

ACTIVATE MOVEMENT CHALLENGE (AMC)

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A. GROSS MOTOR—GAIT AND BALANCE

SCORING CRITERIA

	RAW	CONVERTED	
1. Timed-Up & Go	<input type="text"/>	<input type="text"/>	> 20 = 0, 20-16=1, <16 = 2
2. Dual Attention	<input type="text"/>	<input type="text"/>	> 20 = 0, 20-16=1, <16 = 2
3. Tandem Gait Forward	<input type="text"/>	<input type="text"/>	Steps correct: <4=0, 4-6 = 1, 7-8 = 2
4. Stand - Arms Outstretched	<input type="text"/>	<input type="text"/>	Seconds: <5 = 0, 5 - 8 = 1, 9 - 10 = 2
5. Stand on One Foot—Right	<input type="text"/>	<input type="text"/>	Seconds: <5 = 0, 5 - 8 = 1, 9 - 10 = 2
6. Stand on One Foot—Left	<input type="text"/>	<input type="text"/>	Seconds: <5 = 0, 5 - 8 = 1, 9 - 10 = 2

A.1 TOTAL GAIT/BALANCE SCORE (ITEM 1 + ITEM2 + ITEM 3)

SCORE 0 - 6

A.2 TOTAL BALANCE SCORE (ITEM 4 + ITEM 5 + ITEM 6)

SCORE 0 - 6

B. RHYTHMIC MOVEMENT

**Raw Score = total number of steps in rhythm (step on the beat)*

	RAW	CONVERTED	
1. March to the Beat—Slow	<input type="text"/>	<input type="text"/>	Beats correct: 0-8= 0, 9-16 = 1, 17-20 = 2
2. March to the Beat—Fast	<input type="text"/>	<input type="text"/>	Beats correct: 0-16 = 0, 17-28= 1, 29-32 = 2

B.1 TOTAL RHYTHMIC MOVEMENT SCORE

SCORE 0– 4

C. Visuospatial Memory

ACCURACY

RHYTHM/COORDINATION

		RAW	CONVERTED		RAW	CONVERTED									
1. MapSense3 Trial 1	0-1=0, 2=1, 3=2	<input type="text"/>	<input type="text"/>	<table border="1"> <tr><td></td><td></td><td>1</td></tr> <tr><td>3</td><td>2</td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table>			1	3	2					<input type="text"/>	<input type="text"/>
		1													
3	2														
2. MapSense3 Trial 2	0-1=0, 2=1, 3=2	<input type="text"/>	<input type="text"/>	0-1=0, 2=1, 3=2	<input type="text"/>	<input type="text"/>									
3. MapSense3 Trial 3	0-1=0, 2=1, 3=2	<input type="text"/>	<input type="text"/>	0-1=0, 2=1, 3=2	<input type="text"/>	<input type="text"/>									
4. MapSense4 Trial 1	0-1=0, 2-3=1, 4=2	<input type="text"/>	<input type="text"/>	<table border="1"> <tr><td>1</td><td></td><td></td></tr> <tr><td></td><td>2</td><td></td></tr> <tr><td></td><td>3</td><td>4</td></tr> </table>	1				2			3	4	<input type="text"/>	<input type="text"/>
1															
	2														
	3	4													
5. MapSense4 Trial 2	0-1=0, 2-3=1, 4=2	<input type="text"/>	<input type="text"/>	0-1=0, 2-3=1, 4=2	<input type="text"/>	<input type="text"/>									
6. MapSense4 Trial 3	0-1=0, 2-3=1, 4=2	<input type="text"/>	<input type="text"/>	0-1=0, 2-3=1, 4=2	<input type="text"/>	<input type="text"/>									
7. MapSense5 Trial 1	0-2=0, 3-4=1, 5=2	<input type="text"/>	<input type="text"/>	<table border="1"> <tr><td></td><td>1</td><td></td></tr> <tr><td></td><td>2</td><td>3</td></tr> <tr><td>5</td><td>4</td><td></td></tr> </table>		1			2	3	5	4		<input type="text"/>	<input type="text"/>
	1														
	2	3													
5	4														
8. MapSense5 Trial 2	0-2=0, 3-4=1, 5=2	<input type="text"/>	<input type="text"/>	0-2=0, 3-4=1, 5=2	<input type="text"/>	<input type="text"/>									
9. MapSense5 Trial 3	0-2=0, 3-4=1, 5=2	<input type="text"/>	<input type="text"/>	0-2=0, 3-4=1, 5=2	<input type="text"/>	<input type="text"/>									

