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**June 2014 Progress Update**

Study conducted by the Peabody Research Institute

at Vanderbilt University

PEABODY  
**research**  
institute

Generously funded by:

The Heising-Simons Foundation



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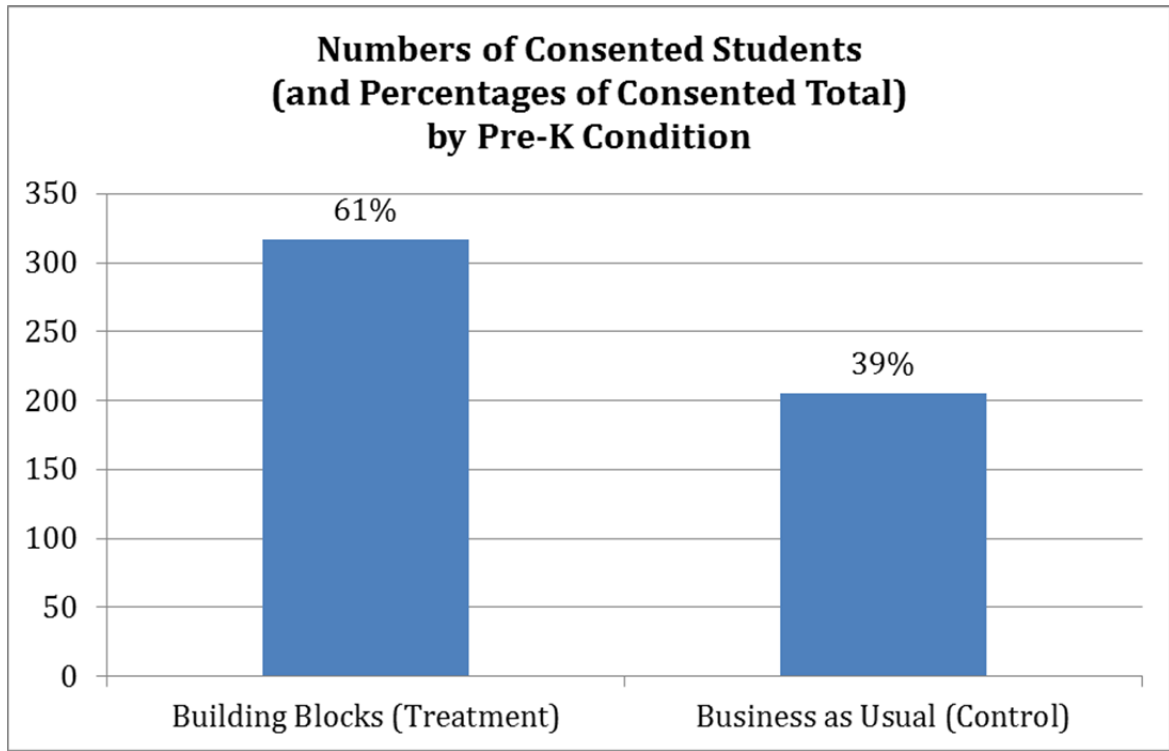
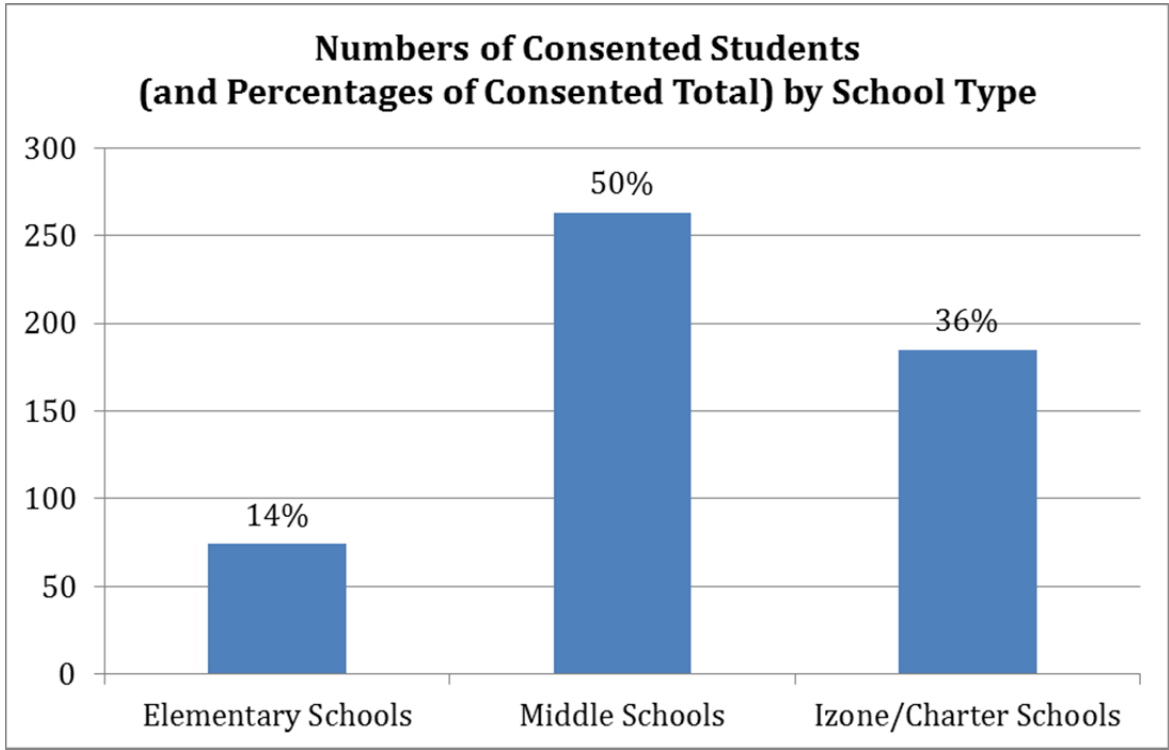
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# Consented Students

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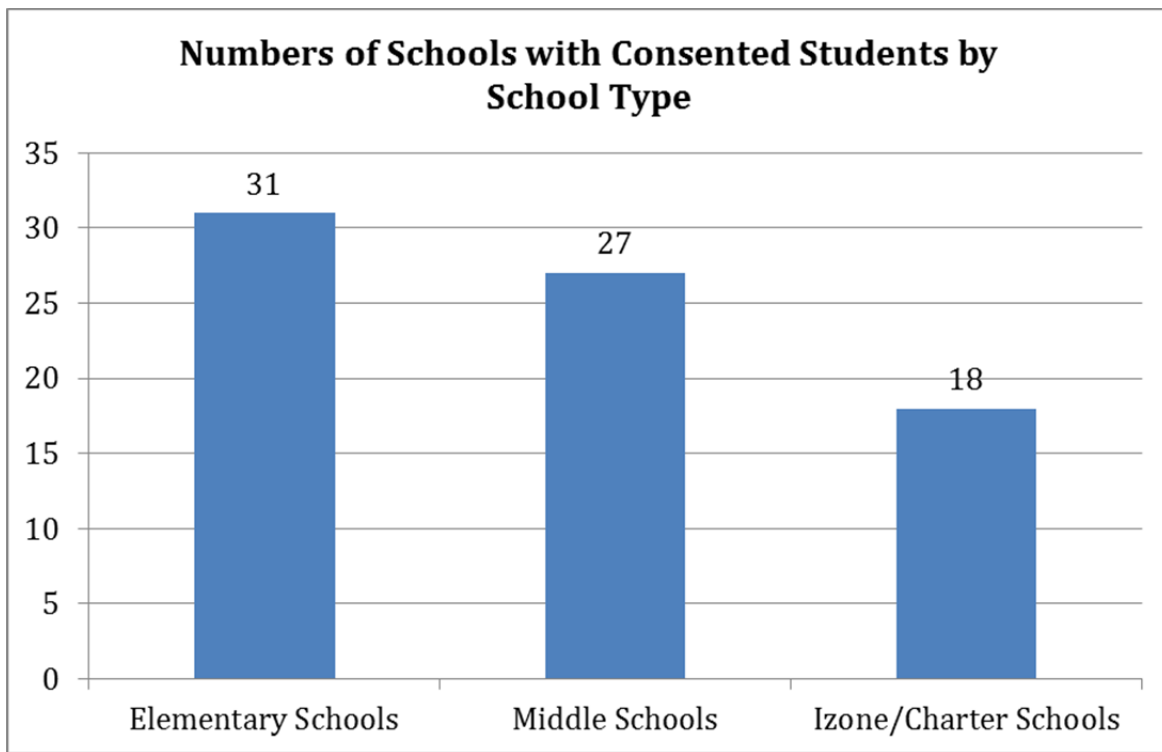
- We originally had 771 students in our database from the Pre-K study, and our goal for the newly-consented sample, as written in the grant proposal, was 500 students.
- 16 students withdrew from the study in 1<sup>st</sup> grade.
- 29 students are no longer in the state.
- 53 students are in the state but are not in Davidson County.
- 45 students have not been located despite all efforts.
- 34 students' parents have declined to participate this year (though 16 of those were communicated via the math teacher).
- 72 students were located in Davidson County, but we could not get parental consent.
- **WE HAVE OBTAINED PARENTAL CONSENT FOR 522 STUDENTS (and assessed 520 of those).**



\*Note: 317 BB consented out of 452 in original sample (70%) vs. 205 Control consented out of 319 in original sample (64%) [Also, percentages in this graph are not much different than the original sample of 771 (59% Treatment, 41% Control)]

# Participating Schools

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- Even though there are more elementary schools than other types, those schools typically only have 1 or 2 students each.
  - Elementary Schools average 2.4 consented students in each school.
  - Middle Schools average 10.3 consented students in each school.
  - Izone/Charter Schools average 9.7 consented students in each school.
- Next year, we shouldn't have any elementary schools; students should be more greatly concentrated within a school.

# Demographic Information

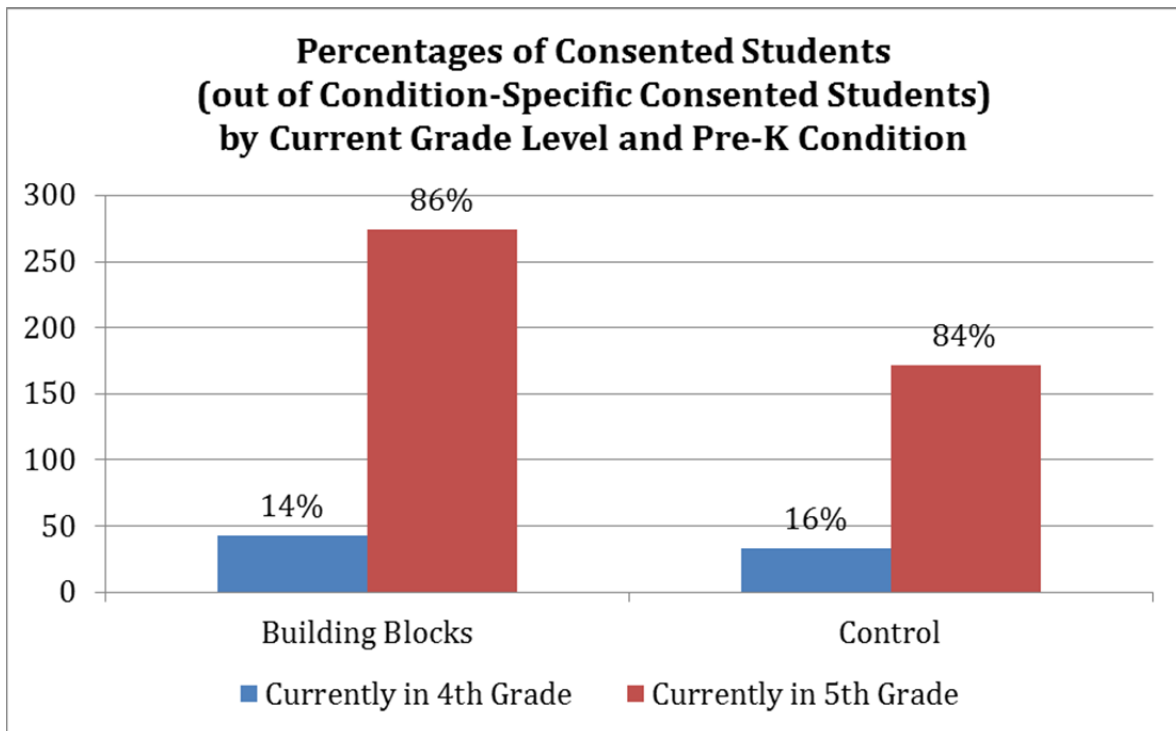
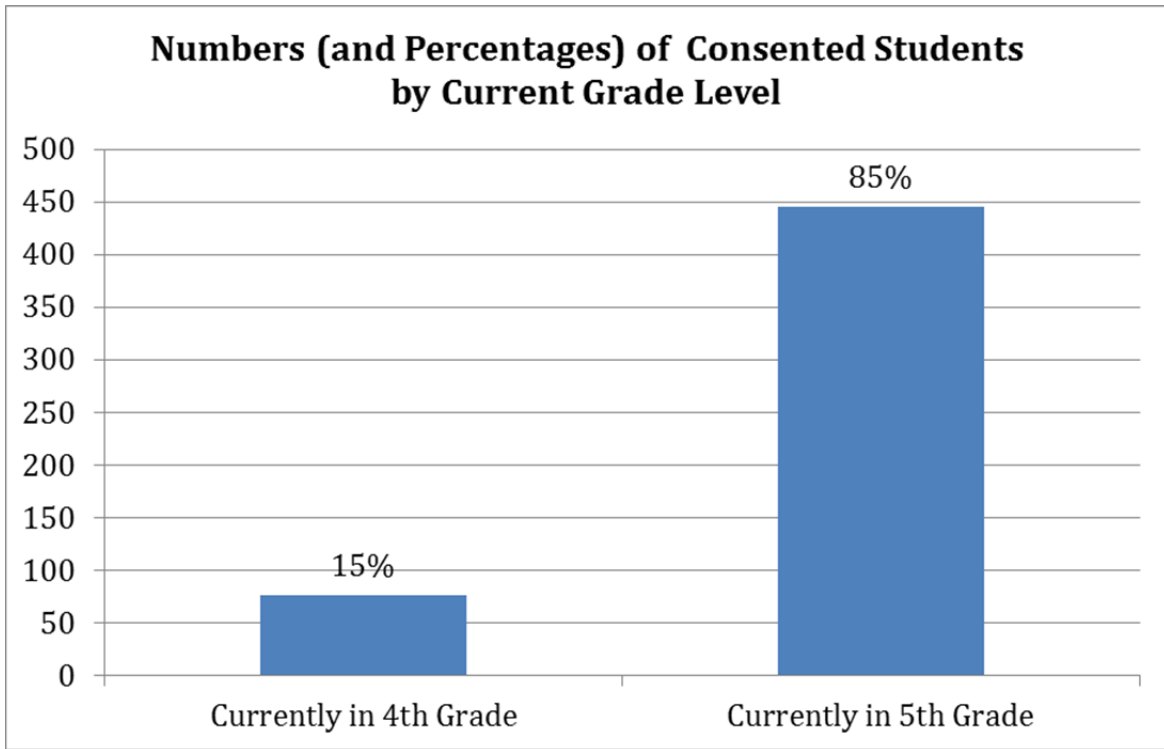
	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
Age at Time of Testing (in years)	522	10.4	12.5	11.05	0.325
PK Treatment Condition	317	10.4	12.5	11.0	.320
PK Control Condition	205	10.4	12.3	11.1	.327

	<b>Overall</b>		<b>PK Treatment</b>		<b>PK Control</b>	
	<b>Freq</b>	<b>Pct</b>	<b>Freq</b>	<b>Pct</b>	<b>Freq</b>	<b>Pct</b>
Ethnicity						
Black	411	79%	259	82%	152	74%
White	46	9%	23	7%	23	11%
Hispanic	42	8%	20	6%	22	11%
Other	22	4%	15	5%	7	4%
Gender						
Male	228	44%	140	44%	88	43%
Female	294	56%	177	56%	117	57%
Number of Current Schools	76	-	68	-	61	-
Pre-K School System*						
MAC	210	40%	152	48%	58	28%
MNPS	312	60%	165	52%	147	72%

\*Note. MAC/MNPS percentages are similar to that of the original sample

	PK Treatment		PK Control	
	Freq	Pct	Freq	Pct
MAC	220	49%	98	31%
MNPS	232	51%	221	69%

