h2;
by promis_sleep;
run;

data sleep_h3;
merge sleep_h2 (in=a) sleep_tscore_xref (in=b);
by promis_sleep;
if a and b ;
run;
```