

## **Health ABC Dual Task Ancillary Study (AS02-33)**

During the 6<sup>th</sup> year Health ABC examinations this ancillary study added 2 dual-task measures and 2 control measures to follow the self-paced 20-meter walk in a subset of the Pittsburgh sample. Dual-task measures include: 1) auditory-tone hand-reaction time tasks during walk, and 2) visual-spatial decision tasks during walk. Control measures include: 1) auditory-tone hand-reaction time tasks while seated, and 2) visual-spatial decision tasks while seated.

### **Specific Aims**

1. To determine whether walking speed will be slower when performed concurrently with auditory-tone hand-reaction time tasks and visual-spatial decision tasks than when performed alone.
2. To determine whether performance on an auditory-tone hand-reaction time task and visual-spatial decision task will be lower while walking than when seated.
3. To determine whether dual-task costs to walking speed will be positively associated with fall risk in older community-dwelling adults (e.g., greater dual-task cost and greater risk of falls).

### **Methods and procedures**

- a. Study population: 426 Health ABC participants at the 6<sup>th</sup> year clinic visit from the Pittsburgh clinic participated in this study. Participation in this ancillary study was entirely voluntary.
- b. During regularly scheduled Health ABC 6<sup>th</sup>-year clinic visits, each participant performed the following assessments under both single- and dual-task conditions. The order of “new” tasks (ii thru v) will be randomized:
  - i. Single task: Average time to walk standard 20-meter (comfortable pace / up to two trials). Approximate time required is 4 minutes.
  - ii. Single task (New): Average hand-reaction-time of up to 10 auditory-tone probes administered randomly while seated (up to two trials). Approximate time required is 4 minutes.
  - iii. Single task (New): Average accuracy and average response times of up to 5 random auditory “time of the day” prompts (for example, “10 minutes past 3 o’clock” delivered while seated (up to two trials). [Participants will be instructed to determine whether the hands are on the same side or different sides of the face of the clock.] Approximate time required is 4 minutes.
  - iv. Dual-task (New): Average time to walk 20-meters (comfortable pace) and average hand-reaction-time of up to 10 auditory-tone probes administered randomly (up to two trials). Approximate time required is 4 minutes.
  - v. Dual-task (New): Average time to walk 20-meters (comfortable pace) and average accuracy and average response time of up to 5 auditory “time of the day” decision prompts (for example, “10 minutes past 3 o’clock” delivered randomly (up to two trials)). [Participants will be instructed to

- determine whether the hands are on the same side or different sides of the face of the clock]. Approximate time required is 4 minutes.
- c. Health ABC participants met the following requirements in order to be included in this ancillary study:
    - i. Adequate cognitive ability to respond to testing procedures (clinical judgment).
    - ii. Ability to hear research staff's spoken instructions, decision-task prompts, and adjustable auditory tones.

The auditory-hand-reaction-time instrumentation is designed specifically for the proposed study and includes: a small wireless communications box (worn on a belt around the waist) connected to a hand-held button to measure response times. Response signals are recorded from the button by a laptop computer that is communicating with the box. The auditory tones are presented to the subjects through wireless headphones. The tones are transmitted to the headphones from the same laptop computer. Reaction times are assessed as the temporal interval between the presentation of the auditory stimulus and the pressing of the hand-held button device. For both the sitting and walking tasks, the timing of the auditory tone stimuli will be randomly generated in order to prevent predictability. The visual-spatial task is up to five random auditory "time of day" decision prompts (e.g., "10 minutes past 3 o'clock") and participants are asked to determine whether the hour and minute hands are on the same side or on different sides of the face of the clock. During the visual-spatial decision task the subject has to create an internal representation of the face of a clock first and then process the image of the location of the two arms of the clock. While the first component is more related to semantic memory (and precisely deals with an over-learned task, as it is recalling in memory the image of an object that is seen many times a day), the second component is of greater interest. In fact, the process of manipulating the space of an imaginary clock, by properly placing the numbers and the arms, involves a spatial processing modality that is likely to be shared with that involved in maintaining postural control while walking.

