## **Supplemental Material**

## **Appendix**

# Construct Validity of the BASC-3 Teacher Rating Scales: Independent Hierarchical Exploratory Factor Analyses of the Normative Sample

#### Table A1

BASC-3 Teacher Rating Scale-Preschool Exploratory Factor Analysis of Clinical and Adaptive Scales: Four Oblique Factor Solution for the Standardization Sample (N = 500)

#### Table A2

BASC-3 Teacher Rating Scale-Preschool Exploratory Factor Analysis of Clinical and Adaptive Scales: Three Oblique Factor Solution for the Standardization Sample (N = 500)

#### Table A3

BASC-3 Teacher Rating Scale-Preschool Exploratory Factor Analysis of Clinical Scales: Four Oblique Factor Solution for the Standardization Sample (N = 500)

#### Table A4

BASC-3 Teacher Rating Scale-Child Exploratory Factor Analysis of Clinical and Adaptive Scales: Five Oblique Factor Solution for the Standardization General Norm Sample (N = 600)

#### Table A5

BASC-3 Teacher Rating Scale-Child Exploratory Factor Analysis of Clinical and Adaptive Scales: Four Oblique Factor Solution for the Standardization General Norm Sample (N = 600)

#### Table A6

BASC-3 Teacher Rating Scale-Child Exploratory Factor Analysis of Clinical and Adaptive Scales: Three Oblique Factor Solution for the Standardization General Norm Sample (N = 600)

#### Table A7

BASC-3 Teacher Rating Scale-Child Exploratory Factor Analysis of Clinical Scales: Three Oblique Factor Solution for the Standardization General Norm Sample (N=600)

#### Table A8

BASC-3 Teacher Rating Scale-Adolescent Exploratory Factor Analysis of Clinical and Adaptive Scales: Four Oblique Factor Solution for the Standardization General Norm Sample (N=600)

#### Table A9

BASC-3 Teacher Rating Scale-Adolescent Exploratory Factor Analysis of Clinical Scales: Two Oblique Factor Solution for the Standardization General Norm Sample (N = 600)

#### Figure A1

BASC-3 Teacher Rating Scale-Preschool Sources of Clinical Scales Variance for the Standardization Sample (N = 500)

### Figure A2

BASC-3 Teacher Rating Scale-Child Sources of Clinical Scales Variance for the Standardization Sample (N=600)

## Figure A3

BASC-3 Teacher Rating Scale-Adolescent Sources of Clinical Scales Variance for the Standardization Sample (N=600)

**Table A1**BASC-3 Teacher Rating Scale-Preschool Exploratory Factor Analysis of Clinical and Adaptive Scales: Four Oblique Factor Solution for the Standardization Sample (N = 500)

		F	F1:		2:	F3	3:	F <sup>2</sup>	1:	
	General	Adaptiv	e Skills	Intern	alizing	Externa	alizing	Unde	fined	
BASC-3 Scale	S	P	S	P	S	P	S	P	S	$h^2$
Social Skills	613	.947	.806	.225	190	.026	393	.072	251	.692
<b>Functional Communication</b>	683	.871	.841	.078	272	.083	389	154	447	.747
Adaptability	746	.718	.779	167	516	046	539	.118	135	.655
Hyperactivity	.715	.104	481	115	.384	1.014	.905	.153	.202	.855
Aggression	.754	010	507	.180	.602	.777	.872	092	022	.793
Anxiety	.549	.053	320	.876	.795	107	.343	.109	.088	.652
Somatization	.299	.214	103	.597	.500	003	.206	.140	.070	.286
Depression	.765	055	506	.667	.851	.297	.682	064	015	.798
Atypicality	.718	113	570	.396	.564	.211	.527	.451	.511	.630
Withdrawal	.674	383	623	.507	.593	167	.352	.309	.431	.614
Attention Problems	.741	436	719	190	.295	.533	.697	.182	.375	.697
Eigenvalue		5.	29	1	.68	1.	16		.65	
% Variance		45.	.23	11	.73	8.	00	2	.47	
Promax Based Factor Correlations	<u> </u>	F	71	F	2	F	3	F	4	
F1: Adaptive Skills		-	_							
F2: Internalizing			153	-	_					
F3: Externalizing			576		38	-	-			
F4: Undefined		3	345	.0	07	.08	34	_	-	

