Researcher Developed Tools to Assess the Relationship of ADHD to Reading Comprehension

Reference:
### DSM IV Attention-Deficit/Hyperactivity Disorder Symptom Rating Scale

**Subject's Name:** _________________  **Rater's Name:** __________________  **Date:** ____________

**Directions:** Please read each statement carefully, and determine how much the person you are rating has displayed the behavior during the past 6 months.

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Not at All</th>
<th>Just a Little</th>
<th>Pretty Much</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Often has difficulty sustaining attention to tasks or play activities.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Often does not seem to listen when spoken to directly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions).</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Often has difficulty organizing tasks and activities.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework).</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools).</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Is often easily distracted by extraneous stimuli.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>Is often forgetful in daily activities.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Often fidgets with hands or feet or squirms in seat.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Often leaves seat in classroom or in other situations in which remaining seated is expected.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>Often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness).</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>Often has difficulty playing or engaging in leisure activities quietly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14</td>
<td>Is often &quot;on the go&quot; or often acts as if &quot;driven by a motor.&quot;</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>Often talks excessively.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>Often blurts out answers before questions have been completed.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>Often has difficulty awaiting turn.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>Often interrupts or intrudes on others (e.g., Butts into conversations or games).</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
**Reading Comprehension Protocol (Even Subject Numbers)**

Name: __________________________ Date: __________________

### Macroprocessing

<table>
<thead>
<tr>
<th>Passage Number</th>
<th>Topic Score</th>
<th>Main Idea Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Topic Score:  
Main Idea Score:  *

### Comprehension Monitoring

<table>
<thead>
<tr>
<th>Passage Number</th>
<th>Comprehension Self-Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Comprehension Self-Rating Total Score:  *

### Microprocessing

<table>
<thead>
<tr>
<th>Passage Number</th>
<th>Exactly Correct Score</th>
<th>Gist Correct Score</th>
<th>Exactly + Gist Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Exactly Correct Total Score:  
Gist Correct Total Score:  
Exactly + Gist Score:  
Words per minute ÷ EG Score:  *
Macroprocessing
(Passage Number _____)

Instructions Read by Examiner (before presenting the first macroprocessing passage):
"Now I'm going to ask you to read a complete passage to yourself. It is important to read this passage carefully because when you are done I'm going to ask you questions about the passage. I will be asking you to give a good title to the passage and for the main or important ideas in the passage. So as you read try to think of a good title and try to identify the main ideas. Take as long as you want to read the passage. Read carefully and let me know when you have finished reading."

(Start stopwatch.)

Subject's Reading Time: __________

Comprehension Monitoring

Instructions Read by Examiner (once the subject has finished reading the first passage):
"Now that you have finished reading, and before I ask you some questions, I would like to know how well you think you understood what you just read. The passage was not real easy so don't be afraid to report that you did not understand the passage. Use this sheet to let me know how much you think you understood."

(Examiner hands Did I Understand What I Just Read? sheet to the subject.)

Subject's Comprehension Self-Rating: __________

Topic

Instructions Read by Examiner (after the subject has completed Did I Understand What I Just Read? sheet):
"The passage you just read did not have a title. How would you title it?"

Topic: ________________________________

Main Ideas

Instructions Read by Examiner (after the subject has suggested a topic or title):
"What were the 5 (passage 7)/ 6 (passage 3) main ideas or important points discussed in this passage? Please tell me as many as you can think of." (For all one word responses say: "Tell me more about that main idea").

Idea 1: ________________________________

Idea 2: ________________________________

Idea 3: ________________________________

Idea 4: ________________________________

Idea 5: ________________________________

Idea 6: ________________________________
Macroprocessing
(Passage Number: _____)

Instructions Read by Examiner (before presenting the second macroprocessing passage):
"Now I'm going to ask you to read another passage to yourself. Again, it is important to read this passage carefully because when you are done I'm going to ask you questions about the passage. I am again going to ask you for the topic and main ideas of this passage. Take as long as you want to read the passage. Let me know when you have finished reading." (Present second macroprocessing passage) "Begin". (Start stopwatch.)
Subject's Reading Time: _________

Comprehension Monitoring

Instructions Read by Examiner (once the subject has finished reading the first passage):
"Now that you have finished reading, and before I ask you some questions, I would like to know how well you think you understood what you just read. The passage was not real easy so don't be afraid to report that you did not understand the passage. Use this sheet to let me know how much you think you understood." (Examiner hands Did I Understand What I Just Read? sheet to the subject.)

Subject's Comprehension Self-Rating: _________

Topic

Instructions Read by Examiner (after the subject has completed Did I Understand What I Just Read? sheet):
"The passage you just read did not have a title. How would you title it?"

Topic: _______________________________________

Main Ideas

Instructions Read by Examiner (after the subject has suggested a topic or title):
"What were the 7 (passage 9)/ 8 (passage 10) main ideas or important points discussed in this passage? Please tell me as many as you can think of." (For all one word responses say: "Tell me more about that main idea").