# Grade Retention Information



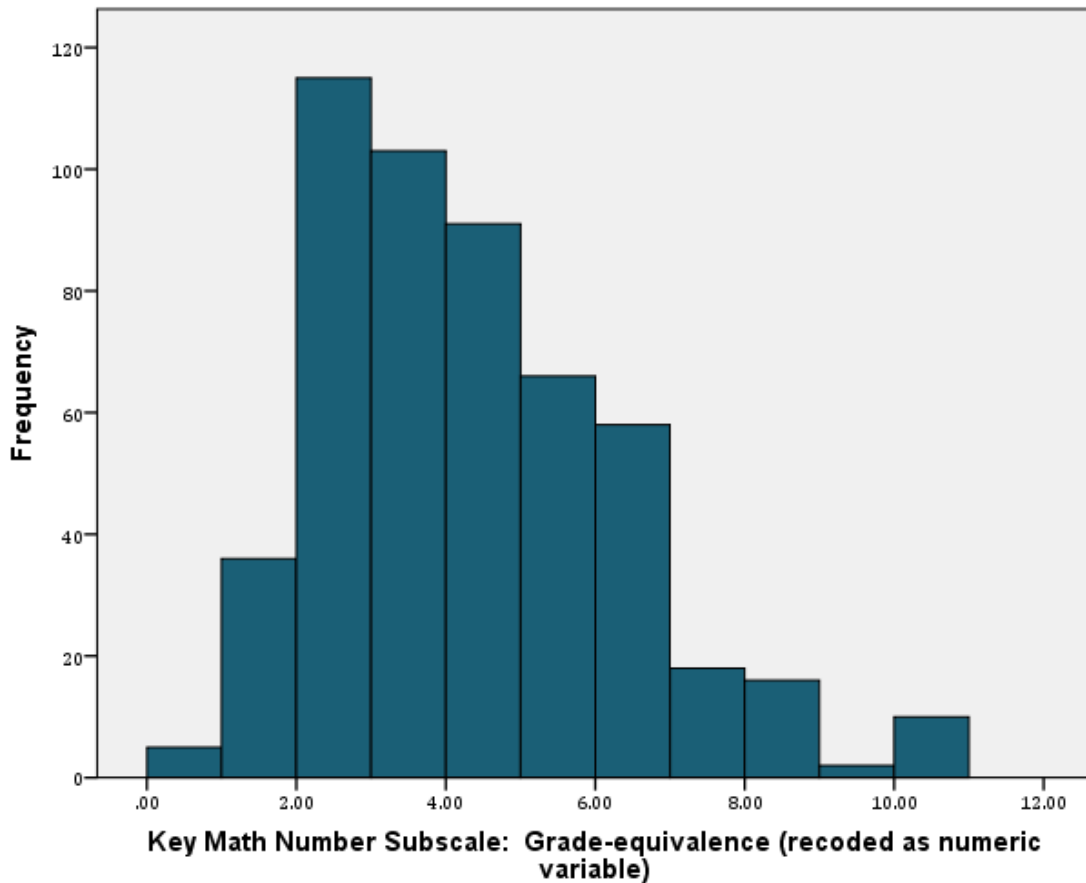
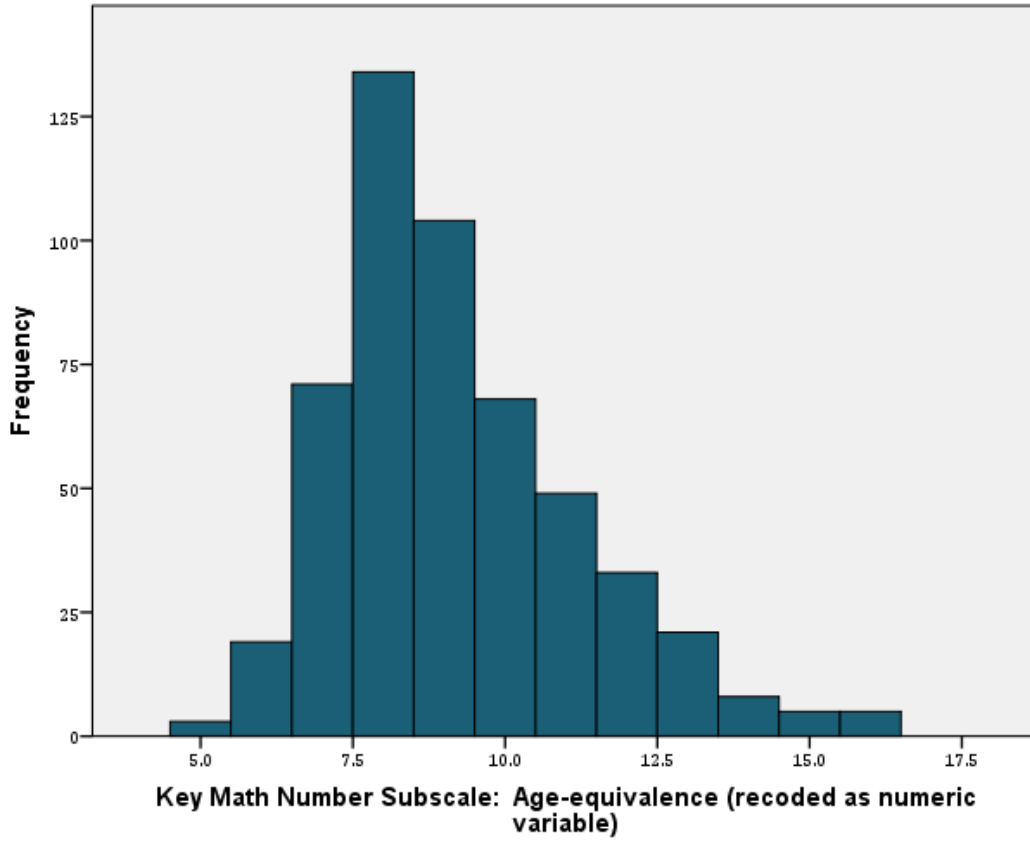
# Assessment Descriptives: Key Math

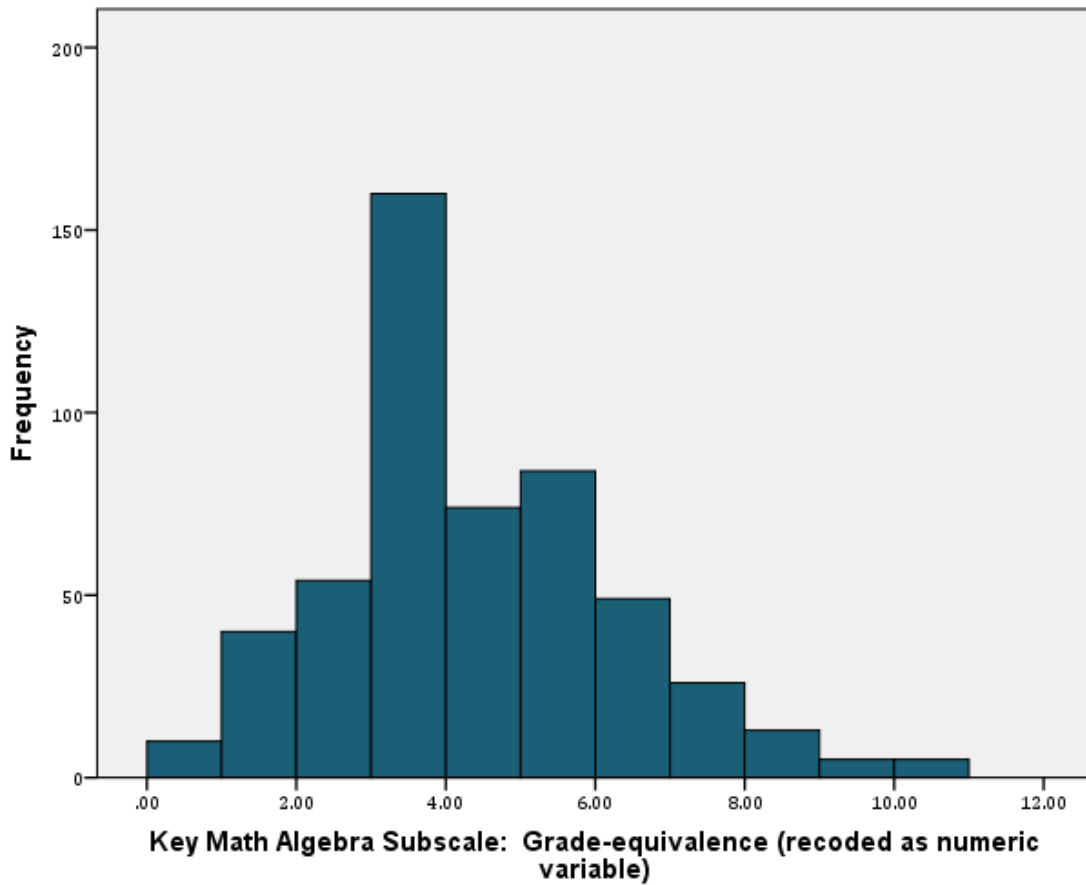
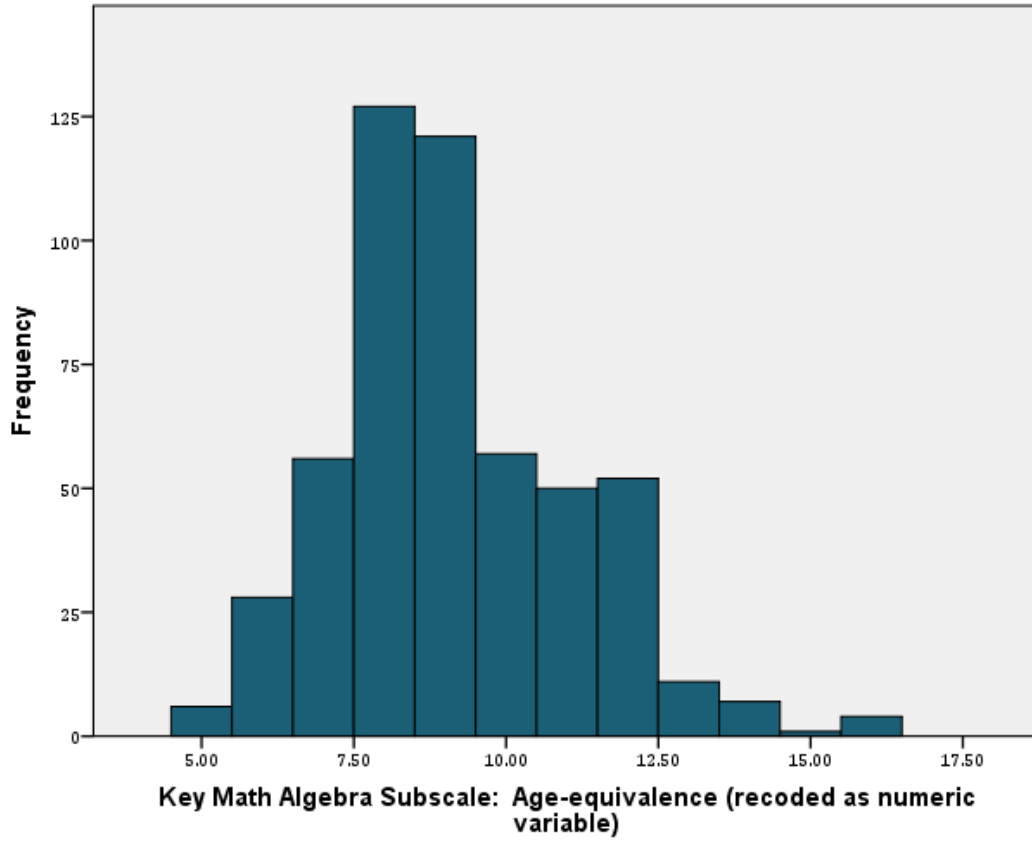
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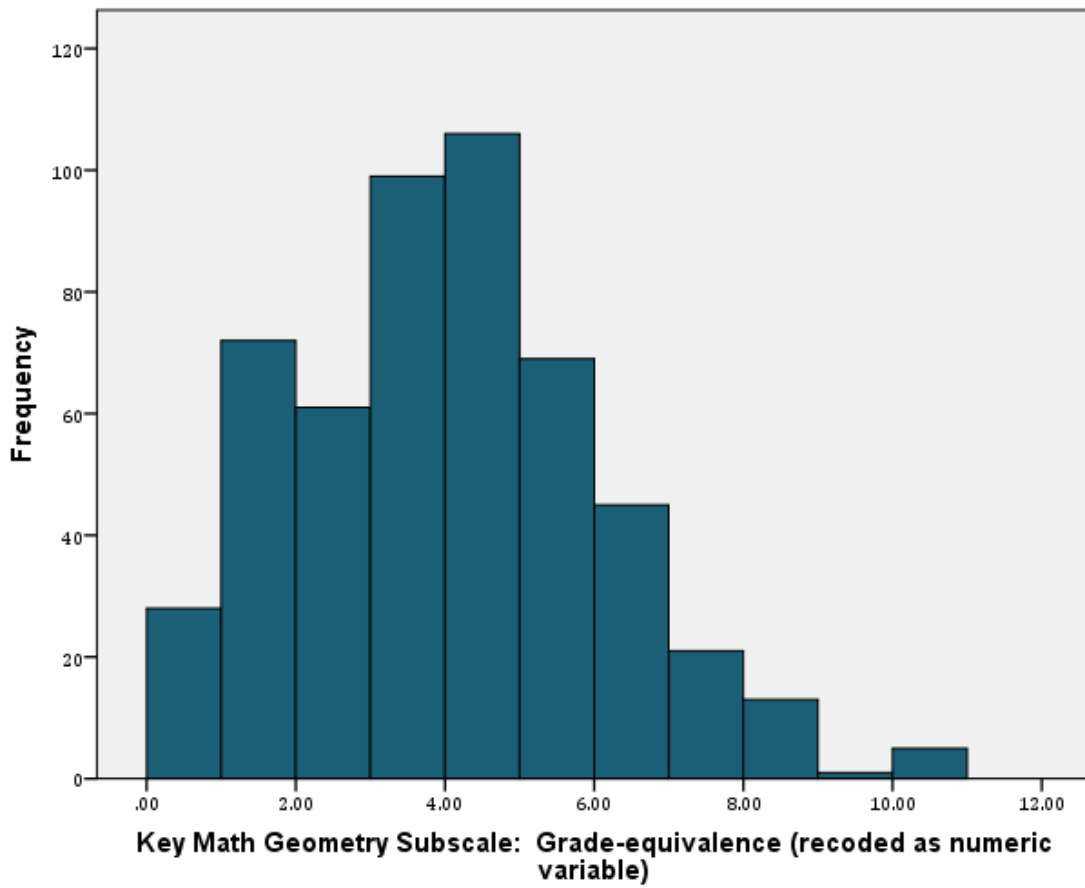
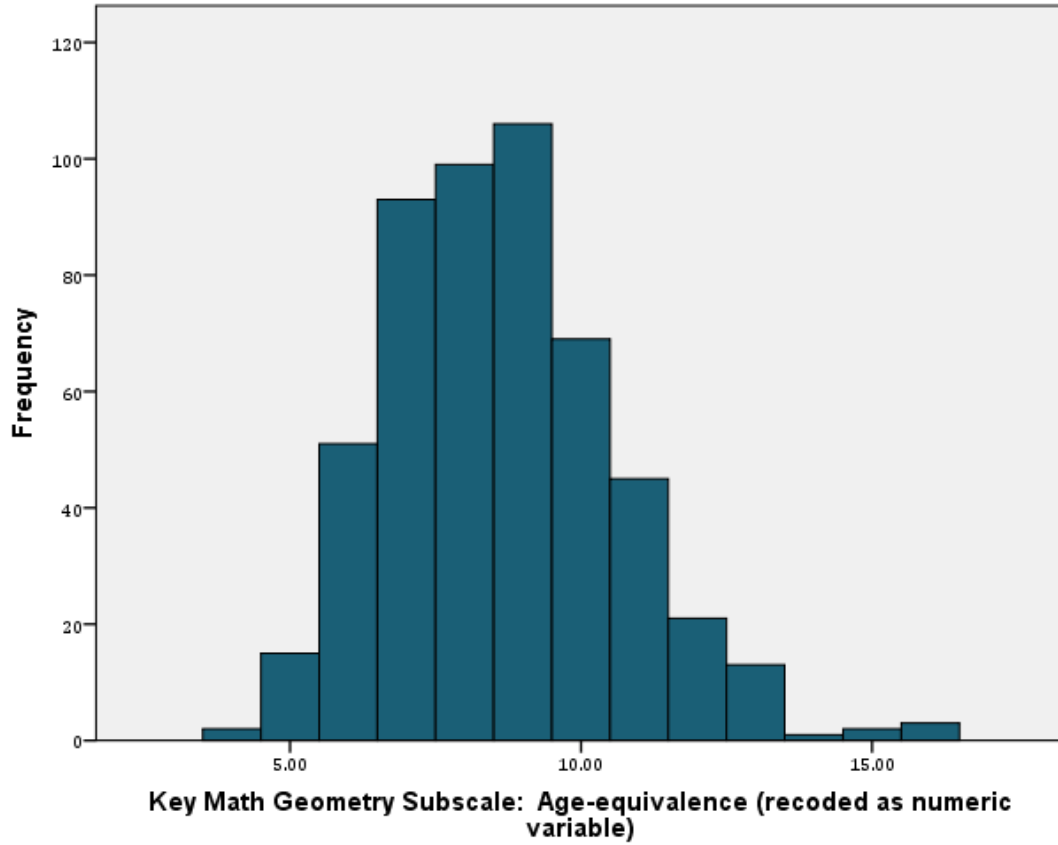
	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
<b>KeyMath: Numeration</b>					
Raw Score	520	5.00	43.00	20.99	7.255
Age-Scaled Score	520	2.00	17.00	7.83	2.790
Grade-Scaled Score	520	1.00	16.00	7.36	2.928
Age Equivalent	520	5.00	16.00	9.21	2.030
Grade Equivalent	520	0.20	10.00	4.20	1.970
<b>Key Math: Algebra</b>					
Raw Score	520	2.00	31.00	15.55	5.470
Age-Scaled Score	520	1.00	16.00	8.00	2.879
Grade-Scaled Score	520	1.00	16.00	7.42	2.946
Age Equivalent	520	5.00	16.00	9.15	1.960
Grade Equivalent	520	0.00	10.00	4.31	1.840
<b>Key Math: Geometry</b>					
Raw Score	520	5.00	32.00	17.43	5.076
Age-Scaled Score	520	1.00	16.00	7.60	2.561
Grade-Scaled Score	520	1.00	16.00	7.47	2.574
Age Equivalent	520	4.00	16.00	8.62	1.980
Grade Equivalent	520	0.00	10.00	3.91	1.960

\*Note: The average age of these students is around 11.0 years (minimum 10.4 years, maximum 12.5 years, SD .33 years).





