

**Appendix 3\_9a Extended Assessment Reading Elementary Factor Analysis**

Oregon 2008 Extended Assessment

Elementary Grade Band READING Task Factor Analysis

**Math Items Across all Tasks**

N of Cases = 2624

N of Items = 50

**Inter-item Correlations**

**Summary Item Statistics**

	Mean	Min	Max	Range	Maxi / Min	Var	N Items
Item Means	1.501	1.022	1.846	.824	1.806	.033	50
Item Variances	.545	.255	.853	.598	3.350	.025	50
Inter-Item Correlations	.324	.123	.785	.662	6.395	.009	50

Alpha = .957

Standardized item alpha = .960

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.982
Bartlett's Test of Sphericity	Approx. Chi-Square	58611.476
	df	1225
	Sig.	.000

**Factor Analysis**

**Total Variance Explained**

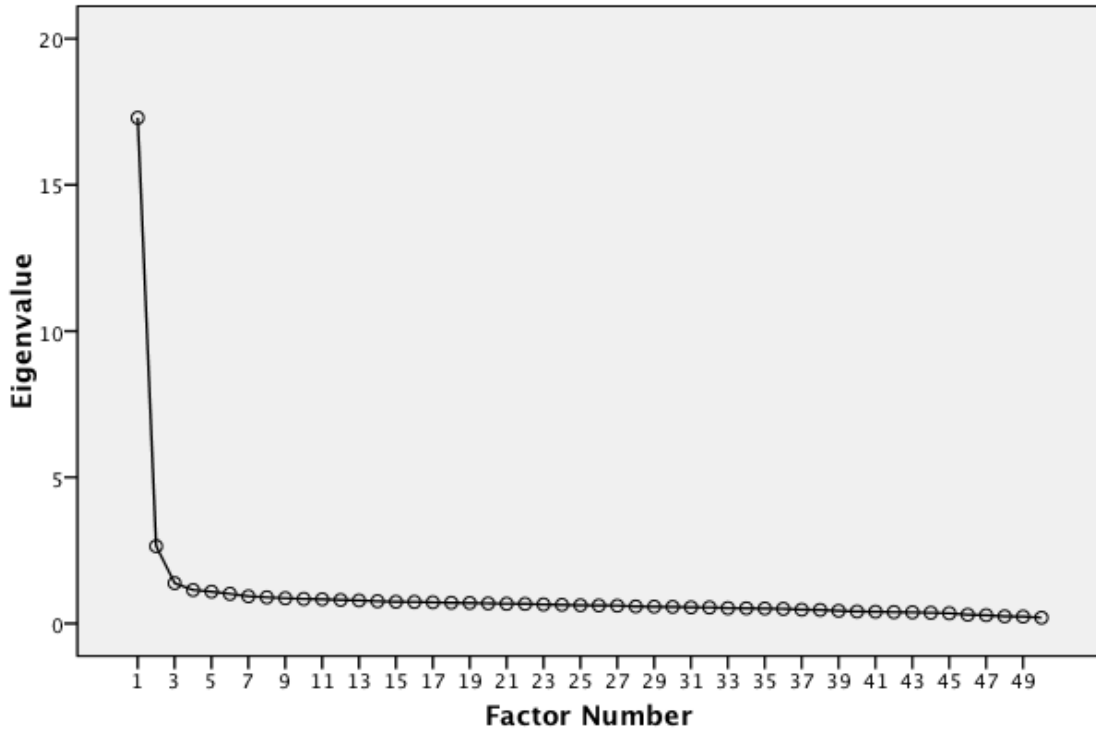
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	17.293	34.587	34.587	16.518	33.036	33.036	7.734	15.468	15.468
2	2.644	5.288	39.875	2.403	4.805	37.841	6.415	12.829	28.298
3	1.382	2.764	42.638	.770	1.540	39.381	3.387	6.774	35.072
4	1.149	2.297	44.935	.558	1.116	40.497	2.050	4.101	39.173
5	1.093	2.186	47.121	.468	.937	41.434	1.127	2.255	41.427
6	1.016	2.032	49.153	.477	.953	42.388	.480	.960	42.388

Extraction Method: Maximum Likelihood.