Idea 1: _______________________________________

Idea 2: _______________________________________

Idea 3: _______________________________________ 

Idea 4: _______________________________________ 

Idea 5: _______________________________________ 

Idea 6: _______________________________________ 

Idea 7: _______________________________________ 

Idea 8: _______________________________________
Microprocessing
(Passage Number: _____)

Instructions Read by Examiner (before having presented the first microprocessing passage):

"Next, I'm going to ask you to read two passages that have missing words. Here's the first one." (Present first microprocessing passage.) "I would like you to read each passage to yourself and make your best guess at what the missing words are. Any guess is better than no response at all. But if you can't make a guess it is OK to say, 'I don't know.' and go on. It is important to try your best. Begin." (Start stopwatch.)

Subject's Reading Time: __________

(Passage Number: _____)

Instructions Read by Examiner (before having presented the second microprocessing passage):

"Let's try one more." (Present second microprocessing passage.) "Again, I would like you to read this passage to yourself and make your best guess at what the missing words are. Any guess is better than no response at all. But if you can't make a guess it is OK to say, 'I don't know.' and go on. It is important to try your best." "Begin." (Start stopwatch.)

Subject's Reading Time: __________
Macroprocessing Passage 3

This passage discusses muscles and bones. You will be reading about how to keep them healthy.

The muscles and bones of your body are important. They give your body its shape. They allow your body to move. For example, muscles and bones help you to run and walk.

Also, muscles and bones protect your body's organs. For example, the skull protects your brain and the ribs protect your heart. The ribs also protect your lungs. The spine protects your spinal cord.

Because muscles and bones are important you should know how to keep them healthy. Think about all the things you could not do if your muscles and bones were not healthy.

There are three important things you can do to keep your muscles and bones healthy. The first thing you can do is to eat a proper diet. Eating a proper diet means eating the foods needed for healthy muscles and bones.

What makes up a proper diet? There are four main groups of foods that make up a proper diet. The meat group contains protein foods needed for cell growth. These foods also help to make new cells. The dairy group includes foods that contain minerals. Minerals are important because they make bones hard. The foods in the fruit and vegetable group contain needed vitamins. The bread and cereal group foods provide energy. Muscles need energy to move bones. Without a proper diet your muscles and bones will not work well.

The second thing you can do to keep your muscles and bones healthy is to get enough of the right kinds of exercise. Along with a proper diet, exercise is important for the growth and development of muscles. When muscles are not used, they shrink. This means they become smaller and weaker. Exercise keeps muscles big and strong. Without the right kinds of exercise your muscles and bones will not work well.

The third thing you can do to keep your muscles and bones healthy is to get enough rest. While exercise is important, there is a problem created by exercise. As energy is used in exercising, food is burned. When the body burns food, waste products are left behind in the muscles. Rest helps get rid of these wastes. Rest also keeps muscles and bones from being overused. Sleep helps to relax muscles and rids them of waste materials. Without enough rest your muscles and bones will not work well.
The air you breathe often contains unwanted substances. These substances are called air pollution. In this passage you will read about air pollution. You will also read about how to stop air pollution.

Cars, trucks, homes, and factories use energy. They burn fossil fuels for energy. Coal, oil, and gas are fossil fuels. The burning of fossil fuels causes air pollution.

In parts of the United States and Canada, there is a special type of pollution. It is called acid rain. The major cause of this pollution is the burning of fossil fuels. Volcanoes and forest fires also add to acid rain. When fuels burn and volcanoes erupt, chemical wastes enter the air. Water vapor in the air combines with these chemicals. This combination forms weak acids in the air. These acids fall to the ground as snow or rain.

Acid rain falls on the land and into lakes and streams. In lakes and streams it increases the amount of acid in the water. This change kills fish. It also kills other living things. Acid rain also breaks down minerals in the soil. The breakdown of minerals robs plants of important materials for growth. Some plants cannot live where there is acid rain.

Another type of pollution occurs in places that have factories, cars, and trucks. This pollution is called smog. Most smog is a mixture of smoke and fog. Smog occurs when calm, moist air near the ground is trapped. The air remains in the area for several days. The longer the air stays in one place, the worse the pollution becomes. Smog can be harmful. It can even cause death.

Today, people know that air pollution is a problem. There are many ways that pollution can be controlled. One way is to stop driving cars and trucks. Cars and trucks cause much pollution. If people walk, ride bicycles, or take trains and buses pollution can be controlled. They can join car pools to get to school or work. In this way, fewer cars and trucks will be on the roads. There will be less air pollution.

Today new cars must have devices that trap and burn up harmful gases in car exhaust. Most new cars are built so that they burn only unleaded gasoline. Burning gasoline that has lead in it causes harmful substances to be released.

Factories are required to use special devices in their smokestacks. These devices use an electrical charge to attract particles from smoke. They also remove harmful waste gases.

