Table 1. Demographic and diagnostic characteristics for the Whole Sample, ADHD Persist and ADHD in Partial Remission

	Whole sample N = 55		Persist N = 34		Partial remission N = 21	
	M	SD	M	SD	M	SD
T1 Age (months)	92.6	18.2	90.4	17.7	96.9	18.4
T2 Age (months)	140.6	17.9	138.4	12.4	144.2	18.6
T1 SES	4.44	1.34	4.53	1.19	4.29	1.57
T2 SES	4.00	1.50	3.71	1.36	4.48	1.60
	n	%	n	%	n	%
Sex						
Male	46	83.6	29	85.3	16	76.2
Female	9	16.4	4	11.8	5	23.8
Ethnicity						
European	51	92.7	32	94.1	19	90.5
Maori	4	7.3	2	5.9	2	9.5
Initial diagnosis						
Combined type	40	72.7	25	73.5	15	71.4
Inattentive type	10	18.2	5	11.8	5	23.8
Hyperactive/impulsive type	5	9.1	4	14.7	1	4.8
Oppositional defiant disorder	20	36.4	13	38.2	7	33.3
Conduct disorder	4	7.3	2	5.9	2	9.5
Medication use						
Historical	50	90.0	29	85.3	21	100.0
Current	36	65.5	25	73.0	11	52.0

T1 = baseline, T2 = 4-year follow-up, ADHD = Attention deficit hyperactivity disorder

Table 2. Summary statistics and group comparisons for the ADHD group at baseline and and follow-up assessments for the WISC-III and WRAT-III.

	n of pairs	Baseline assessment M (SD)	Follow-up assessment M (SD)	p
WISC-III				
Pro-Rated IQ Scores				
Full Scale IQ	47	↓86.32 (12.53)	↓87.70 (13.29)	0.282
Verbal IQ	47	↓86.21 (13.03)	↓86.13 (13.10)	0.978
Performance IQ	47	↓89.00 (12.12)	↓91.62 (14.52)	0.095
Index scores				
Freedom From Distractibility	47	↓86.40 (13.01)	↓86.45 (13.07)	0.974
Processing Speed	47	↓89.68 (14.81)	↓91.23 (15.57)	0.442
Verbal Subtests				
Similarities	47	7.11 (3.95)	8.04 (3.16)	
Arithmetic	47	7.36 (2.87)	7.57 (3.42)	
Vocabulary	47	8.06 (2.82)	6.89 (2.82)	
Digit Span	47	7.49 (2.49)	7.23 (2.16)	
Performance Subtests				
Picture Completion	47	8.00 (3.04)	8.47 (3.30)	
Coding	47	7.51 (3.14)	6.94 (3.00)	
Picture Arrangement	47	8.36 (2.87)	9.51 (3.64)	
Block Design	47	8.77 (3.27)	9.68 (3.43)	
Symbol Search	47	8.17 (3.29)	9.26 (3.67)	
WRAT-III				
Standard Scores				
Reading	55	↓92.69 (13.92)	↓90.98 (16.23)	0.414
Spelling	55	↓90.11 (13.85)	↓86.35 (13.06)	**0.028***
Arithmetic	55	↓84.53 (14.96)	↓82.24 (14.66)	0.286

WISC-III = The Wechsler Intelligence Scale for Children, WRAT-III – The Wide Range Achievement Test, IQ = Intelligence Quotient. Bold indicates comparisons significant after correcting for multiple comparisons.

Note. 8 of the 55 subjects completed the Wechsler Preschool and Primary Scale of Intelligence Revised (WPPSI-R) at baseline due to their age.

WISC-III IQ and and Index scores WRAT-III standard scores M = 100, SD = 15; WISC-III subtest scores M = 10, SD = 3

↓ Score significantly lower (worse) than population mean; ↑ Score significantly higher (better) than population mean; = Score not significantly different to population mean.

* When this analysis was run as a simple repeated measures ANOVA the result was significant after controlling for multiple $F(1,54) = 6.844$, $p = 0.012$.

Table 3. Summary statistics and group comparisons for the ADHD group at baseline and follow-up assessments for the executive function measures.