**Goodness-of-fit Test**

Chi-Square	df	Sig.
2447.600	940	.000

**Scree Plot**



**Goodness-of-fit Test**

Chi-Square	df	Sig.
2938.416	985	.000

**Difference Between Model Fit for 1 Factor and Multiple Factor Models**

chisq1	chisq2	chidiff	df1	df2	dfdifff	prob
11665.1	2938.42	8726.70	1175	985	190	.00

Rotated Factor Matrix<sup>a</sup>

	Factor					
	1	2	3	4	5	6
t2r01	.665	.256	.186	.120	.122	.028
t2r02	.569	.185	.116	.102	.044	.008
t2r03	.698	.252	.195	.045	.113	.246
t2r04	.713	.231	.150	.124	.088	.157
t2r05	.687	.193	.147	.146	.080	.049
t3r01	.745	.282	.214	.089	.073	.015
t3r02	.765	.266	.242	.100	.098	.018
t3r03	.742	.248	.229	.156	.093	-.162
t3r04	.766	.266	.238	.138	.101	-.148
t3r05	.773	.287	.250	.135	.079	-.104
t4r01	.537	.249	.200	.148	.395	.060
t4r02	.241	.223	.261	.105	.173	-.040
t4r03	.467	.244	.237	.100	.516	.042
t4r04	.437	.239	.281	.125	.544	.002
t4r05	.174	.137	.228	.174	.148	.000
t5r01	.236	.301	.218	.076	.124	-.129
t5r02	.342	.309	.205	.113	.144	-.085
t5r03	.295	.280	.133	.137	.091	.063
t5r04	.198	.320	.165	.199	.102	-.058
t5r05	.174	.354	.074	.173	.098	-.055
t6r01	.270	.423	.103	.129	.126	-.008
t6r02	.198	.426	.217	.193	.064	.040
t6r03	.318	.484	.198	.077	.118	.256
t6r04	.243	.503	.127	.101	.093	.076
t6r05	.224	.496	.135	.113	.100	-.011
t7r01	.342	.474	.237	.082	.088	.287
t7r02	.215	.556	.132	.108	.049	.184
t7r03	.178	.492	.156	.155	.048	.100
t7r04	.130	.517	.161	.160	.079	-.054
t7r05	.113	.502	.201	.067	.043	-.134

t8r01	.273	.401	.325	.162	.142	-.105
t8r02	.190	.311	.310	.238	.061	-.080
t8r03	.174	.485	.151	.418	.084	-.030
t8r04	.141	.430	.127	.488	.009	.047
t8r05	.300	.489	.304	.127	.083	-.052
t9r01	.278	.381	.257	.186	.062	.033
t9r02	.234	.442	.288	.135	.065	-.014
t9r03	.157	.393	.294	.229	.023	-.105
t9r04	.254	.468	.341	.054	.005	.135
t9r05	.242	.349	.379	.074	.087	-.023
t10r01	.273	.344	.269	.140	.068	.073
t10r02	.223	.147	.468	.213	.041	.051
t10r03	.150	.251	.458	.155	.106	.047
t10r04	.246	.214	.492	.092	.102	.050
t10r05	.152	.192	.387	.140	.063	-.004
t11r01	.297	.454	.292	.123	.153	.036
t11r02	.141	.255	.295	.586	.107	.021
t11r03	.162	.373	.295	.175	.065	.034
t11r04	.215	.402	.428	.206	.088	-.003
t11r05	.144	.241	.293	.619	.055	.010

Extraction Method: Maximum Likelihood.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

**Task Level Factor Analysis****Descriptive Statistics**

	Mean	Std. Deviation	Analysis N
t2tot	7.85	2.754	2696
t3tot	7.71	2.926	2696
t4tot	6.74	2.856	2696
t5tot	7.54	2.639	2696
t6tot	8.16	2.336	2696
t7tot	7.99	2.474	2696
t8tot	7.23	2.773	2696
t9tot	7.51	2.736	2696
t10tot	6.40	2.975	2696
t11tot	6.94	2.697	2696

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.947
Bartlett's Test of Sphericity	Approx. Chi-Square	20527.826
	df	45
	Sig.	.000

**Total Variance Explained**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.596	65.963	65.963	6.221	62.208	62.208
2	.764	7.635	73.599			
3	.505	5.051	78.650			
4	.426	4.258	82.908			
5	.352	3.522	86.430			
6	.340	3.400	89.830			
7	.305	3.053	92.883			
8	.288	2.880	95.763			

9	.259	2.593	98.356		
10	.164	1.644	100.000		

Extraction Method: Maximum Likelihood.

### Factor Matrix<sup>a</sup>

	Factor
	1
t2tot	.760
t3tot	.803
t4tot	.765
t5tot	.750
t6tot	.806
t7tot	.785
t8tot	.835
t9tot	.829
t10tot	.743
t11tot	.805

Extraction Method:  
Maximum  
Likelihood.

a. 1 factors  
extracted. 4  
iterations required.

### Goodness-of-fit Test

Chi-Square	df	Sig.
1881.477	35	.000