An important law, the Clean Air Act, was passed in 1970. This law limits the amount of pollution allowed in the air. When the amount gets too high, factories are ordered to stop burning certain fuels. When pollution is reduced to a safe level, the factories can begin burning these fuels again.
Macroprocessing Scoring Guidelines

General Scoring Procedures

Before scoring any of the macroprocessing protocols, it is important for the rater to carefully read the macroprocessing passages and the Topic and Main Idea Scoring Guidelines that accompany these passages.

When scoring a given protocol the rater should first read all the subject's topic and main idea responses to the passage. Next, the rater should score the subject's topic response. If all components of the topic are present, as specified by the scoring guidelines, the subject may be given a score of 1. If only part of the topic is present, as specified by the scoring guidelines are present, the subject may be given half credit (a score of .5). If none of the topic is present, as specified by the scoring guidelines, the subject will be given no credit for the response (a score of 0).

After scoring a subject's topic response, the rater should next attempt to assign one of the main ideas to each of the subjects main idea responses. If a given response does not match any of the main ideas it is automatically scored 0. For the remaining responses, referring to the main idea scoring guidelines, the rater should next score the subjects main idea responses. If all components of the main idea are present, as specified by the scoring guidelines, the subject may be given a score of 1. If only part of the main idea is present, as specified by the scoring guidelines, the subject may be given partial credit (a score of .75 or .5). If the response does not match any of the main idea scoring guidelines the subject will be given no credit for the response (a score of 0).

Other general topic and main idea scoring guidelines are as follows:

(1) A given main idea can be scored a maximum of 1 point. For example, if a subject gives a 1 point response to main idea three, and later gives a different .5 point response to the same main idea, the score for main idea three would be 1 (not 1.5).
(2) If a topic response is scored as a 0, and the response meets main idea scoring criteria, it may be given credit as a main idea. However, a main idea may not be given credit as a topic.
(3) If the rater is unsure of whether a response corresponds to a main idea scoring guideline, it is recommended that the rater keep in mind that this is a measure of reading comprehension. If a response is given credit, it will be important for the rater to have judged that the response reflects understanding of the passage read.

Topic and Main Idea Scoring Guidelines

The following are the specific scoring guidelines for each of the macroprocessing passages. They should be read carefully before scoring a subject's macroprocessing protocol.
Passage 3

**TOPIC:** How to keep muscles and bones healthy.

**Main Idea 1:** Muscles and bones perform important jobs in the body.

- 1 pt. = Any general statement which recognizes that muscles and bones perform important functions.
- 1 pt. = Reference to all 3 of the following important functions muscles and bones perform: they give the body its shape, they help the body move, they protect the body's organs.
- .75 pt. = 2 of 3 of the important functions listed above.
- .5 pt. = 1 of 3 of the important functions listed above.
- .5 pt. = Any specific statement that recognizes at least one way in which muscles and bones are important (i.e., they help the body to run and walk; they protect the brain, heart, lungs, and spinal cord).

**Main Idea 2:** Eating a proper diet helps to keep muscles and bones healthy.

- 1 pt. = Any statement that recognizes that a proper diet keeps muscles and bones healthy.
- .5 pt. = Any statement that recognizes the importance of eating a proper diet without specific reference to keeping muscles and bones healthy.

**Main Idea 3:** The four main food groups make up a proper diet.

- 1 pt. = A statement that recognizes that four food groups make up a proper diet [i.e., that there are four food groups, or specific reference to each of the four groups (meat, dairy, fruit and vegetable, bread and cereal)].
- .5 pt. = Any statement that recognizes at least one, but less than four of the main food groups as being important to keeping muscles and bones healthy.

**Main Idea 4:** Getting enough of the right kinds of exercises is important for the growth and development of muscles.

- 1 pt. = Any statement that recognizes that exercise keeps muscles and bones healthy.
- .5 pt. = Any statement that recognizes the importance of exercise without specific reference to keeping muscles and bones healthy.

**Main Idea 5:** Rest and sleep help muscles and bones healthy.

- 1 pt. = Any statement that recognizes that rest and/or sleep keeps muscles and bones healthy.
- .5 pt. = Any statement that recognizes the importance of rest or sleep without specific reference to keeping muscles and bones healthy.

**Main Idea 6:** Rest and sleep rid muscles of waste materials and helps keep them from being overused.

- 1 pt. = A statement that recognizes the two ways in which rest and sleep helps to keep muscles and bones healthy (i.e., it rids muscles of waste materials created by exercise and it helps to keep them from being overused).
- .5 pt. = A statement that recognizes one of the two ways in which rest and sleep helps to keep muscles and bones healthy (i.e., it rids muscles of waste materials created by exercise or it helps to keep them from being overused).
Did I Understand What I Just Read?

Please rate your understanding of what you have just read by pointing to the number that best matches how well you understood the passage.

1
I did not understand the passage

2
I understood less than half of the passage

3
I understood about half of the passage

4
I understood more than half of the passage

5
I understood all of the passage