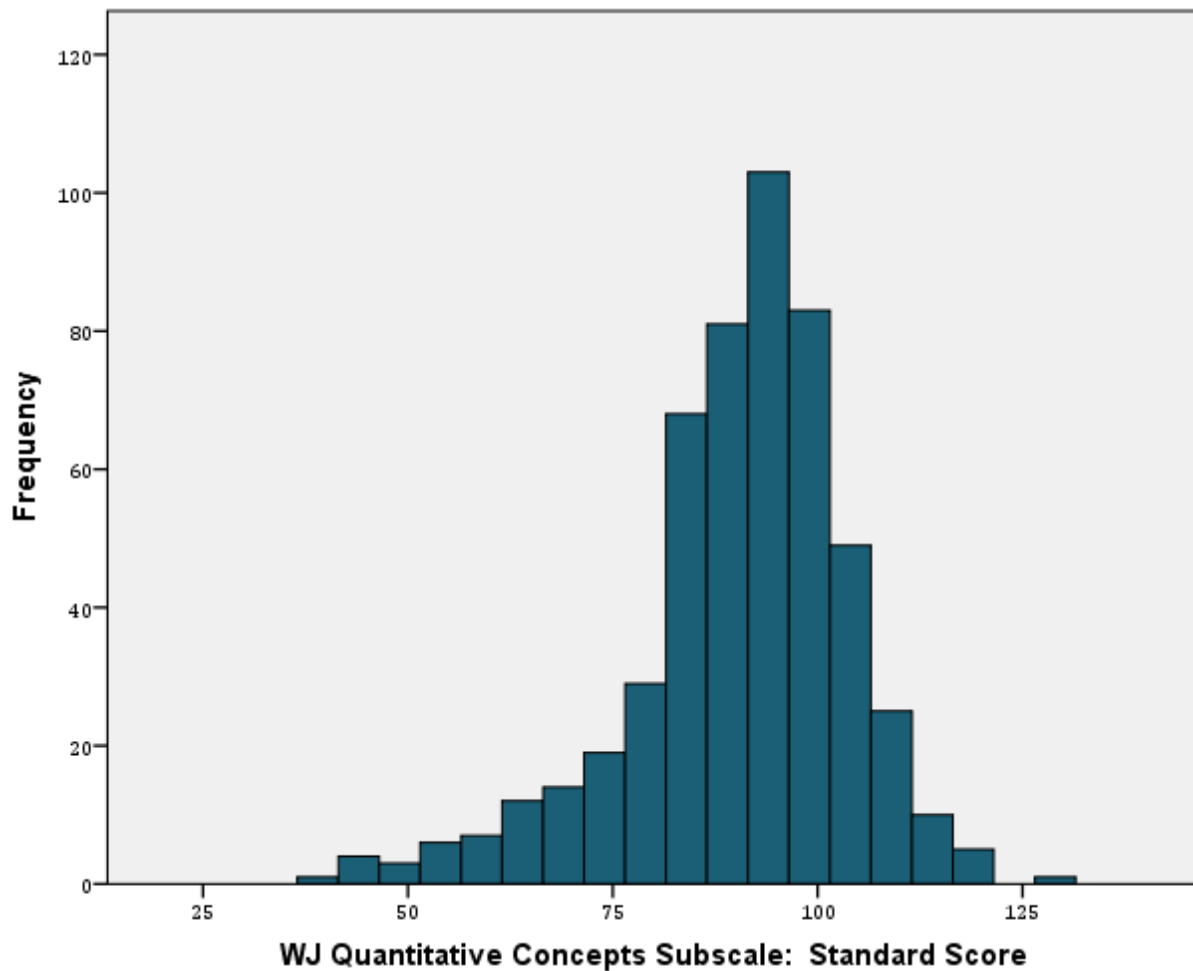




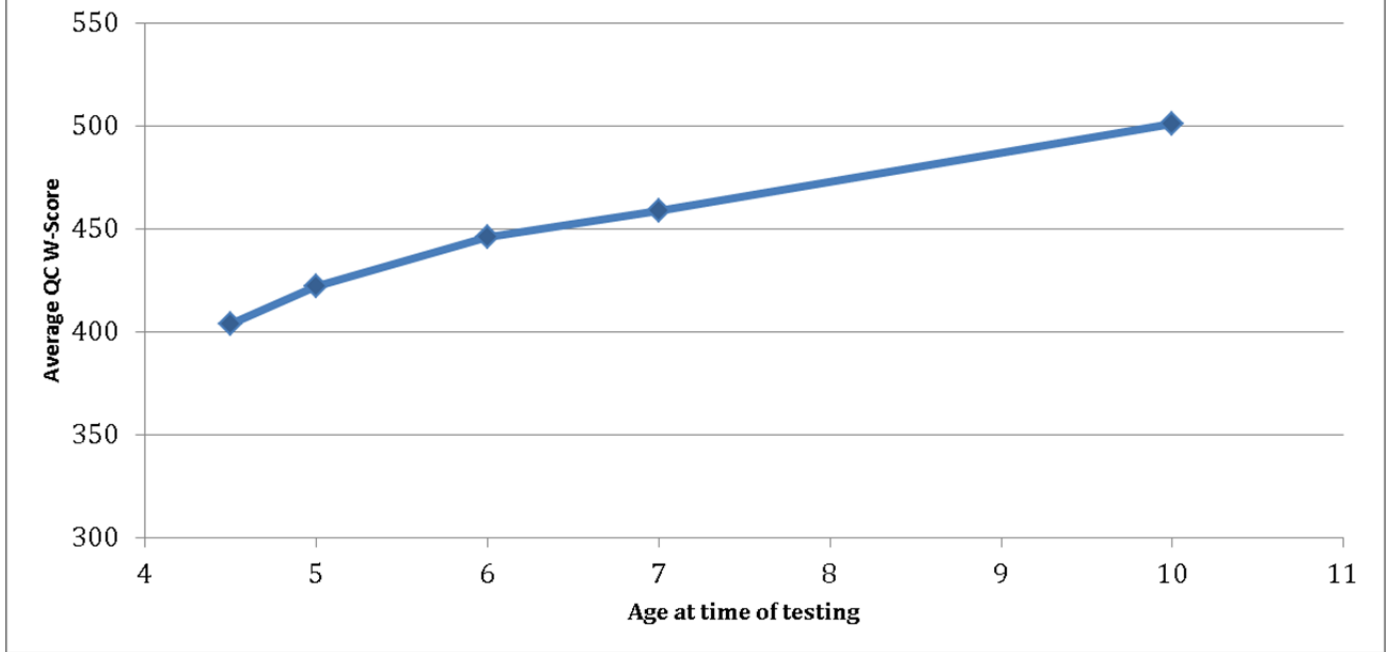
# Assessment Descriptives: Woodcock Johnson

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	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
W-Score	520	448.00	538.00	501.36	13.964
Standard Score	520	39.00	131.00	90.59	13.408



### Quantitative Concepts W-Scores from the Beginning of PK through 5th Grade (N=466)

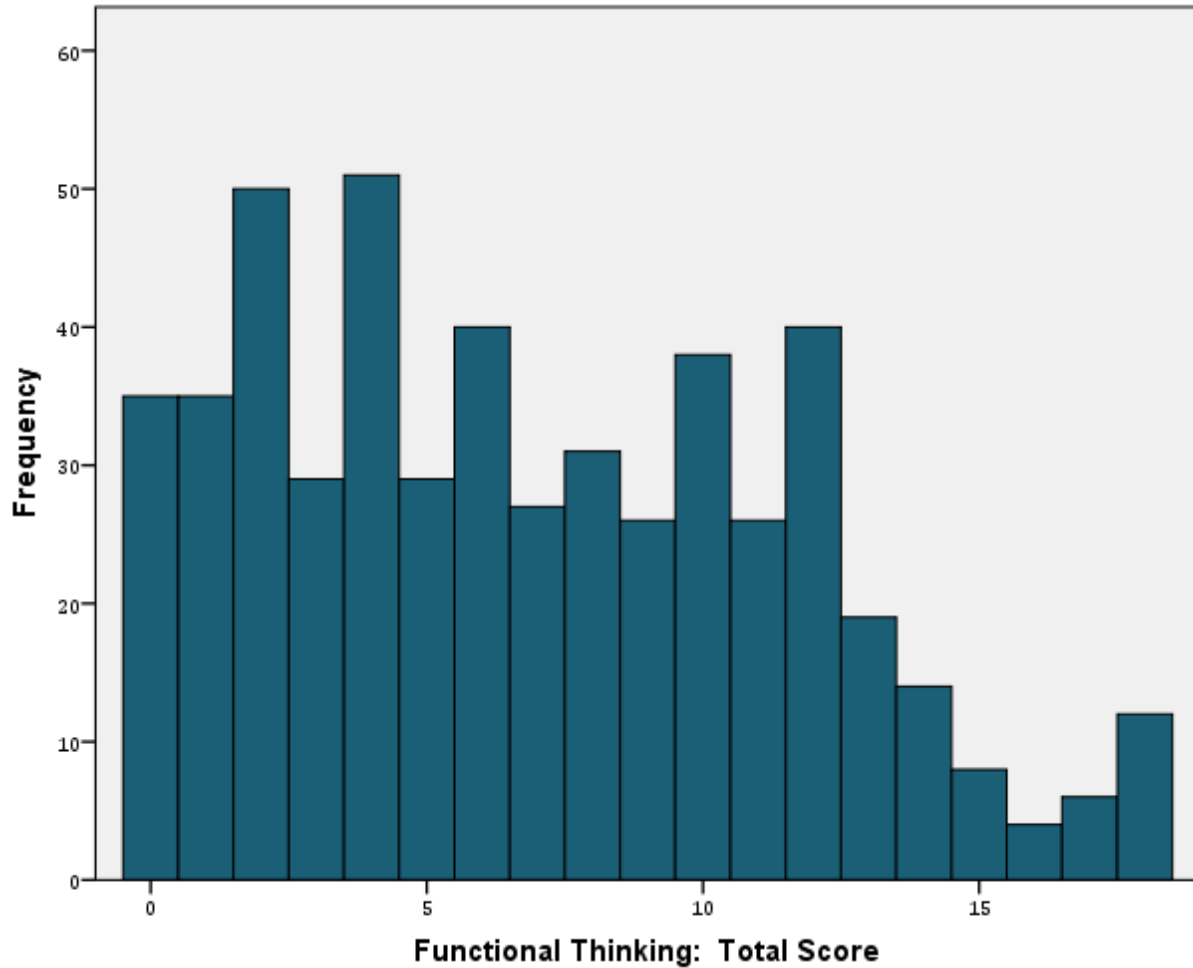


\*5 testing times: fall PK, spring PK, spring K, spring 1<sup>st</sup> grade, and spring 5<sup>th</sup> grade

# Assessment Descriptives: Functional Thinking

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	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
Problem Set 1, Input	520	0.00	1.00	0.41	0.493
Problem Set 1, Output	520	0.00	1.00	0.73	0.447
Problem Set 1, Rule	520	0.00	1.00	0.62	0.485
Problem Set 2, Input	520	0.00	1.00	0.46	0.499
Problem Set 2, Output	520	0.00	1.00	0.73	0.442
Problem Set 2, Rule	520	0.00	1.00	0.62	0.485
Problem Set 3, Input	520	0.00	1.00	0.38	0.485
Problem Set 3, Output	520	0.00	1.00	0.44	0.497
Problem Set 3, Rule	520	0.00	1.00	0.46	0.499
Problem Set 4, Input	520	0.00	1.00	0.31	0.464
Problem Set 4, Output	520	0.00	1.00	0.42	0.493
Problem Set 4, Rule	520	0.00	1.00	0.43	0.495
Problem Set 5, Input	520	0.00	1.00	0.08	0.276
Problem Set 5, Output	520	0.00	1.00	0.33	0.470
Problem Set 5, Rule	520	0.00	1.00	0.07	0.257
Problem Set 6, Input	520	0.00	1.00	0.11	0.313
Problem Set 6, Output	520	0.00	1.00	0.19	0.391
Problem Set 6, Rule	520	0.00	1.00	0.08	0.267
<b>Subtotal: Input</b>	520	0.00	6.00	1.76	1.725
<b>Subtotal: Output</b>	520	0.00	6.00	2.83	1.706
<b>Subtotal: Rule</b>	520	0.00	6.00	2.28	1.710
<b>Total Score</b>	520	0.00	18.00	6.87	4.696



**Correlations between Functional Thinking and First Grade REMA Geometry Assessment (N=500)**

	First Grade REMA: Number	First Grade REMA: Geometry	First Grade REMA: Patterning Items Only
Functional Thinking Subtotal: Input	.485**	.317**	.254**
Functional Thinking Subtotal: Output	.468**	.244**	.227**
Functional Thinking Subtotal: Rule	.512**	.306**	.251**
Functional Thinking: Total Score	.535**	.316**	.267**

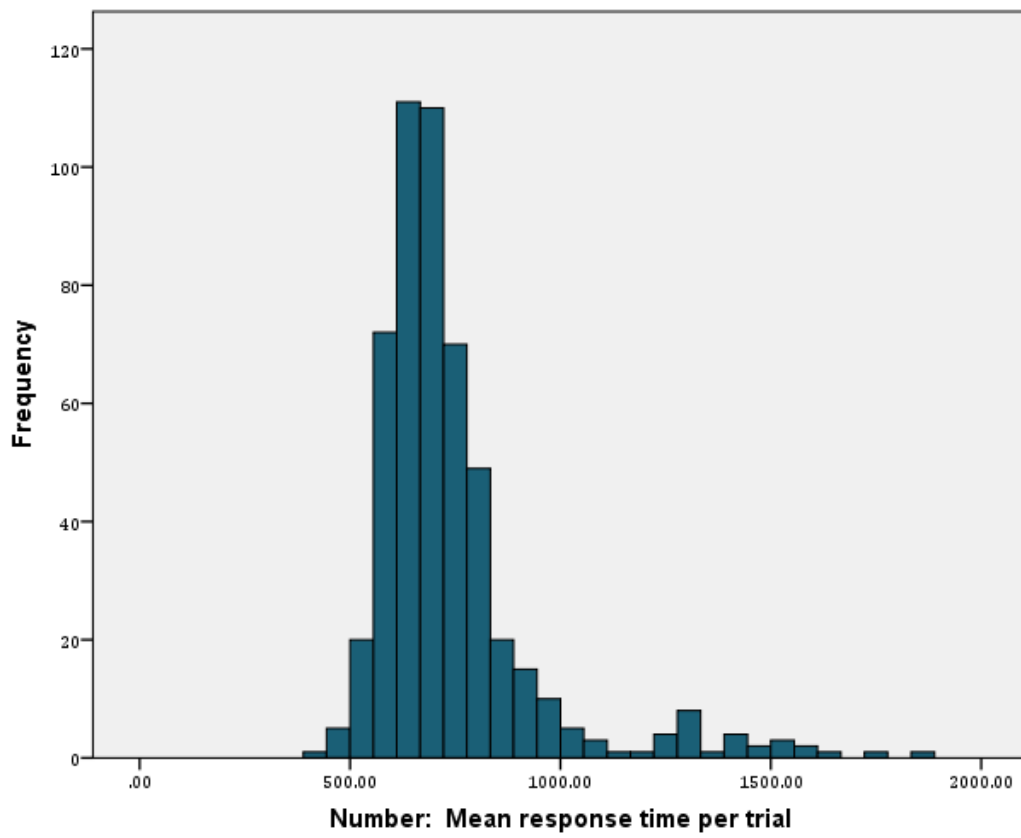
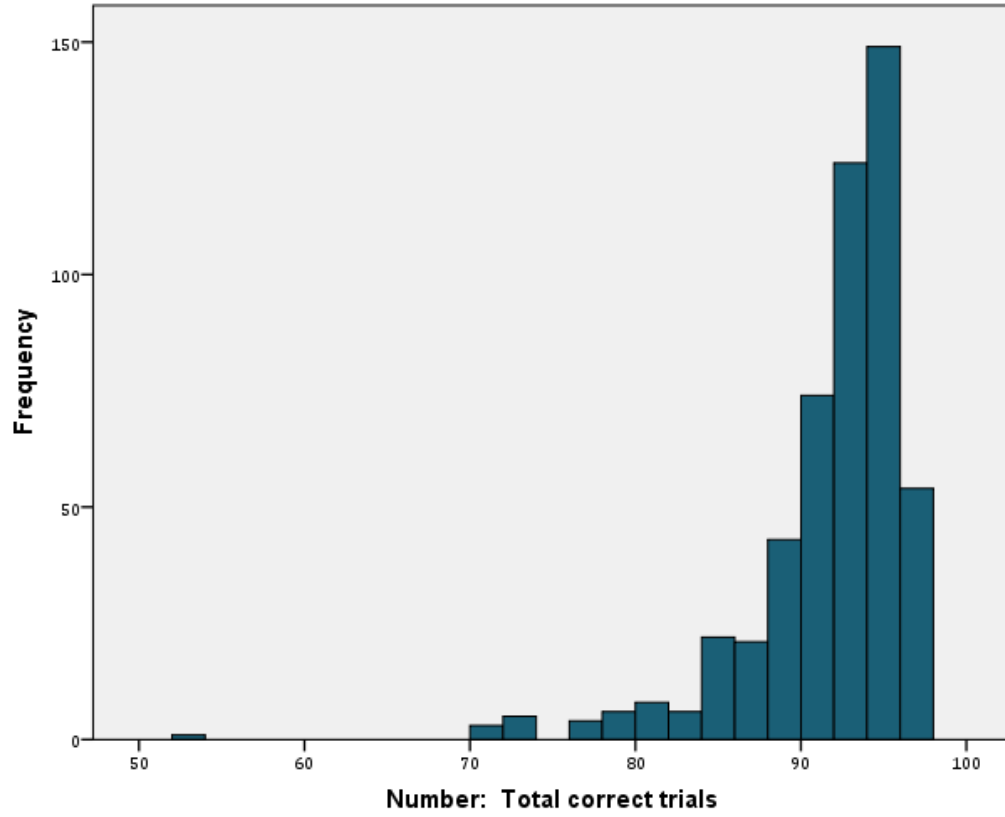
\*\* . Correlation is significant at the 0.01 level (2-tailed).

