

## **ADHD Checklist—Teacher Version**

Grade 2/Year 3

Fast Track Project Technical Report

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### **Table of Contents**

- I. Scale Description
- II. Report Sample
- III. Scaling
- IV. Differences Between Groups
- V. Recommendations for Use
- VI. Item and Scale Means and SDs
- VII. Item and Scale Correlations

### **Appendix**

SAS scoring program

### **Citation**

#### *Instrument*

DuPaul, G.J. (1990). *The ADHD Rating Scale: Normative data, reliability, and validity*. Unpublished manuscript. The University of Massachusetts Medical Center, Worcester, MA.

#### *Report*

Rains, C. (2003). *ADHD Checklist—Teacher Version* (Fast Track Project Technical Report). Available from the Fast Track Project website: <http://www.fasttrackproject.org/>

### **Data Sources**

*Raw:* T3D

*Scored:* ADT3

## **I. Scale Description**

The ADHD Checklist is composed of 14 items used to evaluate the occurrence of ADHD symptoms in children. These items are listed as the criteria for ADHD in the DSMIII-R and have been placed into a checklist format (DuPaul, 1990). The same checklist can be used for both parents and teachers (see separate detailed technical reports).

## **II. Report Sample**

These exploratory analyses were conducted on the first cohort on the high-risk control sample (n = 155) and the normative sample (n = 387, 463 with overlap) from the third year of the study. 51 records were missing the complete measure. 15 records were missing from the control sample (4 from Durham, 9 from Nashville, 1 from Pennsylvania, and 1 from Washington) and 46 records were missing from the normative sample (5 from Durham, 32 from Nashville, 4 from Pennsylvania, and 5 from Washington). These numbers may reflect some overlap between the two samples.

### III. Scaling

The 14 items evaluate a child's behavior and the likelihood of the child having ADHD. Each item is scored on a response scale of 0 to 3, where 0=not at all, 1=just a little, 2=pretty much, and 3=very much.

There are three derived scores and two diagnostic categorizations for this measure. All of these subscales are summary scores that are based on factor analysis or theoretically derived.

The first scale measures *Inattention*. Items include whether the child often fidgets in the seat (item 1), whether the child has difficulty remaining seated (item 2), whether the child is easily distracted (item 3), whether the child has difficulty following instructions (item 6), whether the child has difficulty sustaining attention to tasks (item 7), whether the child shifts from one uncompleted activity to another (item 8), whether the child does not seem to listen (item 12), and whether the child often loses things necessary for tasks (item 13).

The second scale measures *Impulsivity*. Items include whether the child often fidgets in the seat (item 1), whether the child has difficulty remaining seated (item 2), whether the child has difficulty awaiting turn in a group (item 4), whether the child often blurts out answers to questions (item 5), whether the child has difficulty playing quietly (item 9), whether the child often talks excessively (item 10), whether the child often interrupts or intrudes on others (item 11), and whether the child often engages in physically dangerous activities without considering consequences (item 14).

The next scale measures the *Total of all* the items and includes items 1-14. Those scores in this category that exceed the 1.5 standard deviation mark above the mean for age/sex are considered a clinically significant score. A dichotomous score (0 = "not clinically significant" and 1 = "clinically significant") is formed using a cutoff of 26 for male respondents and 23 for female respondents, based on the norms for age 8 provided by DuPaul.

The last scale measures the *Number of Symptoms Present* and includes all of the items. Adding the number of items rated as 2 or higher scores this scale. A score of 8 or more exceeds the DSMIII-R cutoff for a diagnosis of ADHD. Respondents with a total score at or above the clinical cutoff receive a "1" to indicate a diagnosis of ADHD. A "0" indicates that the respondent was not diagnosed with ADHD.

Cronbach's alphas were calculated for each subscale and are shown in the table below:

Subscales	Cronbach's Alpha	
	Control Sample	Normative Sample
<b>Inattention (ADT3INA)</b>	.94	.95
<b>Impulsivity (ADT3IMP)</b>	.92	.93
<b>Total of all (ADT3TOT)</b>	.95	.96
<b>Number of Symptoms Present (ADT3SYM)</b>	.91	.91

Each of the scales showed a high level of internal consistency for both the control and the normative samples.