C.1 TOTAL VISUOSPATIAL MEMORY ACCURACY SCORE

SCORE 0 - 18

C.2 TOTAL VISUOSPATIAL MEMORY RHYTHM/COORDINATION SCORE

SCORE 0 - 12

D. BILATERAL COORDINATION

ACCURACY

RHYTHM

**each pass get up two rhythm points; one for each beat*

	RAW	CONVERTED	RAW	CONVERTED	
1. Bi-manual Ball Pass—Slow	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Passes correct: 0 - 4 = 0, 5 - 6 = 1, 7 - 8 = 2
2. Bi-manual Ball Pass—Fast	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Rhythm: 0 - 8 = 0, 9 - 12 = 1, 13 - 16 = 2

D.1 TOTAL BILATERAL COORDINATION

D.2 TOTAL BILATERAL COORDINATION

ACCURACY SCORE 0- 4

RHYTHM SCORE 0- 4

E. AUDITORY UPPER BODY ACCURACY, RHYTHM AND RESPONSE INHIBITION

*0: moves during both beats, 1: moves only on first, 2: still

Green Lights correct:
0 - 5= 0, 6- 8= 1, 9- 10= 2

Red Lights correct: 0 - 6 = 0, 7-10= 1, 11-12= 2

Green Lights Rhythm:
0 - 10 = 0, 11-16= 1, 17- 20= 2

GREEN LIGHTS CORRECT

RED LIGHTS CORRECT

GREEN RHYTHM CORRECT

Bi-manual Ball Pass Red/Green Light

1. Auditory—Slow

RAW	CONVERTED
<input type="text"/>	<input type="text"/>

RAW	CONVERTED
<input type="text"/>	<input type="text"/>

RAW	CONVERTED
<input type="text"/>	<input type="text"/>

2. Auditory —Fast

RAW	CONVERTED
<input type="text"/>	<input type="text"/>

RAW	CONVERTED
<input type="text"/>	<input type="text"/>

RAW	CONVERTED
<input type="text"/>	<input type="text"/>

Green/Yellow Lights correct:
0 - 6= 0, 7- 10= 1, 11- 12= 2

Red Lights correct: 0 - 4 = 0, 5-6= 1, 7-8= 2

Green/Yellow Lights Rhythm:
0 - 12 = 0, 13-20= 1, 21-24= 2

GREEN/YELLOW LIGHTS CORRECT

RED LIGHTS CORRECT

G/Y RHYTHM CORRECT

Ball Pass Red/Green/Yellow Light

3. Auditory—Slow

<input type="text"/>	<input type="text"/>
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<input type="text"/>	<input type="text"/>
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<input type="text"/>	<input type="text"/>
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4. Auditory —Fast

<input type="text"/>	<input type="text"/>
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<input type="text"/>	<input type="text"/>
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<input type="text"/>	<input type="text"/>
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E.1 TOTAL AUDITORY ACCURACY

E.2 TOTAL AUDITORY RESPONSE INHIBITION

E.3 TOTAL AUDITORY RHYTHM

SCORE 0 - 8

SCORE 0 - 8

SCORE 0 - 8

E.4 TOTAL G/Y LIGHT ACCURACY

E.5 TOTAL RED LIGHT ACCURACY

SCORE 0 - 4

SCORE 0 - 4

F. VISUAL UPPER BODY ACCURACY, RHYTHM AND RESPONSE INHIBITION

** No beats (rhythm)

0: movement during the whole video

1: self-correct (move and then keep still)

2: no movement — still

Green/Yellow Lights correct:
0 - 6= 0, 7- 10= 1, 11- 12= 2

Red Lights correct:
0 - 4 = 0, 5-6= 1, 7-8= 2

GREEN/YELLOW LIGHTS CORRECT

RED LIGHTS CORRECT

Bag Pass Red/Green/Yellow Light

1. Visual—Slow

<input type="text"/>	<input type="text"/>
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<input type="text"/>	<input type="text"/>
----------------------	----------------------

2. Visual —Fast

<input type="text"/>	<input type="text"/>
----------------------	----------------------

<input type="text"/>	<input type="text"/>
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F.1 TOTAL VISUAL ACCURACY