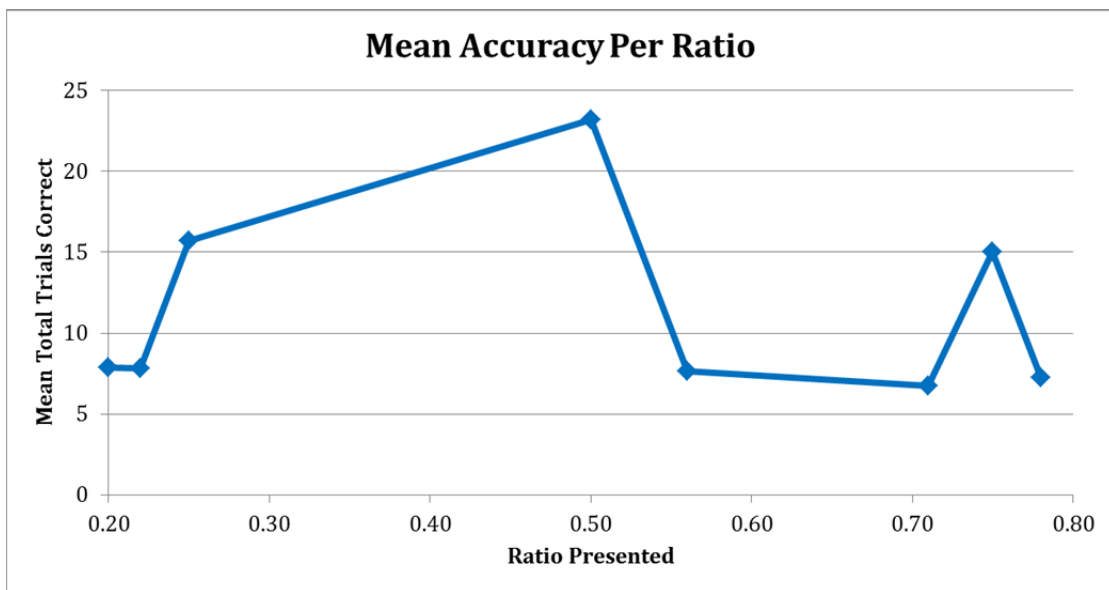
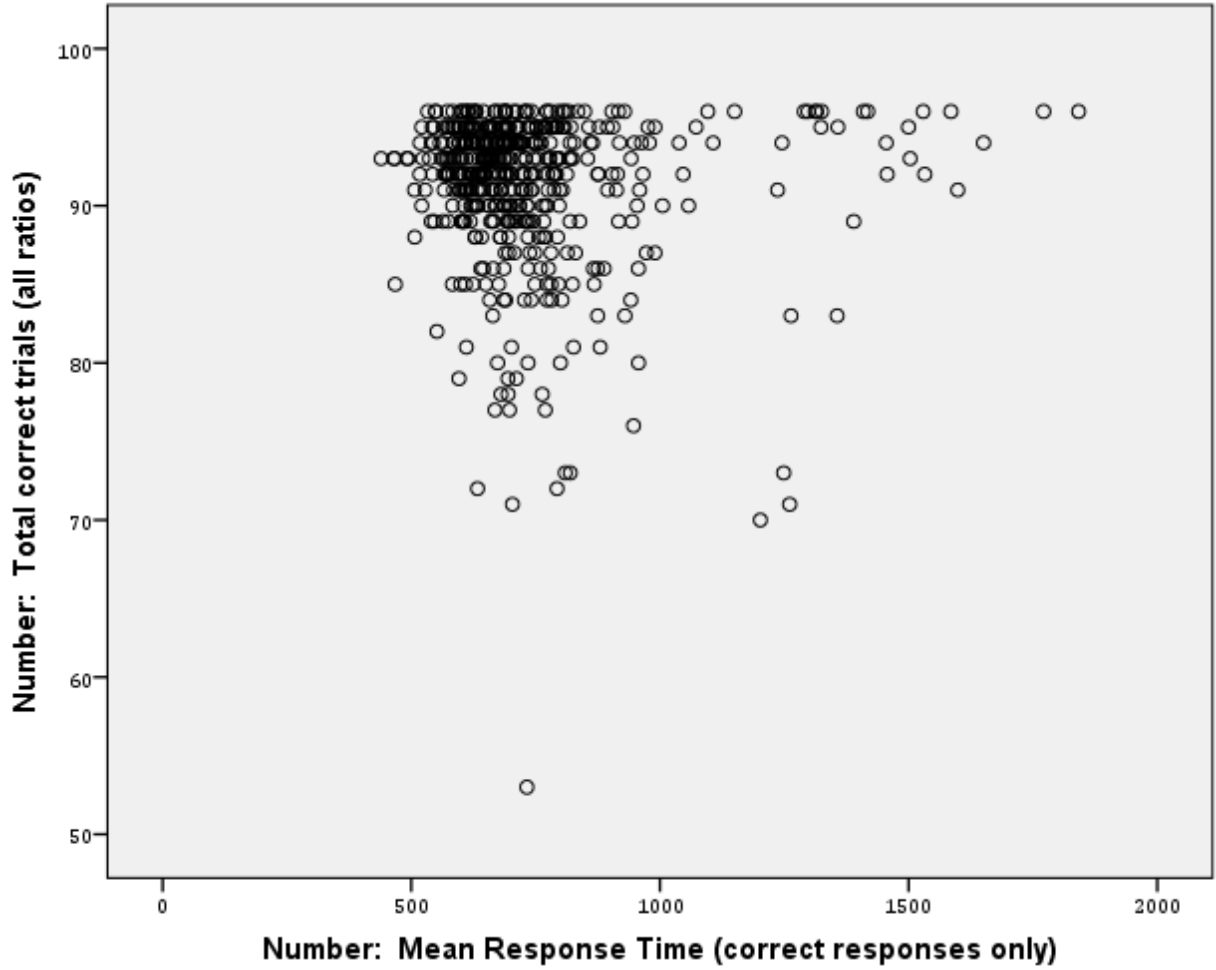
# Assessment Descriptives: Symbolic Number Comparison (NUM)

	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
Total trials correct	520	53	96	91.29	4.901
Mean response time per trial	520	439.15	1841.66	738.94	198.072
Mean response time for incorrect responses	449	82.4	2187	692.33	226.486
Mean response time for correct responses	520	439.17	1841.66	740.07	198.369
Ratio: .20					
Total trials correct	520	6.00	8.00	7.89	0.362
Mean response time per trial	520	402.50	1830.00	687.09	205.012
Ratio: .22					
Total trials correct	520	5.00	8.00	7.83	0.444
Mean response time per trial	520	413.88	1838.88	703.56	205.725
Ratio: .25					
Total trials correct	520	9.00	16.00	15.69	0.743
Mean response time per trial	520	413.94	1807.44	697.66	198.803
Ratio: .50					
Total trials correct	520	12.00	24.00	23.19	1.443
Mean response time per trial	520	427.21	1832.63	737.88	200.754
Ratio: .56					
Total trials correct	520	1.00	8.00	7.63	0.730
Mean response time per trial	520	421.75	1836.13	741.28	205.660
Ratio: .71					
Total trials correct	520	1.00	8.00	6.76	1.426
Mean response time per trial	520	481.38	2028.13	809.62	212.035
Ratio: .75					
Total trials correct	520	11.00	16.00	15.05	1.156
Mean response time per trial	520	451.19	1876.63	773.78	206.162
Ratio: .78					
Total trials correct	520	1.00	8.00	7.24	1.075
Mean response time per trial	520	463.38	1939.86	770.07	214.805

\*response time calculation did NOT include trials with response time of "0"





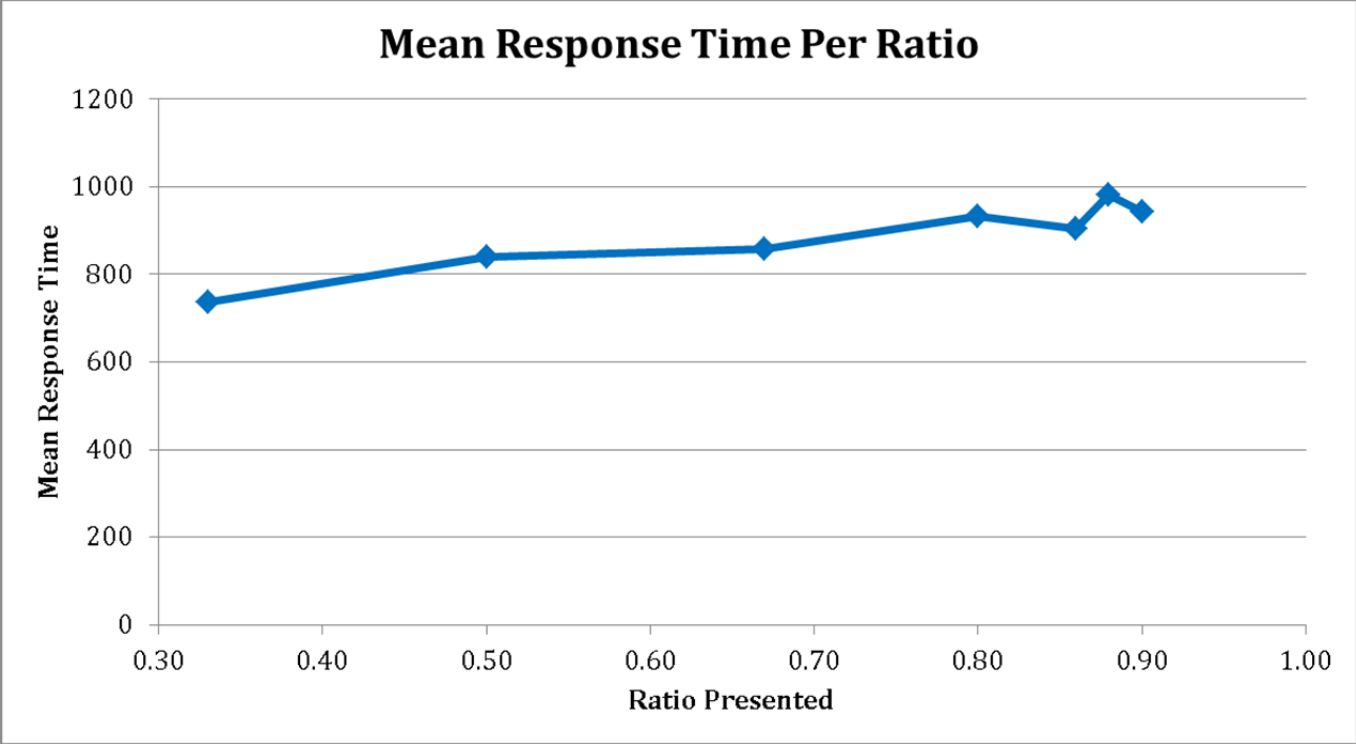
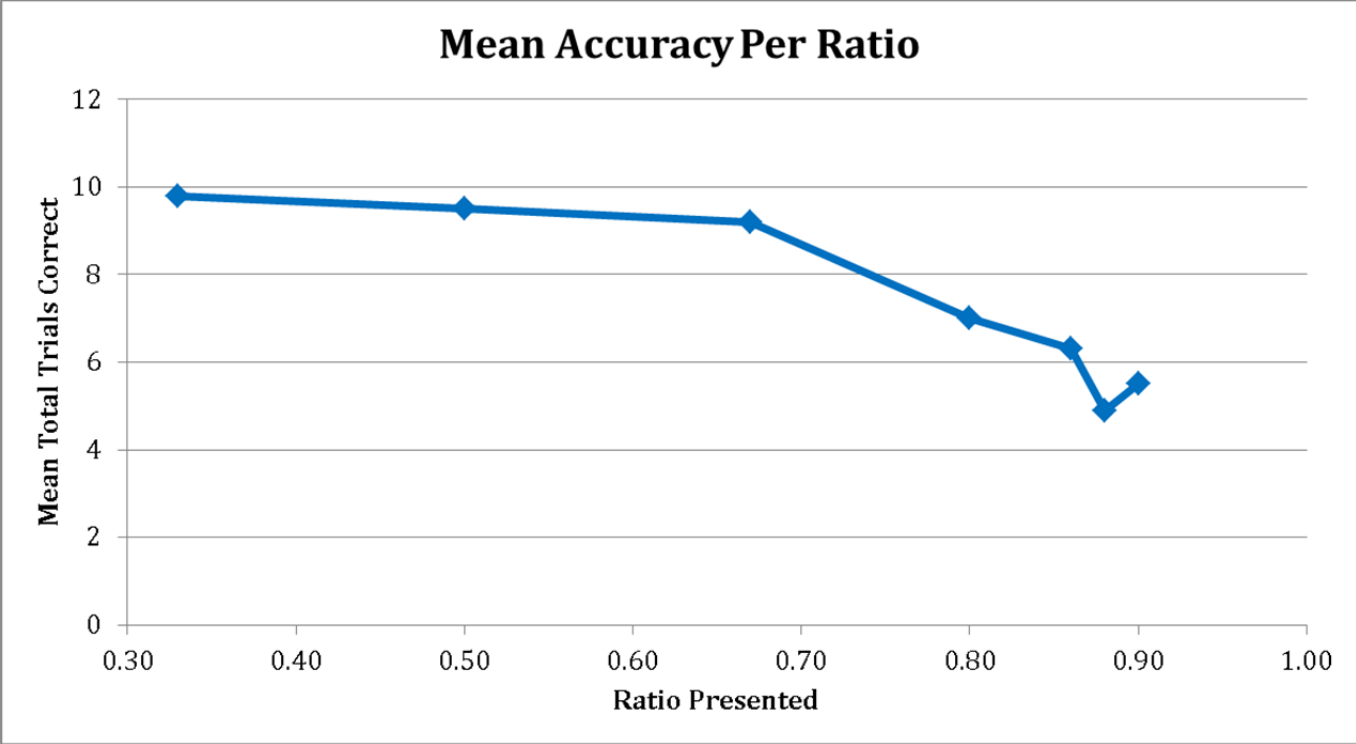


# Assessment Descriptives: NonSymbolic Number Comparison (DOTS)

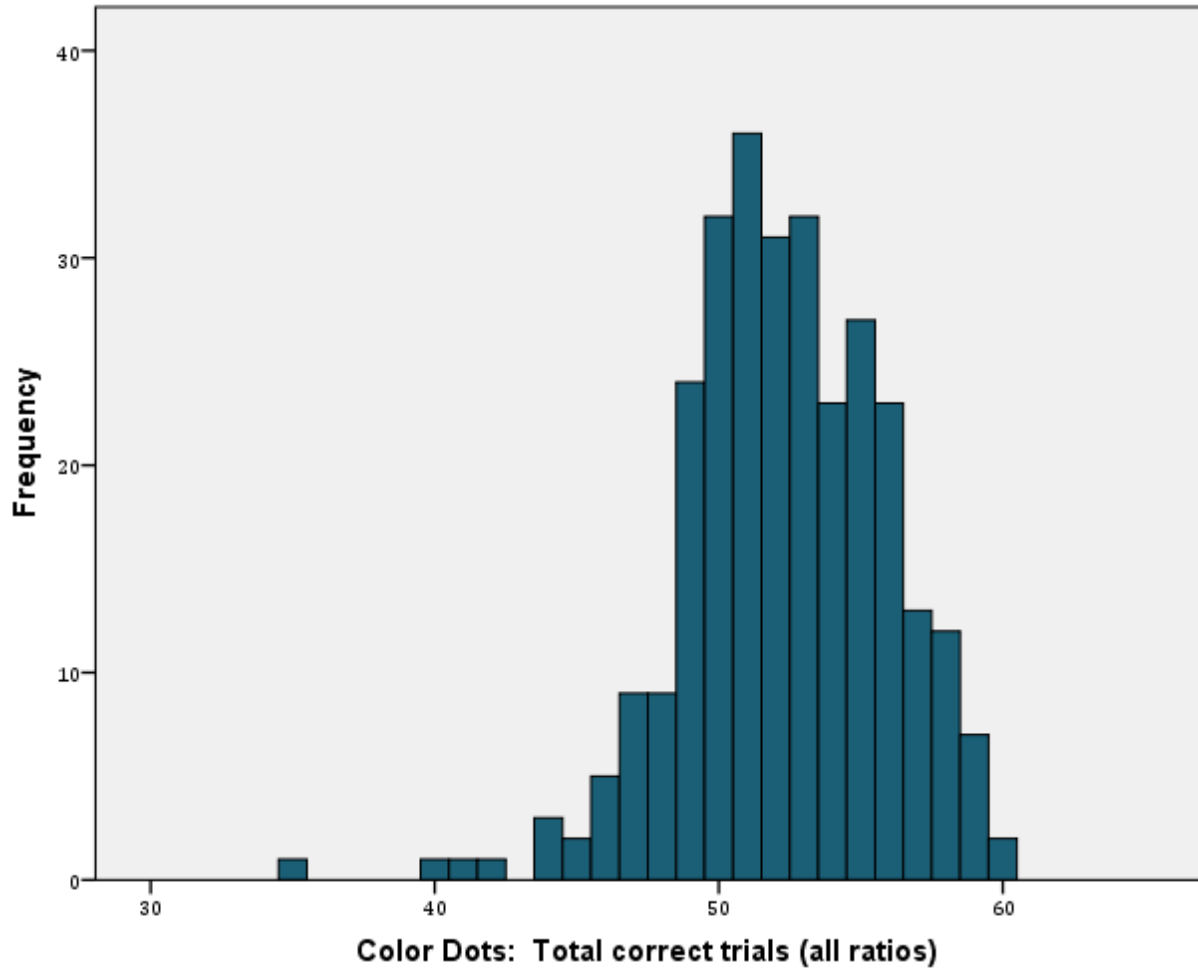
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## *COLOR DOTS*

	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
Ratio: .33					
Total trials correct	294	7.00	10.00	9.84	0.427
Mean response time per trial	294	480.10	1602.60	737.53	168.779
Ratio: .50					
Total trials correct	294	2.00	10.00	9.52	0.861
Mean response time per trial	294	553.50	1565.60	841.05	177.131
Ratio: .67					
Total trials correct	294	5.00	10.00	9.21	0.939
Mean response time per trial	294	480.50	1588.20	858.81	195.536
Ratio: .80					
Total trials correct	294	3.00	10.00	7.04	1.304
Mean response time per trial	294	443.00	1733.20	932.72	222.313
Ratio: .86					
Total trials correct	294	1.00	10.00	6.29	1.443
Mean response time per trial	294	488.50	1774.70	905.94	217.357
Ratio: .88					
Total trials correct	294	1.00	8.00	4.91	1.469
Mean response time per trial	294	504.50	2272.67	981.40	231.090
Ratio: .90					
Total trials correct	294	1.00	9.00	5.48	1.699
Mean response time per trial	294	497.63	1831.60	944.75	227.355