	N of pairs	Baseline Assessment		Follow-up Assessment		
		M (SD)	Mdn	M (SD)	Mdn	*p*
ACPT						
Inattentive Errors z Score	47	1.52 (2.27)		0.40 (2.41)		
Impulsive Errors z Score	47	1.58 (2.98)		1.14 (2.67)		
Total Errors z Score*	47	↓1.41 (1.81)	0.830	= 0.80 (2.83)	-0.011	**0.010**
Vigilance Decrement z Score*	47	↓1.07 (2.45)	0.300	= 0.44 (2.33)	-0.191	**0.017**
TMT						
TMTA z-Score*	39	↑-0.42 (0.86)	-0.667	=-0.004 (1.34)	-0.263	**0.012**
TMT-B z-Score*	39	↓ 0.34 (1.24)	0.442	=-0.100 (1.18)	-0.298	0.079
WCST						
Errors T-Score	35	37.51 (10.82)		47.26 (13.10)		
Perseverative Responses T-Score	35	38.86 (15.23)		47.57 (11.63)		
Perseverative Errors T-Score	35	↓38.37 (13.84)		= 49.06 (11.44)		**<0.001**
Non-Perseverative Errors T-Score	35	48.29 (18.07)		47.26 (13.41)		
Verbal Fluency						
Total Correct Standard Score	55	= 9.49 (3.00)		↑10.64 (3.08)		**0.012**
Design Fluency						
Free Condition						
Novel Responses z Score*	41	↓-0.38 (0.94)	-0.552	↓-0.42 (1.23)	-0.669	0.645
Wrong Answers z Score	41	0.76 (2.12)		1.29 (4.10)		
Perseverative Responses	41	-0.08 (1.07)		0.74 (2.94)		
Total Errors z Score*	41	↓-0.31 (0.89)	-0.610	= 0.29 (2.11)	-0.454	0.818
Total Responses z score	41	-1.41 (0.44)		-2.01 (0.66)		
Fixed Condition						
Novel Responses z Score	42	= 0.09 (1.14)		↓-0.45 (1.25)		**0.029**
Wrong Answers z Score	42	0.73 (2.44)		4.97 (3.42)		
Perseverative Responses z Score	42	2.31 (2.62)		0.87 (1.15)		
Total Errors z Score	42	↓-1.08 (0.56)		↓-0.60 (0.94)		**0.005**
Total Responses z score	42	1.37 (0.80)		-1.95 (0.82)		

ACPT = A Continuous Performance Test, TMT = Trail Making Test, WCST = Wisconsin Card Sorting Test. *Contrasts were analyzed using non-parametric statistics. Bold indicates significant group differences.

Scores on the ACPT, TMT and Design Fluency Test are all age corrected z-scores, representing performance relative to typically developing control subjects.

WCST and Verbal Fluency higher T scores/standard scores = better performance; ACPT, lower scores = better performance; TMT, positive scores = slower time to task completion than controls, negative scores = faster task completion; Design Fluency, novel responses higher (positive) scores = better performance (more novel responses), total errors lower (negative) scores = better performance (fewer errors)

WCST T scores M = 50, SD = 10; 30-34 = mild to moderately impaired range, 35-39 = mildly impaired range, 40-44 = below average range, 45-54 = Average range, 55 and above = Above Average range.
Verbal Fluency standard score = 10, SD = 3; 4-5 = Below Expected level, 6-7 = Borderline, 8-12 = At Expected level, 13-19 = Above Expected level.

↓ Score significantly worse than population mean; ↑ Score significantly better than population mean; = Score not significantly different to population mean.

Table 4. Reliable change statistics for the WISC-III and WRAT-III for the whole group, ADHD Persist, and ADHD Partial Remission subgroups.

	% Improve (n)	% Static (n)	% Decline (n)	% Improve (n)	% Static (n)	% Decline (n)	% Improve (n)	% Static (n)	% Decline (n)
	Full sample (n = 47)			ADHD Persist (n = 27)			ADHD Partial Remission (n = 20)		
WISC-III									
Pro-Rated IQ Scores									
Full Scale IQ	21.3 (10)	72.3 (34)	6.4 (3)	14.8 (4)	77.8 (21)	7.4 (2)	30.0 (6)	65.0 (13)	5.0 (1)
Verbal IQ	10.6 (5)	78.7 (37)	10.6 (5)	3.7 (1)	88.9 (24)	7.4 (2)	20.0 (4)	65.0 (13)	15.0 (3)
Performance IQ	12.8 (6)	80.9 (38)	6.4 (3)	11.1 (3)	81.5 (22)	7.4 (2)	15.0 (5)	80.0 (16)	5.0 (1)
Index scores									
Freedom From Distractibility	2.1 (1)	915 (43)	6.4 (3)	3.7 (1)	96.3 (26)	0.0 (0)	0.0 (0)	85.0 (17)	15.0 (3)
Processing Speed	13.8 (4)	83.0 (39)	4.3 (2)	14.8 (4)	81.5 (22)	3.7 (1)	10.0 (2)	85.0 (17)	5.0 (1)
	Full sample (n = 55)			ADHD Persist (n = 34)			ADHD Partial Remission (n = 21)		
WRAT-III									
Reading	14.5 (8)	61.8 (34)	23.6 (13)	14.7 (5)	55.9 (19)	29.4 (10)	14.3	71.4 (15)	14.3 (3)
Spelling	7.3 (4)	65.5 (36)	27.3 (13)	8.8 (3)	58.8 (20)	32.4 (11)	4.8	76.2 (16)	19.0 (4)
Arithmetic	10.9 (6)	67.3 (37)	21.8 (13)	11.8 (4)	61.8 (21)	26.5 (9)	9.5	76.2 (16)	14.3 (3)

WISC-III = Wechsler Intelligence Scale for Children, WRAT-III = The Wide Range Achievement Test

Improve = a reliable increase in age standardized scores; Static = no reliable change in age standardized scores; Decline = a reliable decrease in age standardized scores.
Raw test scores increased over time for all the children.