### **ADHD Checklist—Parent Version**

Grade 1/Year 2
Fast Track Project Technical Report
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#### 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 *The ADHD Rating Scale: Normative data, reliability, and validity.* Unpublished manuscript.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. (2005). *ADHD Checklist—Parent Version* (Fast Track Project Technical Report). Available from the Fast Track Project website: <a href="http://www.fasttrackproject.org/">http://www.fasttrackproject.org/</a>

### **Data Sources**

Raw: P2Q

Scored: ADP2

## 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 analyses were conducted on the first cohort on the high-risk control sample (n = 155) and the normative sample (n = 387, N = 463 with overlap) from the second year of the study. Thirty-three records were missing the complete measure. Nine records were missing from the control sample (4 from Durham, 1 from Pennsylvania, and 4 from Washington) and 26 records were missing from the normative sample (3 from Durham, 7 from Nashville, 4 from Pennsylvania, and 12 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 32 for male respondents and 24 for female respondents, based on the norms for age 7 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				
Inattention (ADP2INA)	.87	.89			
Impulsivity (ADP2IMP)	.76	.79			
Total of all (ADP2TOT)	.89	.91			
Number of Symptoms Present (ADP2SYM)	.87	.86			

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, with the participants in the control sample scoring higher than those in the normative sample on every scale and score.

	Comparison of Means for Normative and Control for Continuous Scales and Items									
		Normative		Normative Control						
Variable	Label	Mean	Std Dev	Mean	Std Dev	DF	t Value	Pr >  t		
ADP2INA	Inattention	6.91	4.43	11.02	4.95	428	8.76	<0.0001		
ADP2IMP	Impulsivity	4.91	3.38	7.92	3.59	428	8.56	<0.0001		
ADP2TOT	Total of all	11.82	7.28	18.94	7.90	428	9.33	<0.0001		
ADP2SYM	Number of Symptoms Present	0.74	1.71	1.80	2.93	428	4.75	<0.0001		

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

Table of ADP2diag2 by Group								
ADP2diag2 (ADHD Diagnosis based on Total Scale-ADHD Parent Y2)	Gro							
Frequency Column Percent	Control	Total						
Not clinically significant 0	137 93.84	278 97.89	415					
Clinically significant 1	9 6.16	6 2.11	15					
Total	146 33.95	284 66.05	430 100.00					
Frequenc	Frequency Missing = 33							

With  $\chi^2$  (1, N = 430) = 4.7019, p< 0.0301, the hypothesis of independence between risk category (normative or high-risk control) and diagnosis of being clinically significant was 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 ADP2diag1 by Group								
ADP2diag1 (ADHD Diagnosis based on # of Symptoms-ADHD Parent Y2)	Gro							
Frequency Column Percent	Control	Total						
Non-ADHD diagnosis 0	138 94.52	282 99.30	420					
ADHD diagnosis 1	8 5.48	2 0.70	10					
Total	146 33.95	284 66.05	430 100.00					
Frequenc	Frequency Missing = 33							

With  $\chi^2$  (1, N = 430) = 9.6801, p< 0.0019, 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 4 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 A	Table of ADP2diag1 by ADP2diag2							
ADP2diag1 (ADHD Diag. based on # of	ADP2diag2 (ADHD Diag. based on Total							
Symptoms-ADHD Parent Y2)	Scale-ADHL	Parent Y2)						
Frequency Percent Row Percent								
Column Percent	0	1	Total					
0	409 95.12 97.38 98.55	11 2.56 2.62 73.33	420 97.67					
1	6 1.40 60.00 1.45	4 0.93 40.00 26.67	10 2.33					
Total	415 96.51	15 3.49	430 100.00					
Freq	uency Missing =	33						

## 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. Both the normative and the control samples were positively skewed for the *Number of Symptoms Present*.

The normative sample for *Number of Symptoms Present* showed a floor effect with 68% of the participants scoring 0.0. The control sample for *Number of Symptoms Present* showed a floor effect with 50% of the responses being 0.0. The highest possible score for this scale was 14.0.