Note. S = Structure Coefficient, P = Pattern Coefficient,  $h^2 = \text{Communality}$ . General structure coefficients are based on the first unrotated factor coefficients (g loadings). Salient pattern coefficients presented in bold (pattern coefficient  $\geq$  .40) and aligned (.30-.39) in italic. Due to Heywood case in communality estimation, extraction was limited to two iterations as per Gorsuch (2003).

**Table A2**BASC-3 Teacher Rating Scale-Preschool Exploratory Factor Analysis of Clinical and Adaptive Scales: Three Oblique Factor Solution for the Standardization Sample (N = 500)

-		F	1:	F	2:	F.	3:	
	General	Adaptiv	e Skills	Intern	alizing	Externa	alizing	
BASC-3 Scale	S	P	S	P	S	P	S	$h^2$
Functional Communication	693	973	877	.078	325	.107	395	.786
Social Skills	613	895	797	.215	210	006	393	.670
Adaptability	739	601	741	175	512	103	529	.589
Attention Problems	.737	.529	.725	158	.342	.484	.697	.667
Withdrawal	.671	.505	.640	.495	.642	175	.363	.578
Anxiety	.558	063	.308	.914	.829	107	.331	.703
Depression	.762	027	.472	.663	.823	.334	.663	.755
Somatization	.299	168	.104	.588	.505	009	.202	.278
Atypicality	.707	.330	.596	.387	.620	.151	.535	.517
Hyperactivity	.733	047	.479	124	.397	1.049	.958	.933
Aggression	.747	043	.475	.201	.575	.760	.840	.733
Eigenvalue		4	5.29	1	.68	]	1.16	
% Variance		45	5.20	11	.93	{	3.40	
Promax Based Factor Correlations		F	71	F	2	F	3	
F1: Adaptive Skills		-	_					
F2: Internalizing		4	153	-	_			
F3: Externalizing		5	576	.5	38	_	_	

Note. S = Structure Coefficient, P = Pattern Coefficient,  $h^2 = \text{Communality}$ . General structure coefficients are based on the first unrotated factor coefficients (g loadings). Salient pattern coefficients presented in bold (pattern coefficient  $\geq .40$ ) and aligned (.30-.39) in italic. Due to Heywood case in communality estimation, extraction was limited to two iterations as per Gorsuch (.2003).

**Table A3**BASC-3 Teacher Rating Scale-Preschool Exploratory Factor Analysis of Clinical Scales: Four Oblique Factor Solution for the Standardization Sample (N = 500)

		F	F1:		2:	F3: S	ocial	F4	:	
	General	Externa	alizing	Interna	llizing	Disenga	gement	Under	ined	
BASC-3 Scale	S	P	S	P	S	P	S	P	S	$h^2$
Hyperactivity	.760	.917	.912	.030	.323	111	.476	.130	.435	.850
Attention Problems	.645	.650	.747	033	.275	.267	.552	110	.226	.599
Aggression	.805	.615	.771	045	.490	040	.508	.527	.700	.800
Somatization	.382	.012	.124	.688	.552	138	.330	059	.375	.314
Anxiety	.619	101	.217	.622	.788	.156	.596	.120	.600	.633
Withdrawal	.633	124	.353	053	.564	.840	.772	.082	.384	.606
Atypicality	.724	.200	.553	.100	.558	.629	.779	068	.365	.632
Depression	.833	.210	.532	.309	.781	.108	.655	.461	.809	.798
Eigenvalue		4	.12	1.	32	C	0.83	0.	61	
% Variance		47	.35	11.	60	5	5.37	1.	07	
Promax Based Factor Correlations		F	1	F	2	F.	3	F4	1	
F1: Externalizing		_	-							
F2: Internalizing		.30	)3	_	-					
F3: Social Disengagement		.55	52	.70	)9	_				
F4: Undefined		.36	55	.71	16	.45	58	_		