### IV. Differences Between Groups

A series of t-tests between the high-risk control sample and the normative sample (including the overlap) indicated significant differences for all four of the subscales.

ADHD Checklist—Teacher Version--Subscales  
The TTEST Procedure

Variable	Normative Sample		Control Sample		DF	t Value	Pr >  t
	Mean	Std Dev	Mean	Std Dev			
<b>Inattention (ADT3ATT)</b>	7.57	6.39	12.83	6.87	410	7.71	<.0001
<b>Impulsivity (ADT3IMP)</b>	6.23	5.97	11.85	6.70	410	8.68	<.0001
<b>Total of all (ADT3TOT)</b>	11.97	10.02	21.45	11.25	410	8.72	<.0001
<b>Number of Symptoms Present (ADT3SYM)</b>	1.19	2.38	3.45	4.02	410	7.16	<.0001

The frequency distribution of the *Total of all* diagnostic criterion among the high-risk control and normative samples was:

Table of ADT3diag2 by group			
ADT3diag2 (Diagnosis for Total of all)	group		Total
Frequency Column Percent	Control	Normative	
<b>Not clinically significant</b> <b>0</b>	126 90.00	251 92.28	377
<b>Clinically significant</b> <b>1</b>	14 10.00	21 7.72	35
<b>Total</b>	140 33.98	272 66.02	412
<b>Frequency Missing = 51</b>			

With  $\chi^2 (1, N = 412) = 0.6178$ ,  $p < 0.4319$ , the hypothesis of independence between risk category (normative or high-risk control) and diagnosis of being clinically significant was not rejected for these data.

In addition, the frequency distribution of the *Number of Symptoms* diagnostic criterion among the high-risk control and normative samples was:

Table of ADT3diag1 by group			
ADT3diag1 (Diagnosis for Number of Symptoms)	group		Total
Frequency Column Percent	Control	Normative	
Non-ADHD diagnosis <b>0</b>	121 86.43	264 97.06	385
ADHD diagnosis <b>1</b>	19 13.57	8 2.94	27
<b>Total</b>	140 33.98	272 66.02	412 100.00
<b>Frequency Missing = 51</b>			

With  $\chi^2 (1, N = 412) = 17.0552, p < 0.0001$ , the hypothesis of independence between risk category (normative or high-risk control) and diagnosis of ADHD was rejected for these data.

Finally, it should also be noted that only 8 children received a score of "1" for both categories (i.e. *Total of all* diagnostic criterion and the *Number of Symptoms Present* diagnostic criterion). More children scored a "1" in just one category rather than in both categories.

Table of ADT3diag1 by ADT3diag2			
ADT3diag1 (Diagnosis for Number of Symptoms)	ADT3diag2 (Diagnosis for Total of all)		Total
Frequency Percent Row Percent Column Percent	<b>0</b>	<b>1</b>	
<b>0</b>	358 86.89 92.99 94.96	27 6.55 7.01 77.14	385 93.45
<b>1</b>	19 4.61 70.37 5.04	8 1.94 29.63 22.86	27 6.55
<b>Total</b>	377 91.50	35 8.50	412 100.00
<b>Frequency Missing = 51</b>			

## V. Recommendations for Use

Analysts should note that three of the subscales showed a fairly normal distribution for both the normative and control samples. These subscales were *Inattention*, *Impulsivity*, and *Total of all the items*. The normative sample was positively skewed for the *Number of Symptoms Present*, but the control sample was normally distributed.

The normative sample for *Number of Symptoms Present* showed a floor effect with 83% of the responses to be between 0.0 and 3.0. The highest possible score for this scale was 14.0.