**Health ABC Dual-Task Ancillary Study - (AS02-33)**

Variable	Mean Reaction Variable	Trial	Sit / Walk	Time *	Turn **	Tone / Voice	Voice Responses Received Variable	Voice Responses Correct Variable	Task	Task # - Page 1 of Online Documentation	Randomization Scheme 1 Order in Bold	Voice Responses Received Variable Order 1	Voice Responses Correct Variable Order 1	Randomization Scheme 4 Order in Bold	Voice Responses Received Variable Order 4	Voice Responses Correct Variable Order 4
WT20A		1	20 m Walk	Walking					Single	i	<b>1</b> - standard walk			<b>1</b> - standard walk		
WT20B		2	20 m Walk	Walking					Single	i						
WT10A		1	20 m Walk	Walking	Turn				Single	i						
WT10B		2	20 m Walk	Walking	Turn				Single	i						
TRTA	TRTAAVE	1	Sit	Reaction		Tone			Single	ii	<b>2</b> - 1st seated			<b>7</b> - 2nd seated		
TRTB	TRTBAVE	2	Sit	Reaction		Tone			Single	ii						
VRTA	VRTAAVE	1	Sit	Reaction		Voice	NOVCS1	NOCVCS1	Single	iii	<b>3</b> - 2nd seated			<b>6</b> - 1st seated		
VRTB	VRTBAVE	2	Sit	Reaction		Voice	NOVCS2	NOCVCS2	Single	iii						
TRT20A	TRT20AAV	1	20 m Walk	Reaction		Tone			Dual	iv	<b>4</b> - 1st walk			<b>5</b> - 4th walk		
TRT20B	TRT20BAV	2	20 m Walk	Reaction		Tone			Dual	iv						
VRT20A	VRT20AAV	1	20 m Walk	Reaction		Voice	NOV20A	NOVC20A	Dual	v	<b>5</b> - 2nd walk	NOVCW1	NOCVCW1	<b>4</b> - 3rd walk	NOVCW3	NOCVCW3
VRT20B	VRT20BAV	2	20 m Walk	Reaction		Voice	NOV20B	NOVC20B	Dual	v		NOVCW2	NOCVCW2		NOVCW4	NOCVCW4
TRT10A	TRT10AAV	1	20 m Walk	Reaction	Turn	Tone			Dual	iv	<b>6</b> - 3rd walk			<b>3</b> - 2nd walk		
TRT10B	TRT10BAV	2	20 m Walk	Reaction	Turn	Tone			Dual	iv						
VRT10A	VRT10AAV	1	20 m Walk	Reaction	Turn	Voice	NOV10A	NOVC10A	Dual	v	<b>7</b> - 4th walk	NOVCW3	NOCVCW3	<b>2</b> - 1st walk	NOVCW1	NOCVCW1
VRT10B	VRT10BAV	2	20 m Walk	Reaction	Turn	Voice	NOV10B	NOVC10B	Dual	v		NOVCW4	NOCVCW4		NOVCW2	NOCVCW2
TWT20A		1	20 m Walk	Walking		Tone			Dual	iv						
TWT20B		2	20 m Walk	Walking		Tone			Dual	iv						
VWT20A		1	20 m Walk	Walking		Voice			Dual	v						
VWT20B		2	20 m Walk	Walking		Voice			Dual	v						
TWT10A		1	20 m Walk	Walking	Turn	Tone			Dual	iv						
TWT10B		2	20 m Walk	Walking	Turn	Tone			Dual	iv						
VWT10A		1	20 m Walk	Walking	Turn	Voice			Dual	v						
VWT10B		2	20 m Walk	Walking	Turn	Voice			Dual	v						

\* **Please Note:** Reaction time is measured in milli-seconds and walking time is measured in seconds.