# VI. Item and Subscale Means and SDs

# ADHD Checklist—Parent Version Items Year 2 Normative Sample

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
P2Q1	Often Fidgets or Squirms in Seat	361	1.102	0.801	0.000	3.000
P2Q2	Has Difficulty Remaining Seated	361	1.055	0.902	0.000	3.000
P2Q3	Is Easily Distracted	361	1.274	0.888	0.000	3.000
P2Q4	Has Difficulty Awaiting Turn in Group	361	0.892	0.870	0.000	3.000
P2Q5	Often Blurts Out Answers to Questions	361	1.025	0.858	0.000	3.000
P2Q6	Has Difficulty Following Instructions	361	0.801	0.763	0.000	3.000
P2Q7	Has Difficulty Sustaining Attention	361	0.870	0.787	0.000	3.000
P2Q8	Often Shifts from 1 Uncompleted Activity	361	0.950	0.855	0.000	3.000
P2Q9	Has Difficulty Playing Quietly	361	0.778	0.882	0.000	3.000
P2Q10	Often Talks Excessively	361	1.291	1.041	0.000	3.000
P2Q11	Often Interrupts or Intrudes on Others	361	1.136	0.834	0.000	3.000
P2Q12	Often Does Not Seem to Listen	361	1.022	0.778	0.000	3.000
P2Q13	Often Loses Things Necessary to Task	361	0.679	0.735	0.000	3.000
P2Q14	Often Engages in Dangerous Activities	355	0.389	0.665	0.000	3.000

# ADHD Checklist—Parent Version Items Year 2 Control Sample

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
P2Q1	Often Fidgets or Squirms in Seat	146	1.466	0.856	0.000	3.000
P2Q2	Has Difficulty Remaining Seated	146	1.432	0.870	0.000	3.000
P2Q3	Is Easily Distracted	146	1.733	0.865	0.000	3.000
P2Q4	Has Difficulty Awaiting Turn in Group	146	1.397	0.867	0.000	3.000
P2Q5	Often Blurts Out Answers to Questions	146	1.493	0.824	0.000	3.000
P2Q6	Has Difficulty Following Instructions	146	1.185	0.805	0.000	3.000
P2Q7	Has Difficulty Sustaining Attention	146	1.363	0.870	0.000	3.000
P2Q8	Often Shifts from 1 Uncompleted Activity	146	1.397	0.898	0.000	3.000
P2Q9	Has Difficulty Playing Quietly	146	1.247	0.936	0.000	3.000
P2Q10	Often Talks Excessively	146	1.651	0.994	0.000	3.000
P2Q11	Often Interrupts or Intrudes on Others	146	1.521	0.807	0.000	3.000
P2Q12	Often Does Not Seem to Listen	146	1.459	0.815	0.000	3.000
P2Q13	Often Loses Things Necessary to Task	146	0.986	0.830	0.000	3.000
P2Q14	Often Engages in Dangerous Activities	142	0.592	0.773	0.000	3.000

# ADHD Checklist—Parent Version Subscales Year 2 Normative Sample

Variable	Label	N	Mean	Std Dev	Minimum	Maximum
ADP2INA ADP2IMP ADP2TOT ADP2SYM	Inattention -ADHD Parent Y2 Impulsivity -ADHD Parent Y2 Total of all -ADHD Parent Y2 Number of Symptoms -ADHD Parent Y2	361 361 361 361	7.753 5.515 13.268 0.967	4.907 3.630 8.035 2.095	0.000 0.000 0.000	24.000 18.000 42.000 14.000

# ADHD Checklist—Parent Version Subscales Year 2 Control Sample

Variable Label	N	Mean	Std Dev	Minimum	Maximum
ADP2INA Inattention -ADH ADP2IMP Impulsivity -ADH ADP2TOT Total of all -ADH ADP2SYM Number of Symp	D Parent Y2 146	7.919 18.940	3.593 7.904	1.000 1.000 2.000 0.000	24.000 18.000 42.000 14.000

# VII. Subscale Correlations

ADHD Checklist—Parent Version Scales Year 2 Report Sample

Pearson Correlation Coefficients, N = 430 Prob >  r  under H0: Rho=0								
ADP2INA ADP2IMP ADP2TOT ADP2S								
ADP2INA	1.000	0.763	0.956	0.700				
Inattention -ADHD Parent Y2		0.000	0.000	0.000				
ADP2IMP	0.763	1.000	0.919	0.705				
Impulsivity -ADHD Parent Y2	0.000		0.000	0.000				
ADP2TOT Total of all -ADHD Parent Y2	0.956 0.000	0.919 0.000	1.000	0.747 0.000				
ADP2SYM	0.700	0.705	0.747	1.000				
Number of Symptoms -ADHD Parent Y2	0.000	0.000	0.000					