## VI. Item and Subscale Means and SDs

### ADHD Checklist—Teacher Version Items Year 3 Normative Sample

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
T3D1	Often Fidgets or Squirms in Seat	341	1.1495601	1.0136893	0	3.0000000
T3D2	Has Difficulty Remaining Seated	341	0.9794721	1.0187309	0	3.0000000
T3D3	Is Easily Distracted	339	1.4100295	1.0176052	0	3.0000000
T3D4	Has Difficulty Awaiting Turn in Group	340	0.9088235	0.9565386	0	3.0000000
T3D5	Often Blurts Out Answers to Questions	340	0.9882353	1.0502885	0	3.0000000
T3D6	Has Difficulty Following Instructions	340	1.1529412	1.0219523	0	3.0000000
T3D7	Has Difficulty Sustaining Attention	340	1.1617647	1.0335136	0	3.0000000
T3D8	Often Shifts from 1 Uncompleted Activity	341	0.8739003	0.9934754	0	3.0000000
T3D9	Has Difficulty Playing Quietly	339	0.7994100	0.9426764	0	3.0000000
T3D10	Often Talks Excessively	339	1.1445428	1.0850209	0	3.0000000
T3D11	Often Interrupts or Intrudes on Others	341	1.0205279	1.0500088	0	3.0000000
T3D12	Often Does Not Seem to Listen	340	1.2000000	1.0339374	0	3.0000000
T3D13	Often Loses Things Necessary to Task	341	0.8181818	0.9832827	0	3.0000000
T3D14	Often Engages in Dangerous Activities	341	0.3900293	0.7691212	0	3.0000000

### ADHD Checklist—Teacher Version Items Year 3 Control Sample

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
T3D1	Often Fidgets or Squirms in Seat	140	1.7142857	1.0198442	0	3.0000000
T3D2	Has Difficulty Remaining Seated	139	1.5251799	1.0923378	0	3.0000000
T3D3	Is Easily Distracted	140	1.9857143	0.9443944	0	3.0000000
T3D4	Has Difficulty Awaiting Turn in Group	139	1.4532374	1.0371576	0	3.0000000
T3D5	Often Blurts Out Answers to Questions	140	1.5571429	1.0747021	0	3.0000000
T3D6	Has Difficulty Following Instructions	140	1.6642857	1.0361156	0	3.0000000
T3D7	Has Difficulty Sustaining Attention	140	1.6785714	1.0337322	0	3.0000000
T3D8	Often Shifts from 1 Uncompleted Activity	140	1.2928571	1.1026223	0	3.0000000
T3D9	Has Difficulty Playing Quietly	139	1.4316547	1.0498472	0	3.0000000
T3D10	Often Talks Excessively	139	1.6762590	1.0646890	0	3.0000000
T3D11	Often Interrupts or Intrudes on Others	140	1.6928571	1.0654578	0	3.0000000
T3D12	Often Does Not Seem to Listen	140	1.7214286	0.9749957	0	3.0000000
T3D13	Often Loses Things Necessary to Task	140	1.2500000	1.0737214	0	3.0000000
T3D14	Often Engages in Dangerous Activities	140	0.8000000	0.9906033	0	3.0000000

### ADHD Checklist—Teacher Version Subscales Year 3 Normative Sample

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
ADT3INA	Inattention - ADHD-Teacher	341	8.7345343	6.9170032	0	24.0000000
ADT3IMP	Impulsivity - ADHD-Teacher	341	7.3816506	6.5517756	0	24.0000000
ADT3TOT	Total of all - ADHD-Teacher	341	13.9892849	11.1163143	0	42.0000000
ADT3SYM	Number of Symptoms Present - ADHD Teacher	341	1.6859914	3.0714026	0	14.0000000

### ADHD Checklist—Teacher Version Subscales Year 3 Control Sample

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
ADT3INA	Inattention - ADHD-Teacher	140	12.8316327	6.8742564	0	24.0000000
ADT3IMP	Impulsivity - ADHD-Teacher	140	11.8520408	6.6983676	0	24.0000000
ADT3TOT	Total of all - ADHD-Teacher	140	21.4445055	11.2495619	0	42.0000000
ADT3SYM	Number of Symptoms Present - ADHD Teacher	140	3.4478022	4.0188804	0	14.0000000