\*\* **Please Note:** During walks with turns, participants turn around at 10 meters of the 20 meter walk. In other words, **participants do a lap**; 10 meters up, turn around, then 10 meters back.

### HABC: Dual-task Ancillary Study Code Book

Variable name	Type	Value range	Description
1. PPTNO 2. HABCID 3. VDATE 4. RDMSCH	Continuous Continuous Dates Categorical	1 – 426 5072 – 6634 12/03/02 – 5/15/03 1 or 4	Participant ID assigned for dual-task ancillary study HABC ID Date of clinic visit Randomization scheme—order of test measures (cognitive tasks, walking tasks and dual task condition) 1 = Cognitive tasks: (Tone, then Voice) <ol style="list-style-type: none"> <li>1. seated</li> <li>2. with walk no turn</li> <li>3. with walk with turn</li> </ol> Walking tasks: <ol style="list-style-type: none"> <li>1. Walk with no cognitive task</li> <li>2. Walk with tone prompt</li> <li>3. Walk with voice prompt</li> </ol> Cognitive dual-task condition: (Single-task, then dual-task) 4= Cognitive tasks: (Voice, then tone)

5. Exclude	Categorical	0 or 1	<p>1. with walk with turn  2. with walk no turn  3. seated</p> <p>Walking tasks:  1. Walk with no cognitive task  2. Walk with voice prompt  3. Walk with tone prompt</p> <p>Cognitive dual-task: (Dual-task, then single-task)</p> <p>Exclusion status for <u>all</u> walks and/or cognitive tasks</p> <p>0= No, not excluded  1= Yes</p>
6. EXCLUDEW	Categorical	0 or 1	<p>Exclusion status from walking tasks</p> <p>0= No, not excluded  1= Yes</p>
7. EXCLUDEC	Categorical	0 or 1	<p>Exclusion status from cognitive tasks (both tone &amp; voice)</p> <p>0= No, not excluded  1= Yes</p>
8. Status	Categorical	0 or 1	<p>Completed all dual-task measures? (value only if randomized)</p> <p>0= No, not completed  1= Yes, complete</p>

9. Complete	text	n/a	notes as to whether all experiments were completed or not
10. Complete2	categorical	1 - 4	1 if all experiments were completed; otherwise see code in footnote
11. TRTATRL	Ordinal	1 – 10	Sequential order of within trial measures
12. TRTA	Continuous	3 - 4300	Control tone-response reaction time (milli-seconds)- seated trial 1
13. TRTB	Continuous	27 - 3390	Control tone-response reaction time (milli-seconds)- seated trial 2
14. TRTAAVE	Continuous	294 – 1361	Average of control tone reaction times (milli-seconds) – seated trial 1
15. TRTBAVE	Continuous	266 – 1234	Average of control tone reaction times (milli-seconds) – seated trial 2
16. WT20A	Continuous	11.66 – 48.14	Control walking time (seconds) – 20m no turn- trial 1
17. WT20B	Continuous	11.44 – 40.32	Control walking time (seconds) – 20m no turn- trial 2
18. WT10A	Continuous	12.60 – 42.34	Control walking time (seconds) – 20m with turn- trial 1
19. WT10B	Continuous	12.38 – 41.22	Control walking time (seconds) – 20m with turn- trial 2
20. TRT20A	Continuous	29 - 3025	Test tone-response reaction time walking 20m no turn- trial 1
21. TRT20B	Continuous	0 – 4637	Test tone-response reaction time walking 20m no turn- trial 2

