

**Appendix 1: The Ritvo Autism Asperger’s Diagnostic Scale-Revised (RAADS-R) and Scoring Instructions**

# RAADS-R<sup>©</sup>

## Ritvo Autism-Asperger’s Diagnostic Scale – Revised

*All information on this scale is strictly confidential*

- \* 1. Your name \_\_\_\_\_
- \* 2. Your address \_\_\_\_\_  
\_\_\_\_\_
- \* 3. Your phone number ( \_\_\_\_ ) \_\_\_\_\_
- \* 4. Today’s date \_\_\_\_\_
- \* 5. Your age in years \_\_\_\_\_
- Your gender:      \* 6. Male            \* 7. Female
- Marital status:    \* 8. Single            \* 9. Married            \* 10. Divorced
- \* 11. Not married but in a significant relationship
- Do you have children?    \* 12. Yes            \* 13. No
- \* 14. If yes, list their sexes, ages and any psychiatric or neurological disabilities they may have including autism and Asperger’s Disorder:
- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

Do you have or have you ever had a driver’s license?      Yes       No

- \* 17. The highest grade passed or degree earned in school \_\_\_\_\_
- \* 18. Was this in regular class?
- \* 19. Or special education?
- \* 20. Have you ever been diagnosed or labelled as having Autistic Disorder, Asperger’s Disorder, High Functioning Autism, Pervasive Developmental Disorder, Dyslexia, Mental Retardation, Learning Disability or another psychiatric or neurological disorder?  
If so, please name the diagnosis or label, when it was given and by whom (name the doctor, clinic or a school). Please use other paper if necessary.
- Diagnosis: \_\_\_\_\_
- Name of doctor, clinic or other: \_\_\_\_\_
- Date of diagnosis: \_\_\_\_\_

When did you begin speaking?

- \* 21. I began at the usual time (around my second birthday at 24 months of age)
- \* 22. I began speaking late (at or later than age 2½ or 30 months)
- \* 23. I have no information as to when I began speaking or early language problems.

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It will take you about an hour to answer all the questions.

| Some life experiences and personality characteristics that may apply to you   | Check only one column         |                          |                                      |                          |
|---|-------------------------------|--------------------------|--------------------------------------|--------------------------|
|   | True now and when I was young | True only now            | True only when I was younger than 16 | Never true               |
| 1* I am a sympathetic person.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 2. I often use words and phrases from movies and television in conversations.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 3. I am often surprised when others tell me I have been rude.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 4. Sometimes I talk too loudly or too softly, and I am not aware of it.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 5. I often don't know how to act in social situations.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 6* I can "put myself in other people's shoes."  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 7. I have a hard time figuring out what some phrases mean, like "you are the apple of my eye."                                  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 8. I only like to talk to people who share my special interests.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 9. I focus on details rather than the overall idea.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 10. I always notice how food feels in my mouth. This is more important to me than how it tastes.                                | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 11* I miss my best friends or family when we are apart for a long time.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 12. Sometimes I offend others by saying what I am thinking, even if I don't mean to.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 13. I only like to think and talk about a few things that interest me.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 14. I'd rather go out to eat in a restaurant by myself than with someone I know.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 15. I cannot imagine what it would be like to be someone else.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 16. I have been told that I am clumsy or uncoordinated.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 17. Others consider me odd or different.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 18* I understand when friends need to be comforted.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 19. I am very sensitive to the way my clothes feel when I touch them. How they feel is more important to me than how they look. | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |

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| Some life experiences and personality characteristics that may apply to you                                     | Check only one column         |                          |                                      |                          |
|---|-------------------------------|--------------------------|--------------------------------------|--------------------------|
|   | True now and when I was young | True only now            | True only when I was younger than 16 | Never true               |
| 20. I like to copy the way certain people speak and act. It helps me appear more normal.                        | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 21. It can be very intimidating for me to talk to more than one person at the same time.                        | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 22. I have to “act normal” to please other people and make them like me.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 23* Meeting new people is usually easy for me.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 24. I get highly confused when someone interrupts me when I am talking about something I am very interested in. | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 25. It is difficult for me to understand how other people are feeling when we are talking.                      | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 26* I like having a conversation with several people, for instance around a dinner table, at school or at work. | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 27. I take things too literally, so I often miss what people are trying to say.                                 | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 28. It is very difficult for me to understand when someone is embarrassed or jealous.                           | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 29. Some ordinary textures that do not bother others feel very offensive when they touch my skin.               | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 30. I get extremely upset when the way I like to do things is suddenly changed.                                 | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 31. I have never wanted or needed to have what other people call an “intimate relationship.”                    | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 32. It is difficult for me to start and stop a conversation. I need to keep going until I am finished.          | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 33* I speak with a normal rhythm.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 34. The same sound, color or texture can suddenly change from very sensitive to very dull.                      | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 35. The phrase “I’ve got you under my skin” makes me very uncomfortable.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 36. Sometimes the sound of a word or a high-pitched noise can be painful to my ears.                            | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 37* I am an understanding type of person.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |

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| Some life experiences and personality characteristics that may apply to you   | Check only one column         |                          |                                      |                          |
|---|-------------------------------|--------------------------|--------------------------------------|--------------------------|
|   | True now and when I was young | True only now            | True only when I was younger than 16 | Never true               |
| 38. I do not connect with characters in movies and cannot feel what they feel.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 39. I cannot tell when someone is flirting with me.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 40. I can see in my mind in exact detail things that I am interested in.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 41. I keep lists of things that interest me, even when they have no practical use (for example sports statistics, train schedules, calendar dates, historical facts and dates). | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 42. When I feel overwhelmed by my senses, I have to isolate myself to shut them down.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 43* I like to talk things over with my friends.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 44. I cannot tell if someone is interested or bored with what I am saying.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 45. It can be very hard to read someone's face, hand and body movements when they are talking.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 46. The same thing (like clothes or temperatures) can feel very different to me at different times.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 47* I feel very comfortable with dating or being in social situations with others.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 48* I try to be as helpful as I can when other people tell me their personal problems.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 49. I have been told that I have an unusual voice (for example flat, monotone, childish, or high-pitched).  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 50. Sometimes a thought or a subject gets stuck in my mind and I have to talk about it even if no one is interested.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 51. I do certain things with my hands over and over again (like flapping, twirling sticks or strings, waving things by my eyes).  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 52. I have never been interested in what most of the people I know consider interesting.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 53* I am considered a compassionate type of person.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 54. I get along with other people by following a set of specific rules that help me look normal.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 55. It is very difficult for me to work and function in groups.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |

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**Check only one column**

| Some life experiences and personality characteristics that may apply to you   | True now and when I was young | True only now            | True only when I was younger than 16 | Never true               |
|---|-------------------------------|--------------------------|--------------------------------------|--------------------------|
| 56. When I am talking to someone, it is hard to change the subject. If the other person does so, I can get very upset and confused.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 57. Sometimes I have to cover my ears to block out painful noises (like vacuum cleaners or people talking too much or too loudly).  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 58* I can chat and make small talk with people.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 59. Sometimes things that should feel painful are not (for instance when I hurt myself or burn my hand on a stove).   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 60. When talking to someone, I have a hard time telling when it is my turn to talk or to listen.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 61. I am considered a loner by those who know me best.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 62* I usually speak in a normal tone.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 63. I like things to be exactly the same day after day and even small changes in my routines upset me.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 64. How to make friends and socialize is a mystery to me.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 65. It calms me to spin around or to rock in a chair when I am feeling stressed.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 66. The phrase, "He wears his heart on his sleeve," does not make sense to me.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 67. If I am in a place where there are many smells, textures to feel, noises or bright lights, I feel anxious or frightened.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 68* I can tell when someone says one thing but means something else.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 69. I like to be by myself as much as I can.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 70. I keep my thoughts stacked in my memory like they are on filing cards, and I pick out the ones I need by looking through the stack and finding the right one (or another unique way). | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 71. The same sound sometimes seems very loud or very soft, even though I know it has not changed.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 72* I enjoy spending time eating and talking with my family and friends.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 73. I can't tolerate things I dislike (like smells, textures, sounds or colors).  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |

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| Some life experiences and personality characteristics that may apply to you                      | Check only one column         |                          |                                      |                          |
|--|-------------------------------|--------------------------|--------------------------------------|--------------------------|
|  | True now and when I was young | True only now            | True only when I was younger than 16 | Never true               |
| 74. I don't like to be hugged or held.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 75. When I go somewhere, I have to follow a familiar route or I can get very confused and upset. | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 76. It is difficult to figure out what other people expect of me.                                | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 77* I like to have close friends.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 78. People tell me that I give too much detail.  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 79. I am often told that I ask embarrassing questions.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |
| 80. I tend to point out other people's mistakes.   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>             | <input type="checkbox"/> |

Thank you for your cooperation!  
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**Appendix 2: Instructions for Scoring the Scale**

The scale contains two types of questions:

- 64 questions describing specific symptoms of ASD. These are scored in order of severity from: “true now and when I was young” = 3, to “never true” = 0.

- 16 questions describing non symptomatic (normative) behaviors. These are score: “true now and when I was young” = 0 to “never true” = 3. These questions have asterisks by their number (Table 9).

**Table 9** Scores for the four possible answers

| Answer checked by the subject  | True now and when I was young | Only true now | True only when i was young | Never true |
|--|-------------------------------|---------------|----------------------------|------------|
| Symptom based questions<br>N = 64  | 3                             | 2             | 1                          | 0          |
| Example: “I take things too literally so I often miss what people are trying to say”.<br>(No asterisk after question number) |                               |               |                            |            |
| Normative questions<br>N = 16  | 0                             | 1             | 2                          | 3          |
| Example: “I” * “I am a sympathetic person”.<br>(Asterisk after question number)  |                               |               |                            |            |

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