## VII. Item and Scale Correlations

### ADHD Checklist—Teacher Version Items Year 3 Report Sample

	Pearson Correlation Coefficients Prob >  r  under H0: Rho=0 Number of Observations							
	T3D1	T3D2	T3D3	T3D4	T3D5	T3D6	T3D7	T3D8
<b>T3D1</b> Often Fidgets or Squirms in Seat	1.00000 <.0001 412	0.80950 <.0001 411	0.69528 <.0001 410	0.66633 <.0001 411	0.58839 <.0001 411	0.57103 <.0001 411	0.65930 <.0001 411	0.58058 <.0001 412
<b>T3D2</b> Has Difficulty Remaining Seated	0.80950 <.0001 411	1.00000 <.0001 411	0.67325 <.0001 409	0.70277 <.0001 410	0.61846 <.0001 410	0.56563 <.0001 410	0.63618 <.0001 410	0.58227 <.0001 411
<b>T3D3</b> Is Easily Distracted	0.69528 <.0001 410	0.67325 <.0001 409	1.00000 <.0001 410	0.62884 <.0001 409	0.45983 <.0001 409	0.77713 <.0001 409	0.83031 <.0001 409	0.73969 <.0001 410
<b>T3D4</b> Has Difficulty Awaiting Turn in Group	0.66633 <.0001 411	0.70277 <.0001 410	0.62884 <.0001 409	1.00000 <.0001 411	0.69530 <.0001 410	0.55071 <.0001 410	0.56815 <.0001 410	0.52547 <.0001 411
<b>T3D5</b> Often Blurts Out Answers to Questions	0.58839 <.0001 411	0.61846 <.0001 410	0.45983 <.0001 409	0.69530 <.0001 410	1.00000 <.0001 411	0.40676 <.0001 410	0.40047 <.0001 410	0.42716 <.0001 411
<b>T3D6</b> Has Difficulty Following Instructions	0.57103 <.0001 411	0.56563 <.0001 410	0.77713 <.0001 409	0.55071 <.0001 410	0.40676 <.0001 410	1.00000 <.0001 411	0.78711 <.0001 411	0.72893 <.0001 411
<b>T3D7</b> Has Difficulty Sustaining Attention	0.65930 <.0001 411	0.63618 <.0001 410	0.83031 <.0001 409	0.56815 <.0001 410	0.40047 <.0001 410	0.78711 <.0001 411	1.00000 <.0001 411	0.79768 <.0001 411
<b>T3D8</b> Often Shifts from 1 Uncompleted Activity	0.58058 <.0001 412	0.58227 <.0001 411	0.73969 <.0001 410	0.52547 <.0001 411	0.42716 <.0001 411	0.72893 <.0001 411	0.79768 <.0001 411	1.00000 <.0001 412
<b>T3D9</b> Has Difficulty Playing Quietly	0.65183 <.0001 410	0.70303 <.0001 409	0.55657 <.0001 408	0.68568 <.0001 409	0.65781 <.0001 409	0.51958 <.0001 409	0.53949 <.0001 409	0.52741 <.0001 410
<b>T3D10</b> Often Talks Excessively	0.63572 <.0001 409	0.65726 <.0001 408	0.56031 <.0001 407	0.64771 <.0001 408	0.65454 <.0001 408	0.51713 <.0001 408	0.52287 <.0001 408	0.52396 <.0001 409
<b>T3D11</b> Often Interrupts or Intrudes on Others	0.60038 <.0001 412	0.64312 <.0001 411	0.54499 <.0001 410	0.73445 <.0001 411	0.71878 <.0001 411	0.51562 <.0001 411	0.49232 <.0001 411	0.48121 <.0001 412
<b>T3D12</b> Often Does Not Seem to Listen	0.62596 <.0001 411	0.60446 <.0001 410	0.76172 <.0001 409	0.58260 <.0001 410	0.46186 <.0001 410	0.79581 <.0001 410	0.73383 <.0001 410	0.71616 <.0001 411
<b>T3D13</b> Often Loses Things Necessary to Task	0.56248 <.0001 412	0.57468 <.0001 411	0.65065 <.0001 410	0.54350 <.0001 411	0.41374 <.0001 411	0.65504 <.0001 411	0.65692 <.0001 411	0.65475 <.0001 412
<b>T3D14</b> Often Engages in Dangerous Activities	0.48584 <.0001 412	0.55054 <.0001 411	0.47422 <.0001 410	0.50691 <.0001 411	0.47727 <.0001 411	0.43852 <.0001 411	0.44286 <.0001 411	0.44331 <.0001 412