22. TRT20AAV	Continuous	207 - 1548	Average of test tone-response reaction times (measures 1 thru 10) walking 20m no turn- trial 1
23. TRT20BAV	Continuous	131 - 2006	Average of test tone-response reaction times (measures 1 thru 10) walking 20m no turn- trial 2
24. TWT20A	Continuous	9.94 – 33.56	Test walking time- 20m no turn with tone-response reaction time- trial 1
25. TWT20B	Continuous	9.69 – 35.56	Test walking time- 20m no turn with tone-response reaction time- trial 2
26. TRT10A	Continuous	17 - 4466	Test tone-response reaction time walking 20m with turn- trial 1
27. TRT10B	Continuous	7 - 2995	Test tone-response reaction time walking 20m with turn- trial 2
28. TRT10AAV	Continuous	223 - 1965	Average of test tone-response reaction time (measures 1 thru 10) walking 10m with turn- trial 1
29. TRT10BAV	Continuous	150 - 1387	Average of test tone-response reaction time (measures 1 thru 10) walking 10m with turn- trial 2
30. TWT10A	Continuous	9.96 – 38.03	Test walking time- 20m with turn with tone-response reaction time- trial 1
31. TWT10B	Continuous	11.28 - 39.44	Test walking time- 20m with turn with tone-response

32. VRTA	Continuous	31.20 - 6788.20	reaction time- trial 2 Control voice-response reaction time (milli-seconds)- seated trial 1
33. VRTB	Continuous	59.60 – 5843.40	Control voice-response reaction time (milli-seconds)- seated trial 2
34. VRTAAVE	Continuous	245 - 4015	Average of control voice-response reaction time (milli-seconds)- seated trial 1
35. VRTBAVE	Continuous	122 - 3499	Average of control voice-response reaction time (milli-seconds)- seated trial 2
36. VRT20A	Continuous	161.60 – 7203.80	Test voice-response reaction time walking 20m no turn- trial 1
37. VRT20B	Continuous	99.20 – 5862.00	Test voice-response reaction time walking 20m no turn- trial 2
38. VRT20AAV	Continuous	279 – 3552	Average of test voice-response reaction time walking 20m no turn- trial 1
39. VRT20BAV	Continuous	236 – 4743	Average of test voice-response reaction time walking 20m no turn- trial 2
40. VRT10A	Continuous	49.40 – 5803.6	Test voice-response reaction time walking 20m with turn- trial 1
41. VRT10B	Continuous	214 - 4960	Test voice-response reaction time walking 20m with turn- trial 2
42. VRT10AAV	Continuous	149 - 3745	Average of test voice-response reaction time walking 20m

			with turn- trial 1
43. VRT10BAV	Continuous	214 - 4960	Average of test voice-response reaction time walking 20m with turn- trial 2
44. VWT20A	Continuous	10.50 – 38.56	Test walking time- 20m no turn with voice-response reaction time- trial 1
45. VWT20B	Continuous	10.34 – 39.06	Test walking time- 20m no turn with voice-response reaction time- trial 2
46. VWT10A	Continuous	11.88 - 44.28	Test walking time- 20m with turn with voice-response reaction time- trial 1
47. VWT10B	Continuous	10.94 – 42.25	Test walking time- 20m with turn with voice-response reaction time- trial 2
48. NOVCW1	Continuous	1 - 5	Number of voice responses received on 1 <sup>st</sup> walking trial
49. NOCVCW1	Continuous	0 - 5	Number of voice responses answered correctly on 1 <sup>st</sup> walking trial
50. NOVCW2	Continuous	2 - 5	Number of voice responses received on 2 <sup>nd</sup> walking trial
51. NOCVCW2	Continuous	0 - 5	Number of voice responses answered correctly on 2 <sup>nd</sup> walking trial
52. NOVCW3	Continuous	1 - 5	Number of voice responses received on 3 <sup>rd</sup> walking trial
53. NOCVCW3	Continuous	0 - 5	Number of voice responses answered correctly on 3 <sup>rd</sup> walking