Note. S = Structure Coefficient, P = Pattern Coefficient,  $h^2 = \text{Communality}$ . General structure coefficients are based on the first unrotated factor coefficients (g loadings). Salient pattern coefficients presented in bold (pattern coefficient  $\geq$  .40) and aligned (.30-.39) in italic. Due to Heywood case in communality estimation, extraction was limited to two iterations as per Gorsuch (2003).

**Table A4**BASC-3 Teacher Rating Scale-Child Exploratory Factor Analysis of Clinical and Adaptive Scales: Five Oblique Factor Solution for the Standardization General Norm Sample (N = 600)

Standardization G	ener un 1401 m zum g	F1: Sc	chool	F	2:	F3: Ad	laptive	F	1:	F5: S	ocial	
	General	Probl	ems	Extern	alizing	Ski	ills	Interna	lizing	Disenga	gement	
BASC-3 Scale	$\overline{S}$	Р	S	$\overline{P}$	S	$\overline{P}$	S	$\overline{P}$	S	$\overline{P}$	S	$h^2$
Learning Probs	.676	.863	.805	059	.347	.140	445	.192	.362	.001	.480	.683
Study Skills	821	759	890	134	518	.238	.686	.084	229	.097	464	.844
Attention Probs	.837	.732	.856	.399	.682	.100	546	037	.315	.028	.522	.847
Leadership	819	600	851	.147	370	.571	.837	003	301	.069	523	.899
Functional Com	787	579	826	.209	317	.331	.732	005	352	246	666	.820
Aggression	.698	192	.349	.862	.898	208	522	.056	.438	.004	.407	.841
Hyperactivity	.679	.153	.484	.855	.857	.092	396	119	.274	.059	.385	.761
Conduct Probs	.727	.043	.462	.830	.888	017	472	.039	.418	.034	.437	.796
Social Skills	712	073	582	094	436	.824	.843	.244	162	044	451	.759
Adaptability	776	078	566	257	599	.628	.790	122	441	.099	472	.701
Anxiety	.403	.179	.282	171	.204	.103	256	.811	.763	.019	.439	.617
Depression	.700	074	.385	.321	.639	193	553	.594	.802	.040	.571	.782
Somatization	.200	011	.066	.076	.208	.153	070	.549	.497	037	.207	.269
Atypicality	.739	.103	.573	.218	.542	.068	518	026	.490	.763	.858	.784
Withdrawal	.656	102	.463	113	.320	469	688	.051	.470	.561	.750	.685
Eigenvalue		7	'.59	1.	81	1.	46		.93	,	.67	
% Variance		49	.17	1.	44	7.	42	4	.39	2.	.50	
Promax Based Fac	tor Correlations	F1		F	2	F	3	F	4	F	5	
F1: School Probler	ms	_										
F2: Externalizing		.45	66	_	_							
F3: Adaptive Skills	S	62	22	47	75	_	-					
F4: Internalizing		.28	38	.41	1	39	91	_				
F5: Social Disenga	igement	.55	51	.41	.9	56	52	.55	5	-	-	

Note. BASC-3 Scales: Learning Probs = Learning Problems, Attention Probs = Attention Problems, Functional Com = Functional Communication, Conduct Probs = Conduct Problems, S = Structure Coefficient, P = Pattern Coefficient, P = Pat

**Table A5**BASC-3 Teacher Rating Scale-Child Exploratory Factor Analysis of Clinical and Adaptive Scales: Four Oblique Factor Solution for the Standardization General Norm Sample (N = 600)