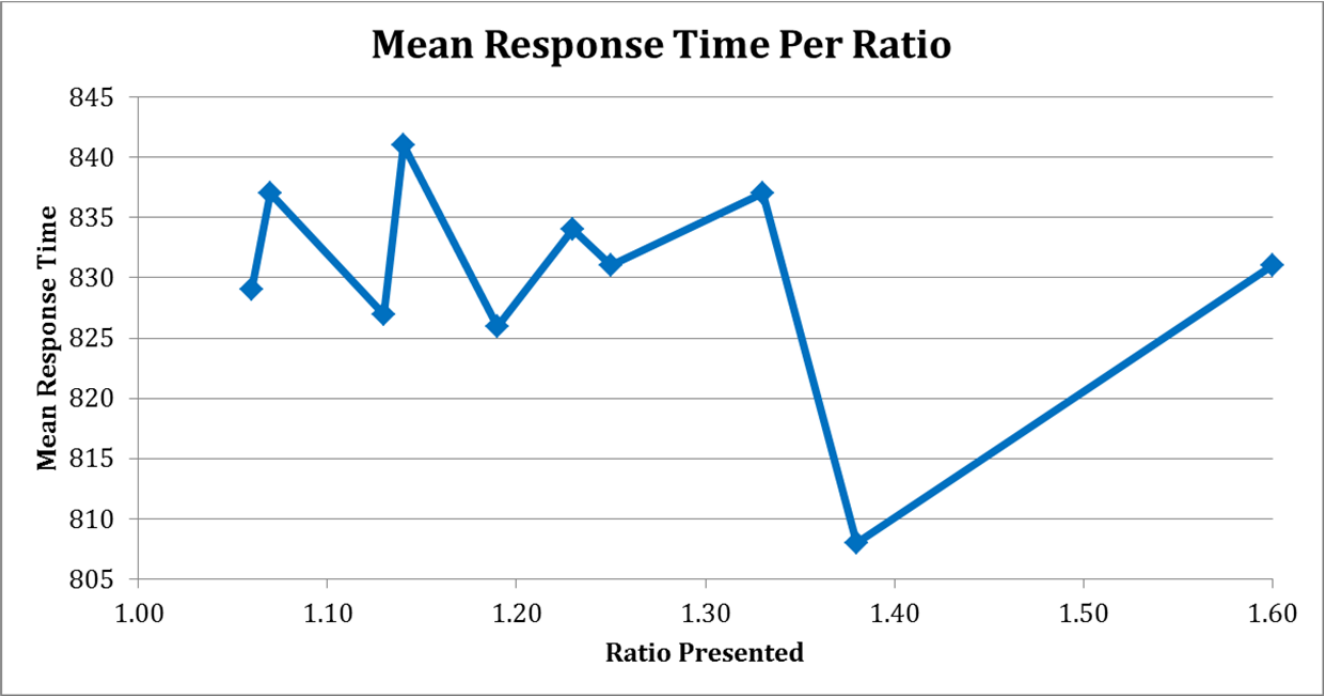
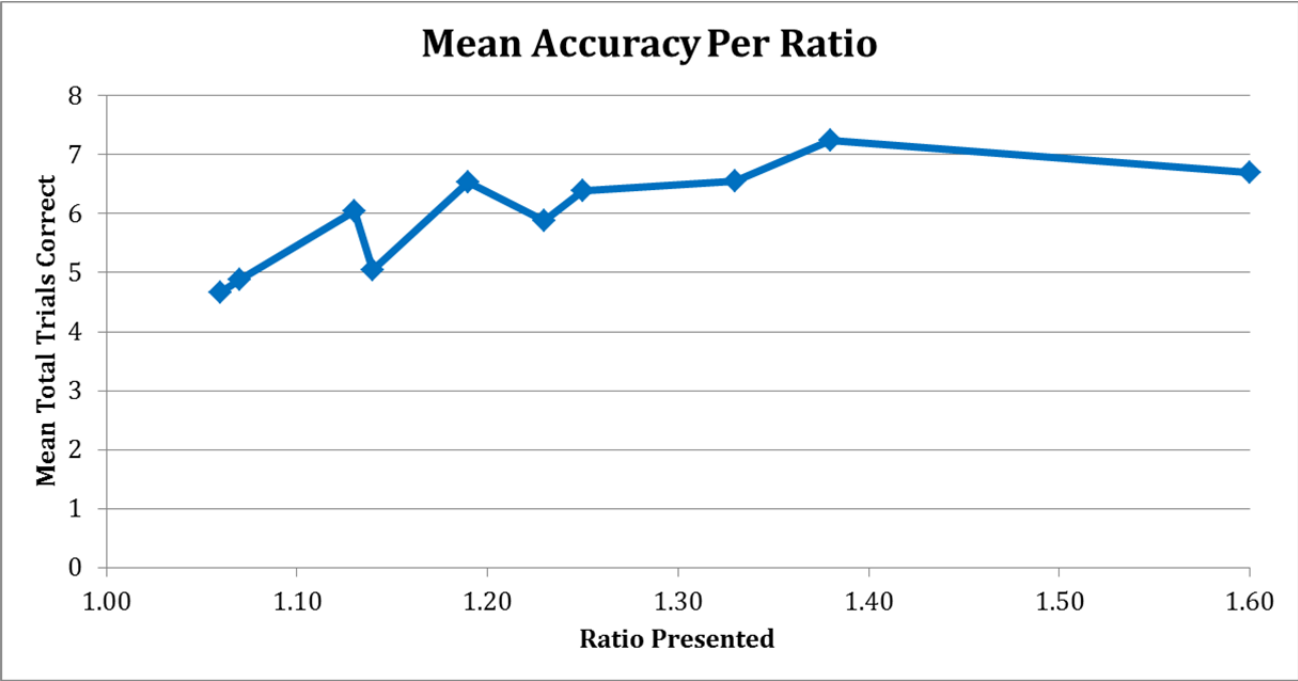


\*Note: This response time includes both correct and incorrect responses.

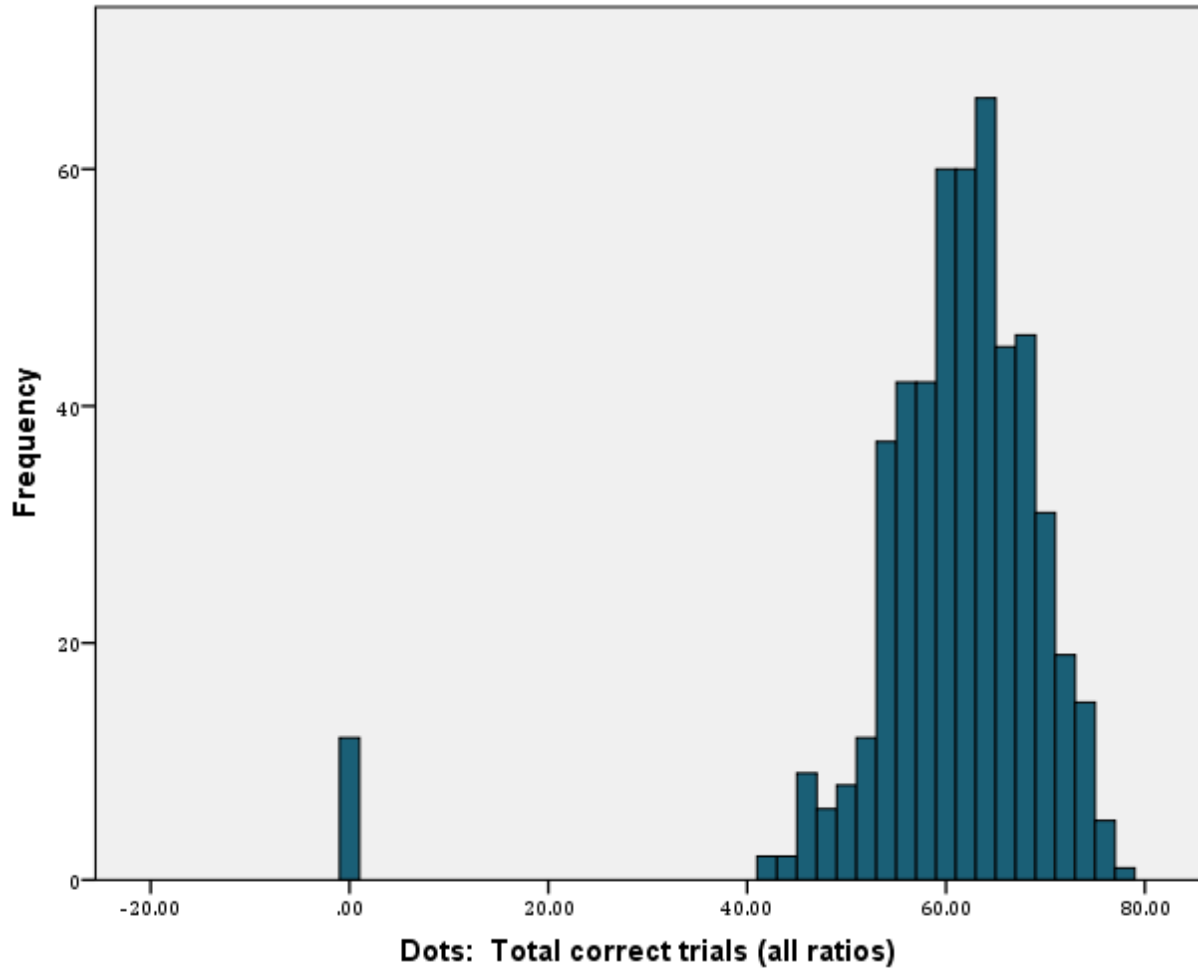


## REGULAR DOTS

	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
Total trials correct	520	0.00	78.00	59.95	11.272
Mean response time per trial	508	454.42	1871.91	830.14	221.325
Mean response time for incorrect responses	508	431.96	1918.23	842.56	227.159
Mean response time for correct responses	508	453.76	1846.58	823.01	220.215
Ratio: 1.06					
Total trials correct	520	0.00	9.00	4.67	1.505
Mean response time per trial	508	419.10	2016.90	829.02	239.023
Ratio: 1.07					
Total trials correct	520	0.00	9.00	4.88	1.670
Mean response time per trial	508	422.60	1799.10	837.29	231.678
Ratio: 1.13					
Total trials correct	520	0.00	10.00	6.05	2.141
Mean response time per trial	508	399.60	1937.70	826.58	235.419
Ratio: 1.14					
Total trials correct	520	0.00	9.00	5.04	1.693
Mean response time per trial	508	468.70	1954.60	841.21	236.033
Ratio: 1.19					
Total trials correct	520	0.00	10.00	6.54	1.893
Mean response time per trial	508	476.70	1736.70	826.27	227.461
Ratio: 1.23					
Total trials correct	520	0.00	10.00	5.88	1.711
Mean response time per trial	508	426.50	1968.80	833.55	229.423
Ratio: 1.25					
Total trials correct	520	0.00	10.00	6.38	1.713
Mean response time per trial	508	404.60	1988.20	831.22	231.668
Ratio: 1.33					
Total trials correct	520	0.00	10.00	6.56	1.812
Mean response time per trial	508	425.20	1803.00	836.67	229.068
Ratio: 1.38					
Total trials correct	520	0.00	10.00	7.25	1.766
Mean response time per trial	508	424.44	1895.33	808.33	226.233
Ratio: 1.60					
Total trials correct	520	0.00	10.00	6.70	1.842
Mean response time per trial	508	443.50	1861.00	831.18	232.418



\*Note: This response time includes both correct and incorrect responses.





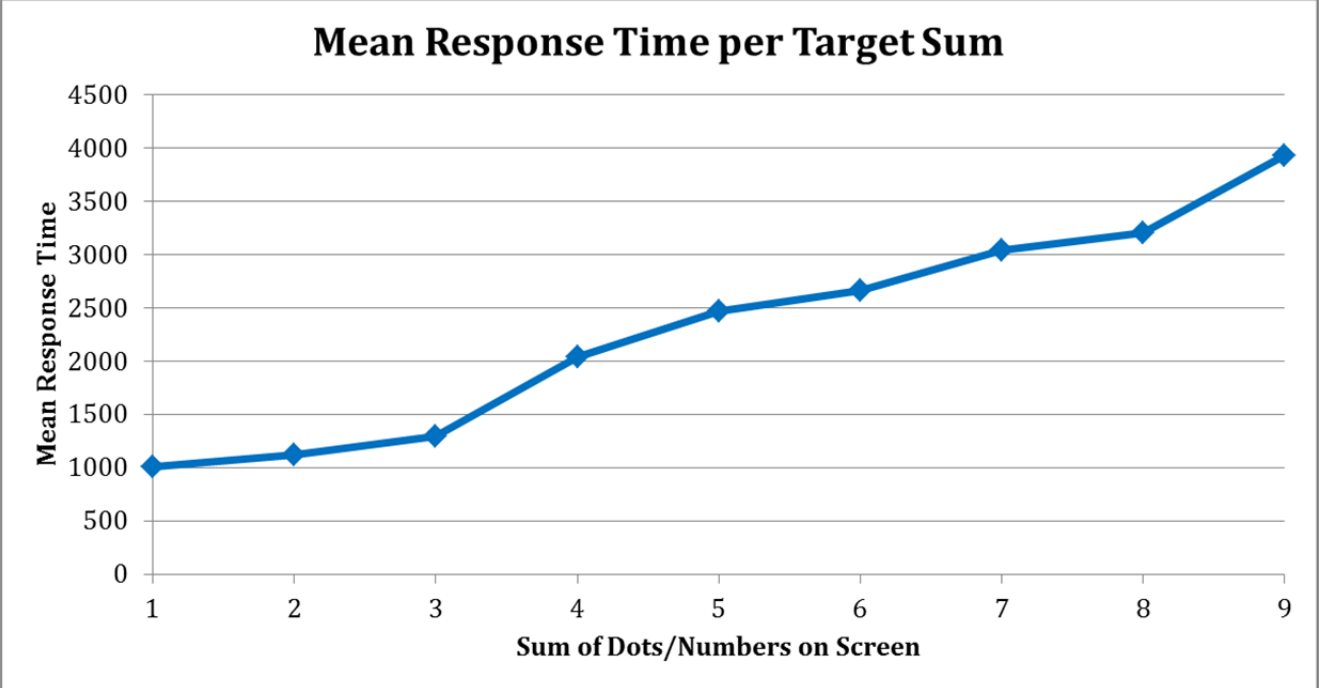
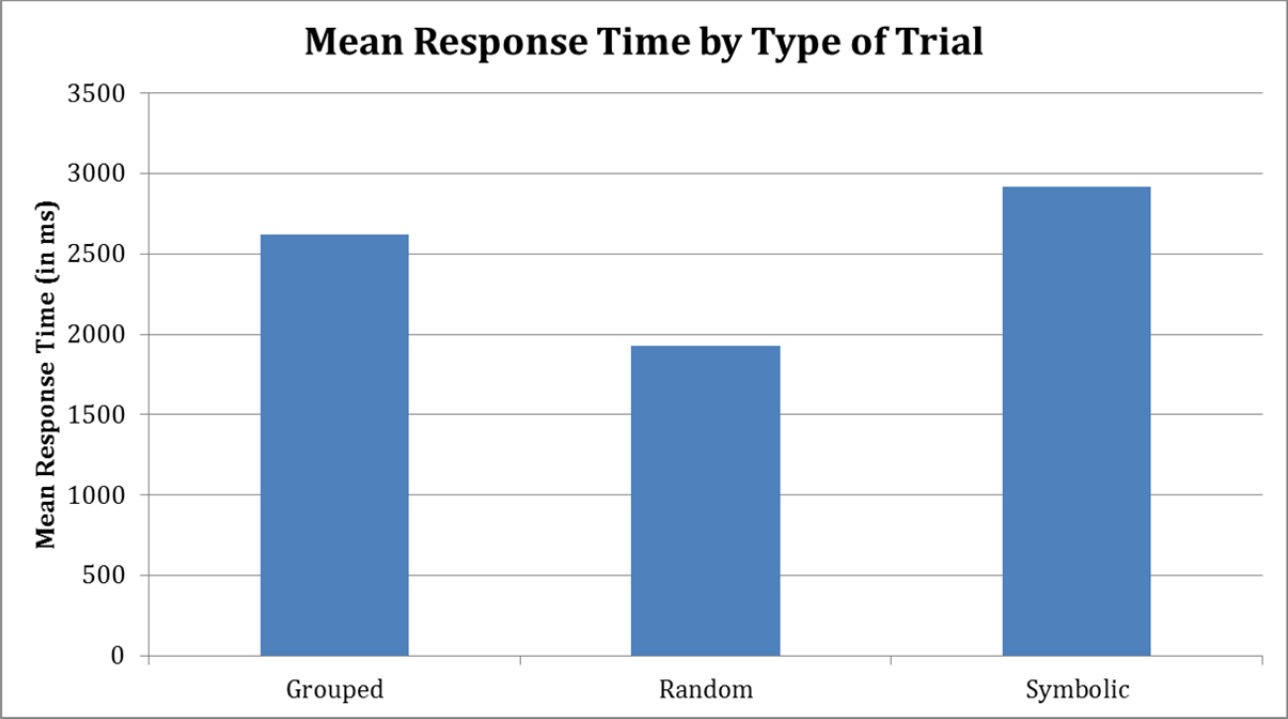
# Assessment Descriptives: Groupitizing (ALL)

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	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
Mean response time per trial (grouped nonsymbolic trials)	520	1302.60	7436.40	2623.01	751.042
Mean response time per trial (random nonsymbolic trials)	520	883.75	3807.50	1932.00	413.857
Mean response time per trial (symbolic trials)	520	361.20	9440.54	2916.08	1270.376
Mean response time (trials that sum to 1)	520	596.75	2359.13	1006.46	208.758
Mean response time (trials that sum to 2)	520	702.00	2264.57	1123.94	225.977
Mean response time (trials that sum to 3)	520	722.22	2948.11	1291.46	306.923
Mean response time (trials that sum to 4)	520	976.75	6725.25	2043.73	574.654
Mean response time (trials that sum to 5)	520	927.27	6238.36	2474.65	764.952
Mean response time (trials that sum to 6)	520	1384.71	6602.14	2662.90	874.722
Mean response time (trials that sum to 7)	520	1298.36	8063.86	3042.06	1035.930
Mean response time (trials that sum to 8)	520	1481.93	7906.14	3205.38	979.252
Mean response time (trials that sum to 9)	520	278.00	25409.00	3930.04	2256.181
Mean response time (trials with 2 numbers to sum)	519	846.57	6974.43	2080.56	989.742
Mean response time (trials with 3 groups or 3 numbers to sum)	520	1389.41	7302.14	2919.89	988.340

\*Note. Remember that in this task, students had to answer correctly to advance (hence, no 'accuracy' output).