			trial
54. NOVCW4	Continuous	2 - 5	Number of voice responses received on 4 <sup>th</sup> walking trial
55. NOCVCW4	Continuous	0 - 5	Number of voice responses answered correctly on 4 <sup>th</sup> walking trial
56. NOVCS1	Continuous	3 - 5	Number of voice responses received seated – trial 1
57. NOCVCS1	Continuous	2 – 5	Number of voice responses answered correctly seated – trial 1
58. NOVCS2	Continuous	4 – 5	Number of voice responses received seated – trial 2
59. NOCVCS2	Continuous	1 – 5	Number of voice responses answered correctly seated – trial 2
60. NOV20A	Continuous	1 – 5	Number of voice responses received walking no turn – trial 1
61. NOVC20A	Continuous	0 – 5	Number of voice responses answered correctly walking no turn – trial 1
62. NOV20B	Continuous	2 – 5	Number of voice responses received walking no turn– trial 2
63. NOVC20B	Continuous	0 – 5	Number of voice responses answered correctly walking no turn– trial 2
64. NOV10A	Continuous	1 –5	Number of voice responses received walking with turn– trial 1
65. NOVC10A	Continuous	0 – 5	Number of voice responses answered correctly walking with turn– trial 1
66. NOV10B	Continuous	2 – 5	Number of voice responses received walking with turn– trial 2

67. NOVC10B	Continuous	0 – 5	Number of voice responses answered correctly walking with turn– trial 2
68. CANE	Categorical	0 or 1	Does participant perform walking tests with a cane?  0 = no 1 = yes
69. STOP	Categorical	0 or 1	Did participant stop during walking tests?  0 = no 1 = yes
70. STOPWLK1	Categorical	0 – 5	What was first walk the participant stopped on?  0 = control no turn 1= control with turn 2 = tone no turn 3= tone turn 4 = voice no turn 5 = voice turn
71. STOPWLK2	Categorical	0 – 5	What was the second walk the participant stopped on?  0 = control no turn 1= control with turn 2 = tone no turn 3= tone turn 4 = voice no turn 5 = voice turn

72. STOPWLK3	Categorical	0 – 5	<p>What was the third walk the participant stopped on?</p> <p>0 = control no turn  1 = control with turn  2 = tone no turn  3 = tone turn  4 = voice no turn  5 = voice turn</p>
73. DTACROS	String	(4 letters)	<p>First letter of first name and first three letters of last name  (assigned during dual-task study according to name as listed  on schedule)</p>
<p>-1 = Participant refused  -2 = Exclusion or partial exclusion from either cognitive tasks or walking tasks (staff-determined)  -3 = Equipment problems, unable  -4 = Not applicable (Wasn't performed due equipment was broken or because of study time constraints)</p>			

## DATA COLLECTION FORM

### VDATE

HABC ID: HABCID / DTACROS

Task	Walk alone	Walk + “same or different”	Walk + push button	<u>Your</u> HABC Usual and Fast pace (20m only)
Course:	Trial:	Trial:	Trial:	Trial:
10m lap(turn)	1. <u>WT10A</u> 2. <u>WT10B</u>	1. 2.	1. <u>TRT10A</u> <u>TRT10AAV</u> 2. <u>TRT10B</u> <u>TRT10BAV</u>	1. 2.
20m	1. <u>WT20A</u> 2. <u>WT20B</u>	1. 2.	1. <u>TRT20A</u> <u>TRT20AAV</u> 2. <u>TRT20B</u> <u>TRT20AAV</u>	1. 2.

Cane: yes/ no CANE

Did participant stop at anytime during the 20m walk or 10m lap? YES / NO  
STOP

If so, which walk(s)?