F.2 TOTAL VISUAL RESPONSE INHIBITION

SCORE 0 - 4

SCORE 0 - 4

G. BI-LATERAL COORDINATION AND SELF-REGULATION

*Accuracy Raw Score = total number of body parts touched at least once

*Rhythm/Coordination Raw Score = total number of times correctly touching body part with the opposite hand all three times, accurately keeping the beat for all three touches. Starting late and rushing to catch the beat is not correct

	Accuracy				Rhythm/Coordination	
	RAW SCORE	CONVERTED		RAW SCORE	CONVERTED	
1. Trial 1—Ears, Shoulders, Hips and Knees	0-1=0, 2-3=1, 4=2	<input type="text"/>	<input type="text"/>	0-6=0, 7-10=1, 11-12=2	<input type="text"/>	<input type="text"/>
*If Converted Accuracy score = 0, go to H.						
2. Trial 2—Opposite Ears and Knees	0-4=0, 5-7=1, 8=2	<input type="text"/>	<input type="text"/>	0-12=0, 13-20=1, 21-24=2	<input type="text"/>	<input type="text"/>
*If Converted Accuracy score = 0, go to H.						
3. Trial 3—Opposite Hips and Shoulders	0-4=0, 5-7=1, 8=2	<input type="text"/>	<input type="text"/>	0-12=0, 13-20=1, 21-24=2	<input type="text"/>	<input type="text"/>
*If Converted Accuracy score = 0, go to H.						
4. Trial 4—Opposite Ears, Knees, Hips and Shoulders	0-6=0, 7-10=1, 11-12=2	<input type="text"/>	<input type="text"/>	0-18=0, 19-32=1, 33-36=2	<input type="text"/>	<input type="text"/>

G.1 TOTAL ACCURACY SCORE

SCORE 0 - 8

G.2 TOTAL RHYTHM/COORDINATION

SCORE 0 - 8

G.3 WORKING MEMORY ACCURACY

SCORE (#2—#4)

SCORE 0 - 6

H. Embodied Memory Recall

<u>H. Embodied Memory Recall</u>		<u>ACCURACY</u>			<u>RHYTHM/COORDINATION</u>		
		RAW	CONVERTED			RAW	CONVERTED
1.	MapSense3 Recall	<div>0-1=0, 2=1, 3=2</div>	<div></div>	<div><div><div></div><div></div><div>1</div></div><div><div>3</div><div>2</div><div></div></div><div><div></div><div></div><div></div></div></div>	<div>0-1=0, 2=1, 3=2</div>	<div></div>	<div></div>
2.	MapSense4 Recall	<div>0-1=0, 2-3=1, 4=2</div>	<div></div>	<div><div>1</div><div></div><div></div></div> <div><div></div><div>2</div><div></div></div> <div><div></div><div>3</div><div>4</div></div>	<div>0-1=0, 2-3=1, 4=2</div>	<div></div>	<div></div>
3.	MapSense5 Recall	<div>0-2=0, 3-4=1, 5=2</div>	<div></div>	<div><div></div><div>1</div><div></div></div> <div><div></div><div>2</div><div>3</div></div> <div><div>5</div><div>4</div><div></div></div>	<div>0-2=0, 3-4=1, 5=2</div>	<div></div>	<div></div>

		1
3	2	
1		
	2	
	3	4
	1	
	2	3
5	4	

H.1 TOTAL VISUOSPATIAL MEMORY RECALL ACCURACY SCORE

SCORE 0 - 6

H.2 TOTAL VISUOSPATIAL MEMORY RECALL

RHYTHM/COORDINATION SCORE

SCORE 0 - 6

I. RAPID/SEQUENTIAL MOVEMENTS SCORING CRITERIA

1. FOOT TAP -Rapidity Raw score = total number of correct foot taps in 10 seconds.
0-9 =0; 10-19 = 1; >20 = 2

2. FOOT STOMP -Rapidity Raw score = total number of correct foot stomp movements in 10 seconds.
0-9 =0; 10-19 = 1; >20 = 2

3. FIST OPEN CLOSE -Rapidity Raw score = total number of correct fist opening times in 10 seconds.
0-9 =0; 10-19 = 1; >20 = 2

4. HAND PRONATE/SUPINATE -Rapidity Raw score = total number of correct Pronate/Supinate movements in 10 seconds. 0-5 =0; 6-9 = 1; >10 = 2