\*ALSO, it looks like there were no grouped nonsymbolic trials presented that only had 2 groups; all had 3 groupings of dots. There were trials with 2 numbers and 3 numbers in the symbolic portion, however.

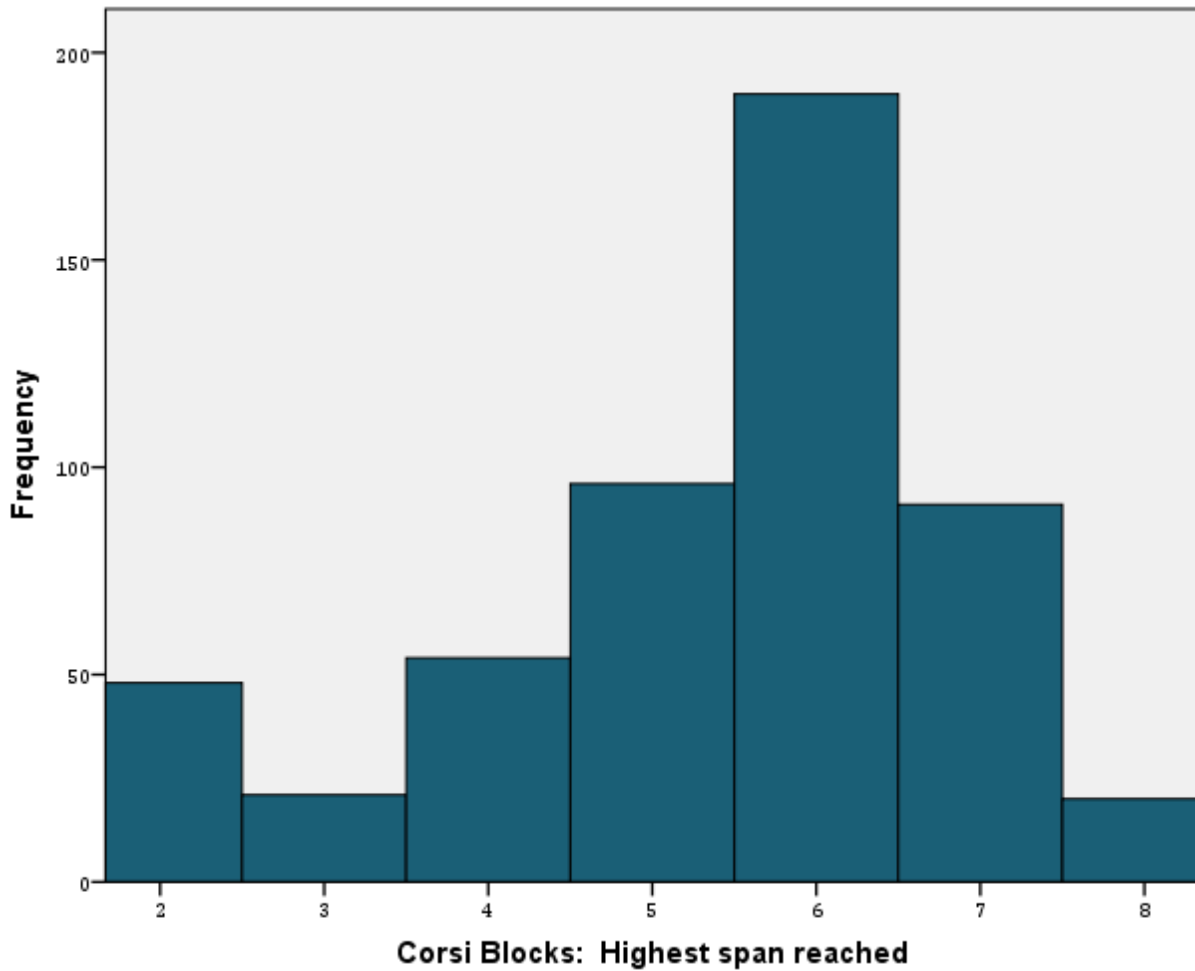


# Assessment Descriptives: Working Memory (CORSI)

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	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
Highest Span Reached	520	2.00	8.00	5.37	1.541
Total trials correct	520	0.00	16.00	8.50	3.111

\*Note – this doesn't distinguish those who didn't pass the practice – should their highest span reached be 0?

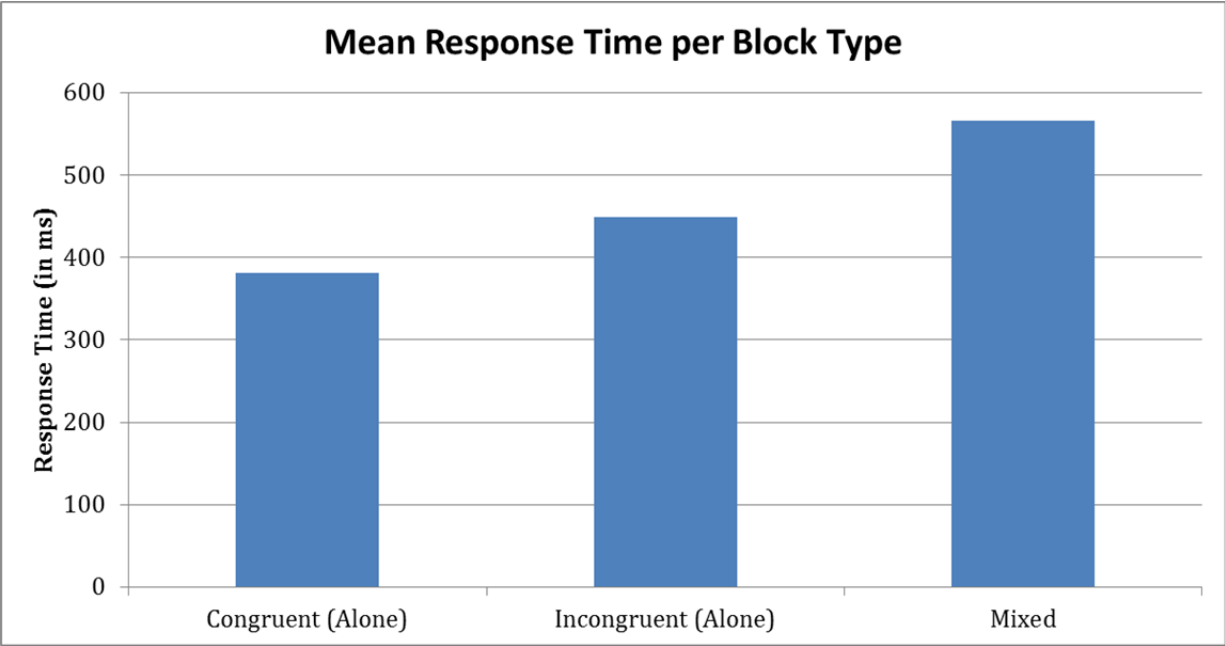
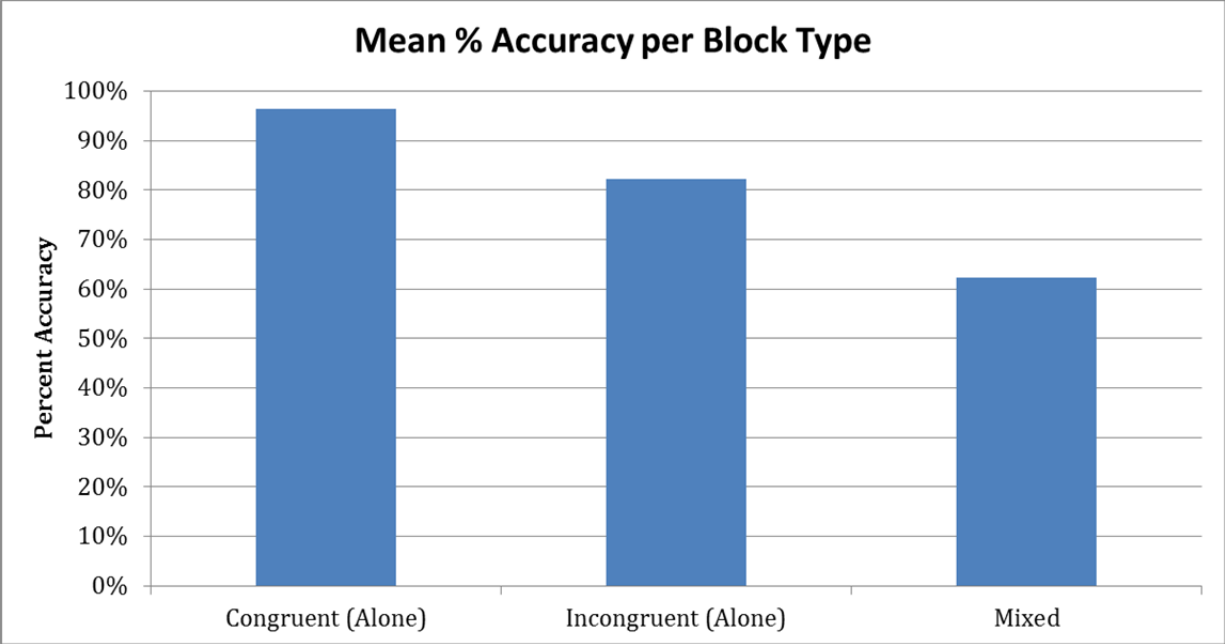


# Assessment Descriptives: Directional Stroop Task (Hearts and Flowers)

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	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
<b>Congruent Trials Presented Alone</b>					
Total trials correct	520	0.00	12.00	11.57	1.001
Mean response time per trial	519	255.50	703.75	380.73	70.266
<b>Incongruent Trials Presented Alone</b>					
Total trials correct	520	0.00	12.00	9.86	3.313
Mean response time per trial	488	279.25	812.22	448.61	84.871
<b>Mixed Trials</b>					
Total trials correct	520	0.00	48.00	29.94	9.998
Mean response time per trial	488	295.88	789.85	566.21	82.832
<b>Congruent Trials Presented in Mixed Blocks</b>					
Total trials correct	520	0.00	24.00	14.34	5.822
Mean response time per trial	488	295.57	774.96	562.91	85.927
<b>Incongruent Trials Presented in Mixed Blocks</b>					
Total trials correct	520	0.00	24.00	15.61	5.945
Mean response time per trial	488	291.17	811.35	569.56	86.324
<b>All Congruent Trials</b>					
Total trials correct	520	0.00	36.00	25.90	6.101
Mean response time per trial	519	291.17	735.06	496.04	72.396
<b>All Incongruent Trials</b>					
Total trials correct	520	0.00	36.00	25.47	8.595
Mean response time per trial	488	334.33	736.06	528.63	70.694

\*Note. Response time includes both correct and incorrect responses.

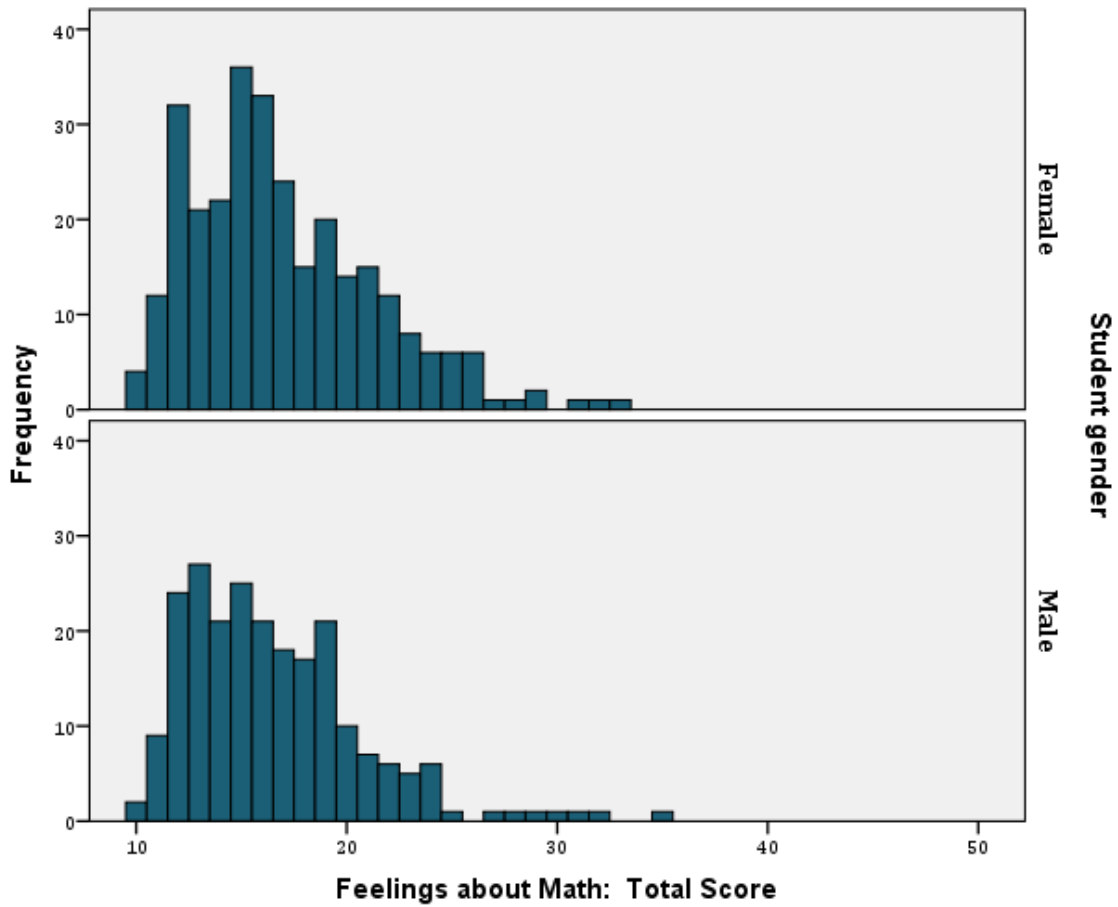
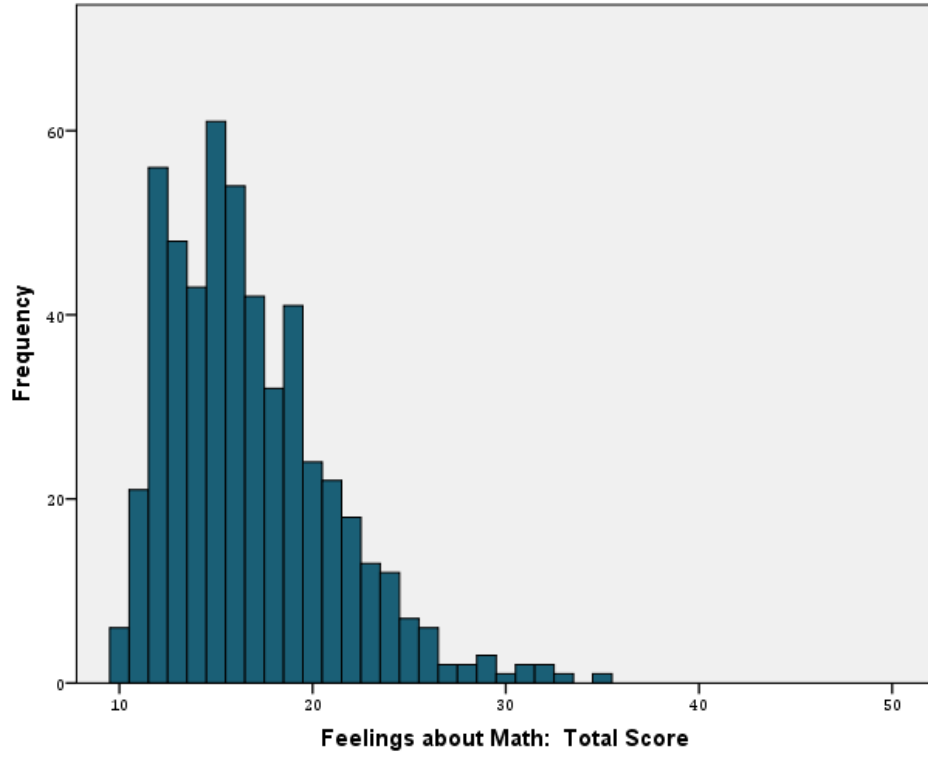


# Assessment Descriptives: Feelings about Math

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	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
I do well in math.	520	1	4	2.05	0.788
Math is interesting to me.	520	1	5	1.81	1.018
I feel sure I can do the math homework even when it's hard.	520	1	5	1.97	0.966
I learn things quickly in math.	520	1	5	2.25	0.994
Even if a new topic in math is hard, I'm sure I can learn it.	520	1	5	1.66	0.815
If I don't understand something, my math teacher helps me.	520	1	5	1.27	0.585
I enjoy doing work in math.	520	1	5	1.62	0.845
My math teacher cares about me.	520	1	3	1.12	0.372
I'm sure that I can learn everything taught in math.	520	1	5	1.58	0.730
My math teacher thinks I am good in math.	520	1	5	1.43	0.720
<b>Total Score</b>	<b>520</b>	<b>10</b>	<b>35</b>	<b>16.76</b>	<b>4.288</b>

**\*NOTE: LOWER IS BETTER!!!!!!**



# Mean Scores by Pre-K Curriculum Condition

	Building Blocks (N=315)	Control (N=205)	Effect Size (Not Covariate-Adjusted)
<b>Math Skills</b>			
KM Number (Age-Scaled)	7.86	7.77	0.03
KM Algebra (Age-Scaled)	8.06	7.91	0.05
KM Geometry (Age-Scaled)	7.74	7.39	0.14
WJ Quant. Cpts. (Std Score)	91.13	89.75	0.10
Functions: Input	1.68	1.88	-0.12
Functions: Output	2.82	2.85	-0.02
Functions: Rule	2.25	2.33	-0.05
Functions: Total	6.75	7.06	-0.07
Feelings about Math (Total)	16.82	16.66	0.04
Number: Accuracy	91.37	91.17	0.04
Number: Correct RT	737.58	743.90	-0.03
Color Dots: Accuracy	52.41	52.08	0.09
Color Dots: Correct RT	902.32	905.34	-0.01
Dots: Accuracy	61.07	58.22	0.25
Dots: Correct RT	824.73	820.25	0.02
ALL: RT (Grouped)	2618.61	2629.76	-0.01
ALL: RT (Random)	1936.83	1924.58	0.03
ALL: RT (Symbolic)	2903.17	2935.91	-0.03
<b>Executive Function Skills</b>			
HAF: Accuracy (Congruent)	11.65	11.44	0.21
HAF: RT (Congruent)	380.35	381.33	-0.01
HAF: Accuracy (Incong.)	9.89	9.81	0.02
HAF: RT (Incongruent)	449.32	447.52	0.02
HAF: Accuracy (Mixed)	29.93	29.96	0.00
HAF: RT (Mixed)	565.80	566.84	-0.01
Corsi: Highest span	5.43	5.28	0.10

\*Note: Green cells indicate unadjusted effect sizes (raw treatment mean minus raw control mean divided by pooled SD) of .10 or greater (either direction).