- Walking alone Y/N (20m / 10m lap)
- Walking and pushing a button Y/N (20m / 10m lap)
- Walking and saying same or different Y/N (20m / 10m lap)

STOPWLK1 / STOPWLK2 / STOPWLK3

VDATE

HABC ID: HABCID / DTACROS

Task	Tone prompts	Voice command prompts
Practice 1		S s s s s
Practice 2		D d d d d
Walk: 10m lap (turn)	<u>TRT10A</u> <u>TRT10AAV</u>	<u>VRT10A</u> <u>VRT10AAV</u>  D s s s d  <u>NOV10A</u> <u>NOVC10A</u>
Walk: 10m lap (turn)	<u>TRT10B</u> <u>TRT10BAV</u>	<u>VRT10B</u> <u>VRT10BAV</u>  S d s s d  <u>NOV10B</u> <u>NOVC10B</u>
Walk: 20m	<u>TRT20A</u> <u>TRT20AAV</u>	<u>VRT20A</u> <u>VRT20AAV</u>  S d d s s  <u>NOV20A</u> <u>NOVC20A</u>

(Continued)

Walk: 20m	<u>TRT20B</u> <u>TRT20AAV</u>	<u>VRT20B</u> <u>VRT20AAV</u>  S d d s d  <u>NOV20B</u> <u>NOVC20B</u>
Sit 1	<u>TRTA</u> <u>TRTAAVE</u>	<u>VRTA</u> <u>VRTAAVE</u>  S d s s d  NOVCS1 NOCVCS2
Sit 2	<u>TRTB</u> <u>TRTBAVE</u>	<u>VRTB</u> <u>VRTBAVE</u>  S s d s s  <u>NOVCS2</u> <u>NOCVCS2</u>

***The CONTENTS Procedure***

<b>Data Set Name</b>	DUAL.DT_TRIALS	<b>Observations</b>	4260
<b>Member Type</b>	DATA	<b>Variables</b>	15
<b>Engine</b>	V9	<b>Indexes</b>	0
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<b>Last Modified</b>	Thu, Dec 19, 2013 04:59:48 PM	<b>Deleted Observations</b>	0
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<b>Encoding</b>	wlatin1 Western (Windows)		

<b>Engine/Host Dependent Information</b>	
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<b>Obs in First Data Page</b>	72
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<b>Host Created</b>	XP_PRO

***The CONTENTS Procedure***

<b>Variables in Creation Order</b>					
<b>#</b>	<b>Variable</b>	<b>Type</b>	<b>Len</b>	<b>Format</b>	<b>Label</b>
1	TRTA	Num	8	DTMISS.	Control tone-response reaction time (milli-seconds)-seated trial 1
2	TRTB	Num	8	DTMISS.	Control tone-response reaction time (milli-seconds)-seated trial 2
3	TRT20A	Num	8	DTMISS.	Test tone-response reaction time (milli-seconds) walking 20m no turn-trial 1
4	TRT20B	Num	8	DTMISS.	Test tone-response reaction time (milli-seconds) walking 20m no turn-trial 2
5	TRT10A	Num	8	DTMISS.	Test tone-response reaction time (milli-seconds) walking 20m with turn-trial 1
6	TRT10B	Num	8	DTMISS.	Test tone-response reaction time (milli-seconds) walking 20m with turn-trial 2
7	VRTA	Num	8	DTMISS.	Control voice-response reaction time (milli-seconds)-seated trial 1
8	VRTB	Num	8	DTMISS.	Control voice-response reaction time (milli-seconds)-seated trial 2
9	VRT20A	Num	8	DTMISS.	Test voice-response reaction time (milli-seconds) walking 20m no turn-trial 1
10	VRT20B	Num	8	DTMISS.	Test voice-response reaction time (milli-seconds) walking 20m no turn-trial 2
11	VRT10A	Num	8	DTMISS.	Test voice-response reaction time (milli-seconds) walking 20m with turn-trial 1
12	VRT10B	Num	8	DTMISS.	Test voice-response reaction time (milli-seconds) walking 20m with turn-trial 2
13	HABCID	Num	8		Health ABC Enrollment ID
14	TRTATRL	Num	8		Sequential order of trial measures
15	VERSION	Num	8	YYMMDD10.	Release date for this Health ABC Dual Task Substudy SAS dataset