Statuta at 2 at 101 m S	1	F	1:	F2: S	chool	F3: Ac	laptive	F <sup>2</sup>	ŀ:	
	General	Extern	alizing	Prob	lems	Sk	ills	Interna	lizing	
BASC-3 Scale	$\overline{S}$	$\overline{P}$	S	$\overline{P}$	S	$\overline{P}$	S	$\overline{P}$	S	$h^2$
Aggression	.700	.897	.904	200	.352	164	528	.036	.412	.842
Hyperactivity	.680	.870	.854	.191	.490	.137	427	081	.270	.755
Conduct Problems	.729	.855	.891	.059	.467	.023	500	.050	.405	.798
Learning Problems	.678	067	.359	.871	.809	.127	511	.193	.368	.687
Attention Problems	.840	.402	.691	.757	.862	.120	603	022	.314	.852
Study Skills	822	142	537	719	885	.212	.711	.157	203	.832
Functional Communication	788	.223	350	570	825	.500	.799	074	365	.819
Social Skills	714	110	473	.004	574	.906	.832	.308	123	.766
Withdrawal	.649	108	.361	038	.472	720	739	.243	.495	.596
Leadership	818	.130	406	520	840	.601	.846	.091	266	.868
Adaptability	773	287	623	014	564	.601	.771	012	389	.654
Anxiety	.402	153	.218	.156	.286	.041	317	.785	.751	.588
Depression	.701	.348	.656	100	.391	228	592	.572	.781	.771
Somatization	.200	.089	.208	019	.071	.160	101	.529	.491	.261
Atypicality	.716	.191	.549	.220	.570	258	631	.280	.533	.542
Eigenvalue		7.	.59	1	.81	1	.46	.93		
% Variance		48.	.96	1	.39	7	.24	4	.28	
Promax Based Factor Correlation	ns	F	71	F	F2	F	<u>'3</u>	F4	4	
F1: Externalizing		-	_							
F2: School Problems		.4	79		_					
F3: Adaptive Skills		5	40	6	80	-	_			
F4: Internalizing			06	.2	95	4	27	_		

**Table A6**BASC-3 Teacher Rating Scale-Child Exploratory Factor Analysis of Clinical and Adaptive Scales: Three Oblique Factor Solution for the Standardization General Norm Sample (N = 600)

		F	1:	F	2:	F	3:	
	General	Adaptiv	e Skills	Extern	alizing	Interna	alizing	
BASC-3 Scale	S	P	S	P	S	P	S	$h^2$
Leadership	821	1.032	.928	.121	449	.074	329	.879
<b>Functional Communication</b>	792	.995	.897	.228	391	079	417	.836
Study Skills	821	.880	.877	152	571	.208	255	.805
Social Skills	697	.719	.735	154	498	.168	224	.568
Learning Problems	.663	703	708	058	.395	.088	.374	.508
Attention Problems	.828	608	793	. <i>388</i>	.700	097	.355	.720
Withdrawal	.641	540	642	072	.394	.323	.530	.489
Adaptability	769	.494	.715	313	642	085	451	.593
Atypicality	.719	403	651	.198	.572	.298	.569	.545
Aggression	.700	.110	466	.928	.898	.073	.455	.816
Conduct Problems	.733	.020	519	.894	.898	.035	.441	.808
Hyperactivity	.680	031	496	.888	.849	122	.304	.732
Anxiety	.403	079	324	183	.230	.789	.740	.567
Depression	.703	034	522	.354	.667	.632	.811	.766
Somatization	.201	.192	087	.071	.206	.533	.480	.254
Eigenvalue		7.	59	1.	.81	1.4	46	
% Variance		48.	62	10.	.24	7.0	04	
Promax Based Factor Correla	ations	F	71	F	2	F	73	
F1: Adaptive Skills		-	_					
F2: Externalizing		5	86	-	-			
F3: Internalizing		4	46	.40	64		_	