Pearson Correlation Coefficients Prob >  r  under H0: Rho=0 Number of Observations						
	T3D9	T3D10	T3D11	T3D12	T3D13	T3D14
<b>T3D1</b> Often Fidgets or Squirms in Seat	0.65183 <.0001 410	0.63572 <.0001 409	0.60038 <.0001 412	0.62596 <.0001 411	0.56248 <.0001 412	0.48584 <.0001 412
<b>T3D2</b> Has Difficulty Remaining Seated	0.70303 <.0001 409	0.65726 <.0001 408	0.64312 <.0001 411	0.60446 <.0001 410	0.57468 <.0001 411	0.55054 <.0001 411
<b>T3D3</b> Is Easily Distracted	0.55657 <.0001 408	0.56031 <.0001 407	0.54499 <.0001 410	0.76172 <.0001 409	0.65065 <.0001 410	0.47422 <.0001 410
<b>T3D4</b> Has Difficulty Awaiting Turn in Group	0.68568 <.0001 409	0.64771 <.0001 408	0.73445 <.0001 411	0.58260 <.0001 410	0.54350 <.0001 411	0.50691 <.0001 411
<b>T3D5</b> Often Blurts Out Answers to Questions	0.65781 <.0001 409	0.65454 <.0001 408	0.71878 <.0001 411	0.46186 <.0001 410	0.41374 <.0001 411	0.47727 <.0001 411
<b>T3D6</b> Has Difficulty Following Instructions	0.51958 <.0001 409	0.51713 <.0001 408	0.51562 <.0001 411	0.79581 <.0001 410	0.65504 <.0001 411	0.43852 <.0001 411
<b>T3D7</b> Has Difficulty Sustaining Attention	0.53949 <.0001 409	0.52287 <.0001 408	0.49232 <.0001 411	0.73383 <.0001 410	0.65692 <.0001 411	0.44286 <.0001 411
<b>T3D8</b> Often Shifts from 1 Uncompleted Activity	0.52741 <.0001 410	0.52396 <.0001 409	0.48121 <.0001 412	0.71616 <.0001 411	0.65475 <.0001 412	0.44331 <.0001 412
<b>T3D9</b> Has Difficulty Playing Quietly	1.00000 410	0.74899 <.0001 407	0.73975 <.0001 410	0.58385 <.0001 409	0.51084 <.0001 410	0.54084 <.0001 410
<b>T3D10</b> Often Talks Excessively	0.74899 <.0001 407	1.00000 409	0.82381 <.0001 409	0.62524 <.0001 408	0.50594 <.0001 409	0.41113 <.0001 409
<b>T3D11</b> Often Interrupts or Intrudes on Others	0.73975 <.0001 410	0.82381 <.0001 409	1.00000 412	0.60114 <.0001 411	0.52111 <.0001 412	0.46511 <.0001 412
<b>T3D12</b> Often Does Not Seem to Listen	0.58385 <.0001 409	0.62524 <.0001 408	0.60114 <.0001 411	1.00000 411	0.69912 <.0001 411	0.46971 <.0001 411
<b>T3D13</b> Often Loses Things Necessary to Task	0.51084 <.0001 410	0.50594 <.0001 409	0.52111 <.0001 412	0.69912 <.0001 411	1.00000 412	0.51792 <.0001 412
<b>T3D14</b> Often Engages in Dangerous Activities	0.54084 <.0001 410	0.41113 <.0001 409	0.46511 <.0001 412	0.46971 <.0001 411	0.51792 <.0001 412	1.00000 412

ADHD Checklist—Teacher Version Subscales Year 3 Report Sample

Pearson Correlation Coefficients, N = 412 Prob >  r  under H0: Rho=0				
	ADT3INA	ADT3IMP	ADT3TOT	ADT3SYM
ADT3INA Inattention - ADHD-Teacher	1.00000	0.81954 <.0001	0.95660 <.0001	0.79516 <.0001
ADT3IMP Impulsivity - ADHD-Teacher	0.81954 <.0001	1.00000	0.94567 <.0001	0.78922 <.0001
ADT3TOT Total of all - ADHD-Teacher	0.95660 <.0001	0.94567 <.0001	1.00000	0.83594 <.0001
ADT3SYM Number of Symptoms Present - ADHD Teacher	0.79516 <.0001	0.78922 <.0001	0.83594 <.0001	1.00000

**Appendix**

SAS scoring program removed