***The CONTENTS Procedure***

<b>Data Set Name</b>	DUAL.DT_1TRIALAVG	<b>Observations</b>	426
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<b>Last Modified</b>	Thu, Dec 19, 2013 04:59:48 PM	<b>Deleted Observations</b>	0
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<b>Encoding</b>	wlatin1 Western (Windows)		

<b>Engine/Host Dependent Information</b>	
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<b>Max Obs per Page</b>	30
<b>Obs in First Data Page</b>	9
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<b>Host Created</b>	XP_PRO

***The CONTENTS Procedure***

<b>Variables in Creation Order</b>					
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1	TRTAAVE	Num	8	DTMISS.	Mean control tone reaction times (milli-seconds)–seated trial 1
2	TRTBAVE	Num	8	DTMISS.	Mean control tone reaction times (milli-seconds)–seated trial 2
3	WT20A	Num	8	DTMISS.	Control walking time (seconds)–20m no turn-trial 1
4	WT20B	Num	8	DTMISS.	Control walking time (seconds)–20m no turn-trial 2
5	WT10A	Num	8	DTMISS.	Control walking time (seconds)–20m with turn-trial 1
6	WT10B	Num	8	DTMISS.	Control walking time (seconds)–20m with turn-trial 2
7	TRT20AAV	Num	8	DTMISS.	Mean test tone-response reaction times (milli-seconds/measures 1 thru 10) walking 20m no turn-trial 1
8	TRT20BAV	Num	8	DTMISS.	Mean test tone-response reaction times (milli-seconds/measures 1 thru 10) walking 20m no turn-trial 2
9	TWT20A	Num	8	DTMISS.	Test walking time (seconds) -20m no turn with tone-response reaction time-trial 1
10	TWT20B	Num	8	DTMISS.	Test walking time (seconds) -20m no turn with tone-response reaction time-trial 2
11	TRT10AAV	Num	8	DTMISS.	Mean test tone-response reaction time ((milli-seconds) measures 1 thru 10)) walking 10m with turn-trial 1
12	TRT10BAV	Num	8	DTMISS.	Mean test tone-response reaction time ((milli-seconds) measures 1 thru 10)) walking 10m with turn-trial 2
13	TWT10A	Num	8	DTMISS.	Test walking time (seconds) -20m with turn with tone-response reaction time-trial 1
14	TWT10B	Num	8	DTMISS.	Test walking time (seconds) -20m with turn with tone-response reaction time-trial 2
15	VRTAAVE	Num	8	DTMISS.	Mean control voice-response reaction time (milli-seconds)-seated trial 1
16	VRTBAVE	Num	8	DTMISS.	Mean control voice-response reaction time (milli-seconds)-seated trial 2
17	VRT20AAV	Num	8	DTMISS.	Mean test voice-response reaction (milli-seconds) time walking 20m no turn-trial 1
18	VRT20BAV	Num	8	DTMISS.	Mean test voice-response reaction (milli-seconds) time walking 20m no turn-trial 2
19	VRT10AAV	Num	8	DTMISS.	Mean test voice-response reaction (milli-seconds) time walking 20m with turn-trial 1
20	VRT10BAV	Num	8	DTMISS.	Mean test voice-response reaction (milli-seconds) time walking 20m with turn-trial 2
21	VWT20A	Num	8	DTMISS.	Test walking time (seconds)-20m no turn with voice-response reaction time-trial 1
22	VWT20B	Num	8	DTMISS.	Test walking time (seconds)-20m no turn with voice-response reaction time-trial 2
23	VWT10A	Num	8	DTMISS.	Test walking time (seconds)-20m with turn with voice-response reaction time-trial 1