5. FINGER TAP -Rapidity Raw score = total number of correct Finger taps in 10 seconds.
0-15 =0; 16-29 = 1; >30 = 2

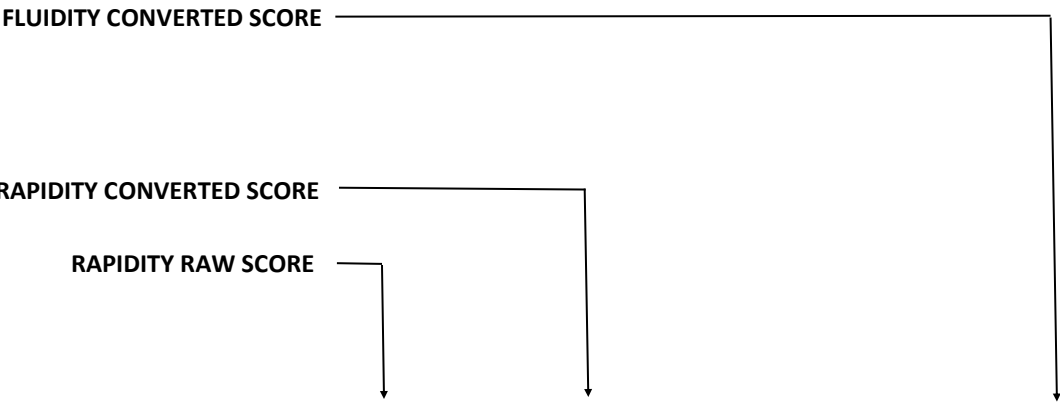
****Fluidity Score ALL TASKS** — Smoothness and accuracy of motion (freezes up or other movements intrude).

Stops and doesn't restart or switches to another movement and doesn't change back to the correct movement = 0.

Stops but restarts, has intrusive movements but returns to correct movements or has mirror movements = 1.

Continuous correct movement = 2.

H. RAPID/SEQUENTIAL MOVEMENTS



FOOT TAP—RIGHT FOOT (10 SEC)				
FOOT TAP—LEFT FOOT (10 SEC)				
FOOT STOMP—RIGHT FOOT (10 SEC)				
FOOT STOMP—LEFT FOOT (10 SEC)				
FIST OPEN CLOSE —RIGHT HAND (10 SEC)				
FIST OPEN CLOSE —LEFT HAND (10 SEC)				
HAND PRONATE/SUPINATE—RIGHT HAND (10 SEC)				
HAND PRONATE/SUPINATE—LEFT HAND (10 SEC)				
FINGER TAP—RIGHT HAND (10 SEC)				
FINGER TAP—LEFT HAND (10 SEC)				
TOTAL SCORE				

I.1 TOTAL RAPIDITY SCORE _____

I.2 TOTAL FLUIDITY SCORE _____

SUMMARY OF SCORES

BALANCE

Gait/Balance Total
(A.1)

Balance Total (A.2)

Balance Total





0-1 = 0; 2-3 = 1, 4-5 = 2; 6-8 = 3; 9-10 = 4; 11-12 = 5

BALANCE CONVERTED SCORE

WORKING MEMORY

Yellow Light Accuracy
Total (E.1+F.1)

Cross Body Opposites
(G.3)

MapSense
(C.1)

Working Memory
Total







0-6 = 0; 7-13 = 1; 14-21 = 2; 22-27 = 3; 28-32 = 4; 33-36 = 5

WORKING MEMORY CONVERTED SCORE

RESPONSE INHIBITION

Bag Pass Response Inhibition
Total (E.2+F.2)

Cross Body Rhythm Total
(G.2)

Response Inhibition
Total





0-3 = 0; 4-6 = 1, 7-10 = 2; 11-14 = 3; 15-17 = 4; 18-20 = 5

RESPONSE INHIBITION CONVERTED SCORE

SELF-REGULATION

Cross Body Accuracy
(G.1)


Cross Body Rhythm
Total (G.2)


Self-Regulation
Total

0-1 = 0; 2-3 = 1, 4-8 = 2; 9-12 = 3; 13-14 = 4; 15-16 = 5

SELF-REGULATION CONVERTED SCORE

Rhythm/Coordination

Upper Body Rhythm
Total (D.2+E.3)

Whole Body
Rhythm Total (G.2)

MapSense
(C.2)

MapSense Recall
Rhythm/Coordination
(H.2)