\*Just students who are at or above a 3<sup>rd</sup> grade level on at least 1 KeyMath subscale\*

	<b>Building Blocks (N=280)</b>	<b>Control (N=179)</b>	<b>Effect Size (Not Covariate- Adjusted)</b>
<b>Math Skills</b>			
KM Number (Age-Scaled)	8.30	8.31	0.00
KM Algebra (Age-Scaled)	8.58	8.49	0.03
KM Geometry (Age-Scaled)	8.17	7.81	0.15
WJ Quant. Cpts. (Std Score)	93.56	92.74	0.08
Functions: Input	1.83	2.13	-0.17
Functions: Output	3.02	3.09	-0.04
Functions: Rule	2.46	2.62	-0.10
Functions: Total	7.31	7.84	-0.12
Feelings about Math (Total)	16.75	16.44	0.07
Number: Accuracy	91.90	92.04	-0.03
Number: Correct RT	735.02	738.02	-0.02
Color Dots: Accuracy	52.42	52.30	0.03
Color Dots: Correct RT	916.59	921.89	-0.02
Dots: Accuracy	61.18	59.80	0.14
Dots: Correct RT	835.69	828.16	0.03
ALL: RT (Grouped)	2532.93	2487.14	0.07
ALL: RT (Random)	1898.97	1860.18	0.10
ALL: RT (Symbolic)	2706.73	2694.49	0.01
<b>Executive Function Skills</b>			
HAF: Accuracy (Congruent)	11.68	11.47	0.21
HAF: RT (Congruent)	379.09	377.76	0.02
HAF: Accuracy (Incong.)	10.12	10.45	-0.12
HAF: RT (Incongruent)	449.31	443.54	0.07
HAF: Accuracy (Mixed)	30.89	31.77	-0.10
HAF: RT (Mixed)	570.27	568.95	0.02
Corsi: Highest span	5.57	5.49	0.06

\*Just students who below a 3<sup>rd</sup> grade level on all 3 KeyMath subscales\*

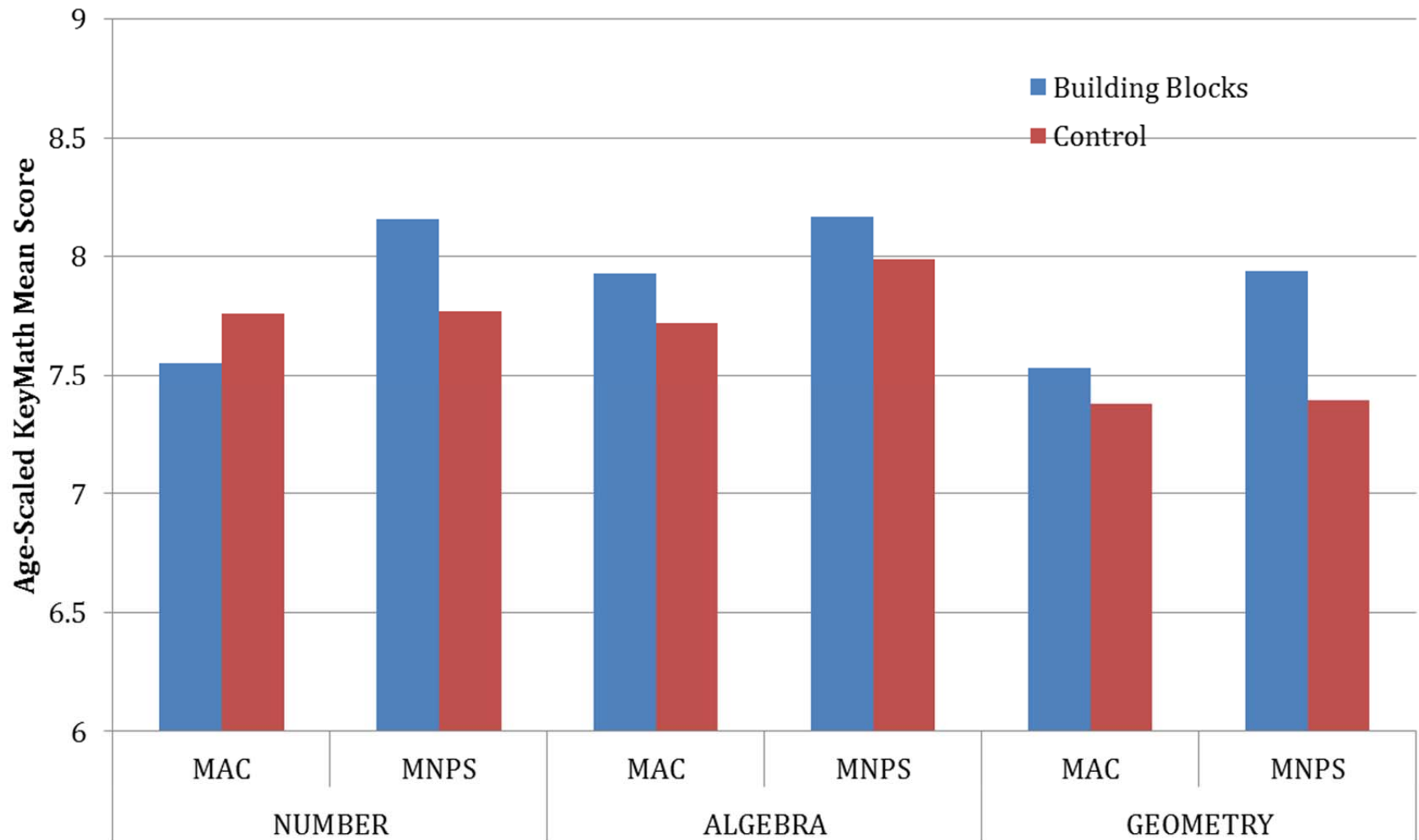
	<b>Building Blocks (N=35)</b>	<b>Control (N=26)</b>	<b>Effect Size (Not Covariate- Adjusted)</b>
<b>Math Skills</b>			
KM Number (Age-Scaled)	4.34	4.00	0.32
KM Algebra (Age-Scaled)	3.89	3.92	-0.03
KM Geometry (Age-Scaled)	4.34	4.46	-0.10
WJ Quant. Cpts. (Std Score)	71.71	69.19	0.18
Functions: Input	0.43	0.15	0.43
Functions: Output	1.26	1.19	0.06
Functions: Rule	0.57	0.35	0.23
Functions: Total	2.26	1.69	0.28
Feelings about Math (Total)	17.40	18.19	-0.16
Number: Accuracy	87.14	85.15	0.32
Number: Correct RT	758.04	784.31	-0.14
Color Dots: Accuracy	52.33	50.76	0.48
Color Dots: Correct RT	798.30	805.04	-0.05
Dots: Accuracy	60.26	47.35	0.77
Dots: Correct RT	737.68	754.70	-0.13
ALL: RT (Grouped)	3304.02	3611.71	-0.32
ALL: RT (Random)	2239.67	2367.96	-0.25
ALL: RT (Symbolic)	4474.64	4597.99	-0.06
<b>Executive Function Skills</b>			
HAF: Accuracy (Congruent)	11.37	11.19	0.22
HAF: RT (Congruent)	390.43	405.76	-0.21
HAF: Accuracy (Incong.)	8.09	5.42	0.54
HAF: RT (Incongruent)	449.46	488.45	-0.50
HAF: Accuracy (Mixed)	22.29	17.50	0.37
HAF: RT (Mixed)	523.00	545.04	-0.21
Corsi: Highest span	4.26	3.85	0.25

# Mean Scores by Pre-K System and Condition

	PK Study Experimental Condition	
	BB (Treatment)	Control
<b>KM Number (Age-Scaled)</b>		
MAC	7.55	7.76
MNPS	8.16	7.77
<b>KM Algebra (Age-Scaled)</b>		
MAC	7.93	7.72
MNPS	8.17	7.99
<b>KM Geometry (Age-Scaled)</b>		
MAC	7.53	7.38
MNPS	7.94	7.39
<b>WJ Quant. Cpts. (Std Score)</b>		
MAC	90.96	88.34
MNPS	91.29	90.31
<b>Functions: Input</b>		
MAC	1.59	1.79
MNPS	1.75	1.91
<b>Functions: Output</b>		
MAC	2.79	2.76
MNPS	2.85	2.89
<b>Functions: Rule</b>		
MAC	2.39	2.21
MNPS	2.12	2.38
<b>Functions: Total</b>		
MAC	6.77	6.76
MNPS	6.72	7.18
<b>Feelings about Math (Total)</b>		
MAC	17.07	17.28
MNPS	16.59	16.41
<b>Number: Accuracy</b>		
MAC	91.51	90.29
MNPS	91.23	91.51
<b>Number: Correct RT</b>		
MAC	727.28	757.97
MNPS	747.18	738.34
<b>Color Dots: Accuracy</b>		
MAC	52.45	52.03
MNPS	52.37	52.11

	PK Study Experimental Condition	
	BB (Treatment)	Control
<b>Color Dots: Correct RT</b>		
MAC	885.37	877.14
MNPS	919.65	917.91
<b>Dots: Accuracy</b>		
MAC	61.14	55.14
MNPS	61.01	59.44
<b>Dots: Correct RT</b>		
MAC	841.90	848.93
MNPS	850.23	832.11
<b>ALL: RT (Grouped)</b>		
MAC	2634.78	2704.82
MNPS	2603.53	2600.15
<b>ALL: RT (Random)</b>		
MAC	1944.48	1987.92
MNPS	1929.69	1899.59
<b>ALL: RT (Symbolic)</b>		
MAC	2909.49	3014.33
MNPS	2897.28	2904.97
<b>HAF: Accuracy (Congruent)</b>		
MAC	11.61	11.52
MNPS	11.68	11.41
<b>HAF: RT (Congruent)</b>		
MAC	383.29	374.97
MNPS	377.60	383.85
<b>HAF: Accuracy (Incong.)</b>		
MAC	10.14	10.02
MNPS	9.66	9.73
<b>HAF: RT (Incongruent)</b>		
MAC	448.38	442.71
MNPS	450.22	449.45
<b>HAF: Accuracy (Mixed)</b>		
MAC	30.20	30.74
MNPS	29.68	29.65
<b>HAF: RT (Mixed)</b>		
MAC	571.09	567.11
MNPS	560.79	566.73
<b>Corsi: Highest span</b>		
MAC	5.51	5.00
MNPS	5.35	5.39

## Mean KeyMath Scores by Pre-K System and Condition



# Correlations among 5<sup>th</sup> Grade Measures

## Zero-Order Correlations

	I	II	III	IV	VI	VI	VI	VI	IX	X	XI	XI	XI	X	X	X	X	X	X	X	X	X	X	X	
I. KM Number (Age-Scaled)																									
II. KM Algebra (Age-Scaled)	.83																								
III. KM Geometry (Age-Scaled)	.70	.66																							
IV. WJ Quant. Cpts. (Std. Score)	.68	.68	.54																						
V. Functions: Input	.65	.63	.43	.55																					
VI. Functions: Output	.55	.55	.38	.54	.71																				
VII. Functions: Rule	.62	.61	.43	.55	.80	.75																			
VIII. Functions: Total	.66	.66	.45	.60	.92	.90	.93																		
IX. Feelings about Math (Total)	-.16	-.18	-.08	-.10	-.15	-.18	-.17	-.18																	
X. Number: Accuracy	.33	.36	.28	.34	.26	.29	.29	.31	-.09																
XI. Number: Correct RT	-.12	-.11	-.04	-.07	-.12	-.16	-.12	-.15	.05	-.03															
XII. Color Dots: Accuracy	.16	.14	.13	.10	.20	.11	.19	.18	-.04	.34	.03														
XIII. Color Dots: Correct RT	.13	.12	.15	.13	.12	.14	.15	.15	.03	.31	.46	.22													
XIV. Dots: Accuracy	.16	.17	.17	.15	.15	.17	.17	.18	-.11	.31	.01	.34	.12												
XV. Dots: Correct RT	.12	.12	.14	.16	.07	.03	.08	.07	.01	.20	.72	.16	.74	.13											
XVI. ALL: RT (Grouped)	-.47	-.45	-.31	-.50	-.35	-.46	-.42	-.45	.16	-.40	.24	-.13	-.06	-.22	.02										
XVII. ALL: RT (Random)	-.38	-.40	-.24	-.44	-.32	-.41	-.37	-.40	.11	-.42	.29	-.12	-.01	-.19	.09	.82									
XVIII. ALL: RT (Symbolic)	-.50	-.51	-.31	-.55	-.42	-.50	-.48	-.51	.14	-.43	.25	-.13	-.12	-.17	.02	.67	.66								
XIX. Corsi: Highest span	.38	.33	.32	.37	.25	.27	.24	.28	-.06	.28	-.02	.16	.13	.15	.10	-.24	-.18	-.27							
XX. HAF: Accuracy (Cong.)	.12	.16	.09	.14	.09	.10	.04	.08	.03	.29	.01	.24	.12	.18	.07	-.10	-.13	-.14	.18						
XXI. HAF: RT (Congruent)	-.14	-.14	-.10	-.08	-.11	-.10	-.13	-.12	.04	-.12	.30	.00	.19	-.05	.24	.22	.25	.16	-.11	-.07					
XXII. HAF: Accuracy (Incong.)	.29	.30	.30	.32	.21	.20	.25	.24	-.01	.29	-.07	.12	.04	.23	.03	-.29	-.25	-.29	.26	.25	-.14				
XXIII. HAF: RT (Incong.)	-.12	-.13	-.09	-.08	-.13	-.13	-.20	-.17	.05	-.18	.22	.01	.13	-.08	.19	.26	.30	.21	-.12	.00	.51	-.15			
XXIV. HAF: Accuracy (Mix)	.33	.33	.33	.37	.26	.27	.28	.30	.00	.31	-.09	.06	.09	.21	.07	-.30	-.27	-.29	.29	.26	-.16	.74	-.21		
XXV. HAF: RT (Mixed)	.04	.04	.07	.15	.00	.04	.02	.02	.01	.07	.18	-.01	.16	.01	.26	.06	.09	.03	.07	.07	.34	.21	.29	.20	

\*Red cells indicate correlations greater than .20, Green cells indicate correlations less than -.20

# Teacher Survey and Student Report (TSSR)

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- The TSSR includes:
  - Section with teacher-specific questions (demographics, education, experience)
  - Section with classroom-specific questions (for math classes taught that include consented students, regarding textbook use, enrollment by ethnicity, etc.) – NOT INCLUDED IN THIS DOCUMENT
  - Section with student-specific questions (each consented student's math abilities, work habits, etc.)
- We sent out 155 TSSR's to teachers with at least 1 consented student.
- We have an additional 3 TSSR's that are nearly complete (all portions pretty much done but we have some questions or there are some minor pieces missing) – includes 15 students.
- There are 24 TSSR's that have not been completed (1 is partial but most is still blank, including student questions) – includes 55 students.
- **We have 128 fully completed and checked TSSR's (includes 452 students, around 87% of consented student sample).**

# Teacher Survey Information

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\*Presented here is information from the 128 completed teacher surveys

- Gender
  - 107 females (84%), 21 males (16%)
- Grades Taught
  - 43 teach 4<sup>th</sup> grade (34%), 85 teach at least 5<sup>th</sup> grade (66%)
- Preferred Grade To Teach
  - 7 teachers (6%) reported that they would prefer to teach younger students than their current grade(s) level
  - 108 teachers (84%) reported that their current grade(s) level is just right
  - 13 teachers (10%) reported that they would prefer to teach older students than their current grade(s) level
- Math Taught
  - 39 teachers (30%) currently only teach math, while 89 teachers (70%) also teach other subjects
- Experience
  - Years as a teacher
    - This is 1<sup>st</sup> year: 21 (16%)
    - 2-4 years: 29 (23%)
    - 5-10 years: 33 (26%)
    - More than 10 years: 45 (35%)
  - Years at current school
    - This is 1<sup>st</sup> year: 46 (36%)
    - 2-4 years: 45 (35%)
    - 5-10 years: 23 (18%)
    - More than 10 years: 14 (11%)
  - Years teaching middle grades math
    - Don't teach middle grades math: 33 (26%)
    - This is 1<sup>st</sup> year: 22 (17%)
    - 2-4 years: 32 (25%)
    - 5-10 years: 27 (21%)
    - More than 10 years: 14 (11%)