***The CONTENTS Procedure***

<b>Variables in Creation Order</b>					
<b>#</b>	<b>Variable</b>	<b>Type</b>	<b>Len</b>	<b>Format</b>	<b>Label</b>
24	VWT10B	Num	8	DTMISS.	Test walking time (seconds)-20m with turn with voice-response reaction time-trial 2
25	NOTES	Char	50		Notes as to whether all experiments were completed or not
26	HABCID	Num	8		Health ABC Enrollment ID
27	PPTNO	Num	8		Participant ID assigned for dual-task ancillary study
28	VDATE	Num	8	MMDDYY10.	Date of clinic visit
29	RDMSCH	Num	8	SCHEME.	Randomization scheme—test order(cognitive,walking,dual task)
30	COMPCODE	Num	8	DTCOMP.	Experiments completion code
31	EXCLUDE	Num	8	YNEXCUL.	Exclusion status for all walks and/or cognitive tasks
32	EXCLUDEW	Num	8	YNEXCUL.	Exclusion status from walking tasks
33	EXCLUDEC	Num	8	YNEXCUL.	Exclusion status from cognitive tasks (both tone & voice)
34	STATUS	Num	8	YNCOMP.	Completed all dual-task measures? (value only if randomized)
35	NOVCS1	Num	8	DTMISS.	Number of voice responses received seated–trial 1
36	NOCVCS1	Num	8	DTMISS.	Number of voice responses answered correctly seated–trial 1
37	NOVCS2	Num	8	DTMISS.	Number of voice responses received seated–trial 2
38	NOCVCS2	Num	8	DTMISS.	Number of voice responses answered correctly seated–trial 2
39	NOVCW1	Num	8	DTMISS.	Number of voice responses received on 1st walking trial - randomization scheme
40	NOCVCW1	Num	8	DTMISS.	Number of voice responses answered correctly on 1st walking trial - randomization scheme
41	NOVCW2	Num	8	DTMISS.	Number of voice responses received on 2nd walking trial - randomization scheme
42	NOCVCW2	Num	8	DTMISS.	Number of voice responses answered correctly on 2nd walking trial - randomization scheme
43	NOVCW3	Num	8	DTMISS.	Number of voice responses received on 3rd walking trial - randomization scheme
44	NOCVCW3	Num	8	DTMISS.	Number of voice responses answered correctly on 3rd walking trial - randomization scheme
45	NOVCW4	Num	8	DTMISS.	Number of voice responses received on 4th walking trial - randomization scheme
46	NOCVCW4	Num	8	DTMISS.	Number of voice responses answered correctly on 4th walking trial - randomization scheme

***The CONTENTS Procedure***

<b>Variables in Creation Order</b>					
<b>#</b>	<b>Variable</b>	<b>Type</b>	<b>Len</b>	<b>Format</b>	<b>Label</b>
47	CANE	Num	8	DTCANE.	Does participant perform walking tests with a cane?
48	NOV20A	Num	8	DTMISS.	Number of voice responses received walking no turn-trial 1
49	NOV20B	Num	8	DTMISS.	Number of voice responses received walking no turn-trial 2
50	NOV10A	Num	8	DTMISS.	Number of voice responses received walking with turn-trial 1
51	NOV10B	Num	8	DTMISS.	Number of voice responses received walking with turn-trial 2
52	NOVC20A	Num	8	DTMISS.	Number of voice responses answered correctly walking no turn-trial 1
53	NOVC20B	Num	8	DTMISS.	Number of voice responses answered correctly walking no turn-trial 2
54	NOVC10A	Num	8	DTMISS.	Number of voice responses answered correctly walking with turn-trial 1
55	NOVC10B	Num	8	DTMISS.	Number of voice responses answered correctly walking with turn-trial 2
56	STOP	Num	8	DTCANE.	Did participant stop during walking tests?
57	STOPWLK1	Num	8	STOPWK.	What was first walk the participant stopped on?
58	STOPWLK2	Num	8	STOPWK.	What was second walk the participant stopped on?
59	STOPWLK3	Num	8	STOPWK.	What was third walk the participant stopped on?
60	VERSION	Num	8	YYMMDD10.	Release date for this Health ABC Dual Task Substudy SAS dataset