Rhythm/
Coordination Total









0-5 = 0; 6-12 = 1; 13-18 = 2; 19-25 = 3; 26-32 = 4; 33-38 = 5

RHYTHM/COORDINATION CONVERTED
SCORE

ATTENTION

Bag Pass Accuracy
Total (D.1+E.1+F.1)

Cross Body Accuracy Total
(G.1)

MapSense
(C.1)

Attention Total

+

+

=

0-5 = 0; 6-13 = 1; 14-20 = 2; 21-30 = 3; 31-37 = 4; 38-42 = 5

ATTENTION CONVERTED SCORE

MOTOR SPEED

Rapidity Total (I.1)

Fluidity Total (I.2)

Motor Speed Total

+

=

0-5 = 0; 6-13 = 1; 14-20 = 2; 21-30 = 3; 31-36 = 4; 37-40 = 5

MOTOR SPEED CONVERTED SCORE

EMBODIED MEMORY RECALL

Visual Memory Recall Accuracy (H.1)

Visual Memory Recall Total

=

0= 0; 1= 1; 2 = 2; 3-4 = 3; 5 = 4; 6 = 5

VISUAL MEMORY CONVERTED SCORE

AMC TOTAL SCORE

BALANCE CONVERTED SCORE



WORKING MEMORY CONVERTED
SCORE



RESPONSE INHBITION CONVERTED
SCORE



SELF-REGULATION CONVERTED SCORE



RHYTHM/COORDINATION CONVERTED
SCORE



ATTENTION CONVERTED SCORE



EMBODIED MEMORY RECALL
CONVERTED SCORE



MOTOR SPEED CONVERTED SCORE



AMC TOTAL SCORE

Performance Categories

Very Severely Impaired	0—15	<div></div>
Severely Impaired	16—18	<div></div>
Moderately Severely Impaired	19—22	<div></div>
Moderately Impaired	23—27	<div></div>
Mildly Impaired	28—32	<div></div>
Minor Difficulties	33—36	<div></div>
No Difficulties	37—40	<div></div>

SUPPLEMENTARY SCORES

Discrepancy - Right / Left

Right	Left
A.5	A.6
H.1	H.2
H.3	H.4
H.5	H.6
H.7	H.8
H.9	H.10
Total =	Total =

—

=

Discrepancy - Auditory / Visual

Auditory	Visual
E.4	F.1
E.5	F.2
Total =	Total =

—

=

Discrepancy

Timed Up & Go / Dual Attention

—

=

Discrepancy - Accuracy / Response Inhibition

Accuracy	Response Inhibition
E.1	E.2
F.1	F.2
Total =	Total =

—

=

Participant Experience Questionnaire
ACTIVATE TEST OF EMBODIED COGNITION

ID Number _____

Date _____

Please rate the following statements about the ATEC assessment experience using a scale of 1 to 5, where **1 indicates that you STRONGLY DISAGREE** and **5 indicates you STRONGLY AGREE**.

	Strongly Disagree				Strongly Agree
1. I found that some of the tasks were challenging.	1	2	3	4	5
2. I was often bored during the assessment.	1	2	3	4	5
3. I liked the video host, and thought the demonstrations were helpful.	1	2	3	4	5
4. I liked doing some tasks I had never done before.	1	2	3	4	5
5. I always felt safe doing the tasks.	1	2	3	4	5
6. I thought the assessment was relevant to my medical and physical health.	1	2	3	4	5
7. I would not hesitate to take this assessment again.	1	2	3	4	5
8. Instructions were confusing, and I usually didn't understand what I was supposed to do.	1	2	3	4	5
9. Overall, I felt comfortable with the assessment process.	1	2	3	4	5
10. Overall, I enjoyed doing the tasks.	1	2	3	4	5

Semi Structured Interview for Qualitative Assessment

Did you feel this assessment was enjoyable? Yes No

Why or why not?

What task(s) were your favorite? Why?

What task(s) did you dislike? Why?

Did you feel safe and comfortable during the assessment? Yes No

Why or Why not?

What task(s) if any made you feel unsafe? Why?

If you found some tasks uncomfortable, what could we do to make it better for you?

Do you think that this assessment is relevant for understanding your mental or physical health problems? Yes No

Why or Why not?

Would you be willing to take this assessment again? Yes No

Why or Why not?

Is there anything else you would like to tell us about your experience taking this assessment?

Thank you for sharing your experience and for participating in this process.