- Licensure (categories add up to more than 100%)
  - Early Childhood license (at least): 9 (7%)
  - Elementary license (at least): 95 (74%)
  - Middle Grades license (at least): 37 (29%)
  - Special Education license (at least): 14 (11%)
- Education
  - Highest degree earned
    - Bachelor's degree: 49 (38%)
    - Master's degree 63 (49%)
    - Master's degree + 30: 15 (12%)
    - Doctoral degree: 1 (1%)
  - Majored in math in undergraduate program
    - Yes: 7 (6%)
    - No: 121 (95%)
  - Minored in math in undergraduate program
    - Yes: 5 (4%)
    - No: 104 (81%)
    - No minor (NA): 19 (15%)
  - Majored in math in graduate school
    - Yes: 9 (7%)
    - No: 70 (55%)
    - No grad school (NA): 49 (38%)



# Teacher-Reported Student Information

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\*Presented here is information from the 452 completed teacher surveys

- Does student receive individual tutoring in math?
  - Yes: 81 (18%)
  - No: 283 (63%)
  - Program not available at this school: 88 (19%)
- Does student receive pull-out small group instruction in math?
  - Yes: 144 (32%)
  - No: 243 (54%)
  - Program not available at this school: 64 (14%)
- Does student participate in gifted/talented programs in math?
  - Yes: 6 (1%)
  - No: 328 (73%)
  - Program not available at this school: 115 (26%)
- Does student participate in a Title 1 program in math?
  - Yes: 63 (14%)
  - No: 253 (56%)
  - Program not available at this school: 134 (30%)
- Does the teacher use ability grouping in this student's class?
  - Yes: 176 (39%)
  - No: 269 (60%)
- If there is ability grouping, how does this student compare to others in the class?
  - Less skilled: 59 (13%)
  - About the same: 61 (14%)
  - More advanced: 56 (12%)
  - Not applicable (no ability grouping): 275 (61%)
- To what extent does this student work to the best of his/her ability in math?
  - Always: 102 (23%)
  - Usually: 159 (35%)
  - Erratic: 142 (31%)
  - Seldom: 43 (10%)
  - Never: 6 (1%)

- How does this student's math skills compare to others in his/her grade?
  - Far above average: 30 (7%)
  - Above average: 108 (24%)
  - Average: 144 (32%)
  - Below average: 133 (29%)
  - Far below average: 36 (8%)
- How does this student's interest in math compare to others in his/her grade?
  - Far above average: 18 (4%)
  - Above average: 100 (22%)
  - Average: 222 (49%)
  - Below average: 90 (20%)
  - Far below average: 22 (5%)
- How prepared is this student for the next level in math?
  - Highly prepared: 71 (15%)
  - Mostly prepared: 135 (30%)
  - May struggle but is prepared: 129 (29%)
  - Somewhat unlikely to be prepared: 77 (17%)
  - Very unlikely to be prepared: 40 (9%)
- How long has the teacher taught this student math this year?
  - More than 6 months: 400 (89%)
  - 4-6 months: 41 (9%)
  - 1-3 months: 11 (2%)
- This student concentrates well and is not easily distracted when doing a task.
  - Strongly agree: 88 (20%)
  - Agree: 169 (37%)
  - Disagree: 138 (30%)
  - Strongly disagree: 57 (13%)
- This student does not have difficulty planning and carrying out activities with many steps.
  - Strongly agree: 36 (8%)
  - Agree: 161 (36%)
  - Disagree: 167 (37%)
  - Strongly disagree: 88 (19%)
- This student finishes tasks and activities.
  - Strongly agree: 103 (23%)
  - Agree: 222 (49%)
  - Disagree: 102 (23%)
  - Strongly disagree: 25 (5%)

- This student actively uses resources for help and information.
  - Strongly agree: 88 (20%)
  - Agree: 181 (40%)
  - Disagree: 141 (31%)
  - Strongly disagree: 41 (9%)
- Does this student have math-specific difficulties?
  - Yes: 30 (7%)
  - No: 422 (93%)

- Some responses (and frequency) if “No”:

Functionally Delayed/Specific Learning Disability	7
IEP	3
IEP for math	3
Memory	2
Speech	2
Receives accommodations for math	2
ELL	2
Lifeskills	1
Very low basic math skills	1
Allowed more time on assessments	1
Reading word problems	1
Low IQ	1
Delayed written and spoken language skills	1
Easily distracted	1
Fact fluency	1

# Correlations among 5<sup>th</sup> Grade Direct Assessments and Teacher Ratings

## Zero-Order Correlations

Direct Assessment	TSSR: Math skills compared to others	TSSR: Interest in math compared to others	TSSR: Prepared for next level in math	TSSR: Self-Reg Items (Sum)
KM Number (Age-Scaled)	.582	.371	.564	.378
KM Algebra (Age-Scaled)	.596	.410	.604	.409
KM Geometry (Age-Scaled)	.460	.313	.416	.312
WJ Quant. Cpts. (Std Score)	.533	.370	.553	.385
Functions: Input	.529	.421	.531	.408
Functions: Output	.525	.419	.501	.427
Functions: Rule	.550	.408	.565	.411
Functions: Total	.584	.454	.581	.454
Feelings about Math (Total)	-.257	-.279	-.297	-.255
Number: Accuracy	.374	.271	.360	.310
Number: Correct RT	-.084	-.097	-.098	-.087
Color Dots: Accuracy	.227	.199	.283	.207
Color Dots: Correct RT	.226	.097	.149	.174
Dots: Accuracy	.216	.188	.232	.195
Dots: Correct RT	.131	.034	.087	.052
ALL: RT (Grouped)	-.389	-.265	-.415	-.290
ALL: RT (Random)	-.336	-.205	-.366	-.277
ALL: RT (Symbolic)	-.426	-.281	-.460	-.315
HAF: Accuracy (Congruent)	.170	.078	.117	.133
HAF: RT (Congruent)	-.122	-.085	-.180	-.150
HAF: Accuracy (Incong.)	.255	.155	.219	.144
HAF: RT (Incongruent)	-.145	-.099	-.152	-.130
HAF: Accuracy (Mixed)	.290	.198	.257	.198
HAF: RT (Mixed)	.060	.054	.100	.108
Corsi: Highest span	.303	.185	.290	.213

\*Red cells indicate correlations greater than .20

\*Green cells indicate correlations less than -.20

# Looking at Low-Scoring Students

\*I selected students who were below a third-grade level on all 3 KeyMath subscales. Here are descriptives for the other direct assessments for this group of 61 students. (Purple cells just highlight a contrast of potential interest between the groups.)

Descriptive Statistics										
	At or Above 3rd-grade level on Key Math					Below 3rd-grade level on Key Math				
	N	Min	Max	Mean	SD	N	Min	Max	Mean	SD
WJ Quant. Cpts. (Std Score)	459	53.00	131.00	93.24	10.91	61	39.00	93.00	70.64	13.69
Functions: Input	459	.00	6.00	1.95	1.73	61	.00	2.00	.31	.65
Functions: Output	459	.00	6.00	3.05	1.67	61	.00	4.00	1.23	.99
Functions: Rule	459	.00	6.00	2.52	1.64	61	.00	4.00	.48	.96
Functions: Total	459	.00	18.00	7.52	4.57	61	.00	10.00	2.02	2.03
Feelings about Math (Total)	459	10.00	35.00	16.63	4.19	61	10.00	31.00	17.74	4.90
Number: Accuracy	459	53.00	96.00	91.95	4.30	61	70.00	96.00	86.30	6.15
Number: Correct RT	459	439.17	1841.66	736.19	199.67	61	560.44	1650.61	769.24	187.27
Color Dots: Accuracy	256	35.00	60.00	52.38	3.65	38	44.00	58.00	51.63	3.32
Color Dots: Correct RT	256	506.24	1824.81	918.73	225.59	38	554.81	1129.05	801.32	140.17
Dots: Accuracy	459	.00	78.00	60.64	9.90	61	.00	76.00	54.75	17.87
Dots: Correct RT	452	453.76	1846.58	832.79	227.13	56	502.97	1071.94	744.07	129.91
ALL: RT (Grouped)	459	1302.60	4932.65	2515.07	643.61	61	1977.50	7436.40	3435.17	978.49
ALL: RT (Random)	459	883.75	3807.50	1883.84	375.13	61	1236.09	3703.80	2294.35	506.12
ALL: RT (Symbolic)	459	1100.75	9440.54	2701.96	972.25	61	361.20	8838.21	4527.22	1937.65
HAF: Accuracy (Congruent)	459	.00	12.00	11.60	1.02	61	9.00	12.00	11.30	.80
HAF: RT (Congruent)	458	255.50	703.75	378.57	69.83	61	277.17	619.64	396.96	72.00
HAF: Accuracy (Incong.)	459	.00	12.00	10.25	2.80	61	.00	12.00	6.95	5.03
HAF: RT (Incongruent)	443	279.25	812.22	447.03	85.32	45	339.67	650.67	464.19	79.52
HAF: Accuracy (Mixed)	459	.00	48.00	31.23	8.76	61	.00	42.00	20.25	13.04
HAF: RT (Mixed)	443	354.31	789.85	569.75	79.85	45	295.88	754.33	531.32	102.57
Corsi: Highest span	459	2.00	8.00	5.54	1.45	61	2.00	7.00	4.08	1.62

# Looking at Early Correlates of Later Skills

Zero-Order Correlations: At or Above 3rd Grade Level

	Fall PK QC	Spring PK QC	Spring K QC	Spring G1 QC	Fall PK AP	Spring PK AP	Spring K AP	Spring G1 AP	Fall PK A NUM	Spring PK A NUM	Spring K A NUM	Spring G1 A NUM	Fall PK A GEO	Spring PK A GEO	Spring K A GEO	Spring G1 A GEO
KM Number (Age-Scaled)	.30	.41	.43	.47	.22	.35	.46	.50	.32	.43	.52	.47	.22	.35	.30	.32
KM Algebra (Age-Scaled)	.29	.38	.41	.44	.21	.32	.41	.43	.31	.36	.48	.44	.19	.31	.27	.31
KM Geometry (Age-Scaled)	.27	.32	.32	.32	.23	.30	.34	.39	.28	.28	.41	.37	.25	.32	.27	.35
WJ Quant. Cpts. (Std Score)	.29	.42	.42	.40	.24	.31	.40	.39	.26	.40	.44	.45	.23	.36	.28	.23
Functions: Input	.25	.37	.33	.37	.22	.29	.32	.38	.29	.38	.43	.41	.19	.28	.24	.25
Functions: Output	.24	.28	.27	.33	.19	.27	.29	.30	.23	.37	.33	.36	.20	.26	.21	.16
Functions: Rule	.26	.36	.33	.34	.22	.28	.33	.38	.28	.37	.36	.41	.19	.30	.22	.23
Functions: Total	.28	.37	.34	.38	.23	.31	.34	.39	.29	.41	.41	.43	.21	.31	.25	.24
Feelings about Math (Total)	-.18	-.13	-.07	-.11	.06	-.01	-.05	-.02	-.12	-.16	-.09	-.10	-.07	-.06	-.14	-.14
Number: Accuracy	.15	.17	.19	.17	.13	.14	.19	.24	.15	.19	.25	.24	.12	.14	.15	.11
Number: Correct RT	-.03	-.02	-.04	-.09	-.02	-.03	-.14	-.12	-.07	-.07	-.04	-.14	-.02	-.08	-.04	-.03
Color Dots: Accuracy	.10	.21	.03	.06	-.01	.17	.09	.17	.13	.26	.10	.10	.11	.20	.10	.13
Color Dots: Correct RT	.07	-.01	.09	.04	.01	.12	.11	.17	.10	.11	.04	.11	.03	.10	.08	.11
Dots: Accuracy	.06	.10	.01	.06	.09	.08	.07	.12	.05	.09	.07	.05	.07	.10	.06	.03
Dots: Correct RT	.05	.04	.06	.05	.05	.04	.01	.04	.00	.02	.08	.03	.03	.01	.05	.10
ALL: RT (Grouped)	-.19	-.24	-.26	-.30	-.14	-.28	-.30	-.35	-.22	-.27	-.34	-.37	-.24	-.27	-.19	-.11
ALL: RT (Random)	-.17	-.26	-.24	-.26	-.13	-.23	-.26	-.36	-.23	-.27	-.31	-.37	-.22	-.23	-.20	-.12
ALL: RT (Symbolic)	-.21	-.28	-.31	-.32	-.19	-.31	-.34	-.37	-.26	-.31	-.37	-.43	-.19	-.24	-.20	-.08
HAF: Accuracy (Congruent)	-.03	-.01	.08	.00	-.03	-.02	.03	.08	-.03	.01	.04	.07	-.04	.00	.05	.06
HAF: RT (Congruent)	-.10	-.12	-.08	-.02	.04	-.06	-.08	-.08	-.09	-.03	-.05	-.08	-.04	-.07	-.03	.02
HAF: Accuracy (Incong.)	.11	.10	.15	.04	.11	.02	.13	.14	.11	.08	.15	.16	.03	.04	.07	.04
HAF: RT (Incongruent)	-.16	-.20	-.09	-.14	-.05	-.13	-.09	-.11	-.12	-.14	-.13	-.16	-.13	-.12	-.08	-.02
HAF: Accuracy (Mixed)	.10	.04	.12	.04	.09	.01	.16	.15	.15	.05	.14	.15	.09	.07	.13	.10
HAF: RT (Mixed)	-.10	-.12	-.07	-.04	.07	-.07	.02	-.02	-.09	-.05	-.01	-.08	-.10	-.09	-.09	-.04
Corsi: Highest span	.10	.22	.21	.22	.08	.16	.21	.20	.14	.22	.21	.21	.18	.14	.16	.14

**Zero-Order Correlations: Below 3rd Grade Level**

	Fall PK QC	Spring PK QC	Spring K QC	Spring G1 QC	Fall PK AP	Spring PK AP	Spring K AP	Spring G1 AP	Fall PK REM A NUM	Spring PK REM A NUM	Spring K REM A NUM	Spring G1 REM A NUM	Fall PK REM A GEO	Spring PK REM A GEO	Spring K REM A GEO	Spring G1 REM A GEO
KM Number (Age-Scaled)	-.08	.26	.24	.25	.03	.28	.24	.29	.03	.24	.22	.28	-.14	.02	.29	.30
KM Algebra (Age-Scaled)	.08	.14	.33	.35	.09	.35	.28	.29	.19	.25	.25	.22	-.12	.09	.16	.20
KM Geometry (Age-Scaled)	-.21	.10	.04	-.01	.05	-.06	-.01	.09	-.07	.06	.04	.08	-.13	-.03	-.03	.10
WJ Quant. Cpts. (Std Score)	.26	.25	.54	.36	.21	.39	.38	.37	.23	.26	.41	.49	.09	.21	.25	.43
Functions: Input	.29	.29	.27	.19	.23	.24	.22	.14	.33	.32	.27	.29	.33	.29	.18	.32
Functions: Output	.28	.20	.31	.30	.01	.15	.21	.29	.09	-.04	.35	.38	.16	.03	.11	.22
Functions: Rule	.18	.20	.12	.10	-.04	.16	.15	.03	.21	.00	.12	.23	-.01	.00	.16	.09
Functions: Total	.31	.29	.29	.26	.06	.23	.24	.20	.25	.09	.32	.38	.18	.11	.18	.25
Feelings about Math (Total)	.07	-.18	-.17	-.16	-.04	-.06	.08	-.03	.19	-.13	-.04	-.01	.02	-.01	.06	.01
Number: Accuracy	.26	.24	.16	.26	.41	.28	.00	.33	.35	.30	.32	.38	.11	-.06	.18	.29
Number: Correct RT	-.22	-.22	-.26	-.14	-.07	-.12	-.18	-.26	.02	-.13	-.28	-.29	.00	-.19	-.27	-.18
Color Dots: Accuracy	-.16	.36	.05	.17	-.17	.22	.00	.20	.15	.17	.19	.15	.05	.00	.38	.08
Color Dots: Correct RT	.00	-.12	-.10	-.20	-.05	-.17	.05	-.16	-.01	.02	-.09	-.22	-.17	.00	-.06	-.19
Dots: Accuracy	.00	.23	.24	.07	.22	.34	.04	.24	.14	.29	.23	.30	-.09	.13	.08	.22
Dots: Correct RT	-.08	-.13	.18	.16	-.01	-.02	.13	.00	.19	.06	.12	.15	-.11	-.15	.02	.12
ALL: RT (Grouped)	-.20	-.38	-.43	-.39	-.33	-.61	-.35	-.31	-.28	-.30	-.49	-.50	-.20	-.30	-.24	-.41
ALL: RT (Random)	-.14	-.42	-.40	-.28	-.27	-.56	-.25	-.26	-.19	-.33	-.44	-.44	-.09	-.24	-.25	-.41
ALL: RT (Symbolic)	-.05	-.28	-.37	-.26	.01	-.29	-.17	-.26	-.11	-.16	-.29	-.22	-.06	-.05	-.06	-.28
HAF: Accuracy (Congruent)	.03	.15	.20	.04	.08	.07	.08	.19	.06	.31	.20	.07	.05	.05	.29	.20
HAF: RT (Congruent)	-.24	-.24	-.08	-.22	-.12	-.18	.01	-.10	-.10	-.28	-.15	-.18	.01	.00	-.16	-.08
HAF: Accuracy (Incong.)	.19	.28	.34	.20	.11	.12	.06	.24	.26	.39	.31	.30	.03	.18	.25	.34
HAF: RT (Incongruent)	-.13	-.11	.06	-.23	-.17	-.20	.26	.18	-.10	-.09	.03	-.11	.17	.11	.12	-.16
HAF: Accuracy (Mixed)	.28	.27	.32	.21	.27	.11	.19	.34	.26	.40	.33	.39	-.05	.14	.24	.37
HAF: RT (Mixed)	.25	.12	.32	.28	.03	.08	.21	.16	.13	.18	.30	.52	.00	.04	.17	.30
Corsi: Highest span	.19	.26	.52	.26	.16	.34	.16	.27	.13	.23	.37	.46	-.15	.00	.23	.43

\*Red cells indicate correlations  $\geq .20$ , Green cells indicate correlations  $\leq -.20$