**Table A7**BASC-3 Teacher Rating Scale-Child Exploratory Factor Analysis of Clinical Scales: Three Oblique Factor Solution for the Standardization General Norm Sample (N = 600)

1 actor Solution for th		F1		F2: S		F3	3:	
	General	Externa	lizing	Prob	lems	Interna	lizing	
BASC-3 Scale	S	P	S	P	S	P	S	$h^2$
Aggression	.804	.974	.917	167	.490	.102	.475	.860
Conduct Problems	.828	.876	.905	.030	.586	.022	.447	.821
Hyperactivity	.758	.782	.832	.215	.613	179	.293	.729
Attention Problems	.809	.213	.674	.901	.928	213	.332	.909
Learning Problems	.578	126	.374	.746	.705	.076	.386	.508
Atypicality	.732	.127	.563	.492	.709	.278	.581	.582
Withdrawal	.561	049	.373	.396	.552	.376	.549	.407
Anxiety	.455	219	.219	.156	.380	.729	.704	.524
Depression	.789	.343	.659	.000	.548	.678	.838	.794
Somatization	.293	.060	.209	134	.149	.497	.459	.221
Eigenvalue		4.9	95	1.	39	1.0	)8	
% Variance		46.0	50	9.	86	7.0	)8	
Promax Based Factor	Correlations	F	1	F	2	F	3	
F1: Externalizing		_	-					
F2: School Problems		.6	23	-	_			
F3: Internalizing		.4	68	.4	95	_		

 Table A8

 BASC-3 Teacher Rating Scale-Adolescent Exploratory Factor Analysis of Clinical and Adaptive Scales: Four Oblique Factor Solution for the Standardization General Norm Sample (N = 600)

	1	F	1:	F2: A	daptive	F.	3:	F4: Sc	chool	
	General	Extern	alizing	Sk	ills	Interna	alizing	Probl	lems	
BASC-3 Scale	$\overline{S}$	$\overline{P}$	S	$\overline{P}$	S	$\overline{P}$	S	$\overline{P}$	S	$h^2$
Aggression	.727	.972	.935	098	475	.001	.481	142	.497	.885
Conduct Problems	.757	.855	.909	044	492	026	.464	.077	.601	.832
Hyperactivity	.712	.754	.852	.173	384	.104	.492	.217	.599	.757
Social Skills	752	139	490	.983	.926	.291	310	043	628	.915
Withdrawal	.653	173	.305	688	749	.498	.689	178	.384	.737
Leadership	810	.111	451	.628	.858	.087	411	511	810	.867
Adaptability	827	181	600	.563	.808	080	545	181	686	.732
Functional Communication	805	.177	427	.507	.808	164	546	468	762	.779
Anxiety	.527	090	.336	.165	314	.865	.784	.114	.339	.635
Depression	.759	.254	.625	133	566	.758	.898	130	.444	.856
Somatization	.486	.000	.348	.149	286	.678	.658	.129	.335	.446
Atypicality	.728	.205	.580	157	564	.553	.753	.032	.500	.639
Study Skills	843	090	605	.204	.704	.126	387	811	940	.912
Learning Problems	.785	064	.518	.044	572	.255	.556	.799	.847	.760
Attention Problems	.863	.263	.717	.001	618	.030	.492	.741	.910	.877
Eigenvalue	;	8.	48	1.	.75	1.	.46		.82	
% Variance	;	55	.18	1.	.00	8.	.29	4	.07	
Promax Based Factor Correlation	<u>IS</u>	F	71	F	F2	F	3	F	4	
F1: Externalizing		-	_							
F2: Adaptive Skills		4	82	-	_					
F3: Internalizing		.5	07	5	20	-	_			
F4: School Problems		.5	93	6	43	.4	45		-	

**Table A9**BASC-3 Teacher Rating Scale-Adolescent Exploratory Factor Analysis of Clinical Scales: Two Oblique Factor Solution for the Standardization General Norm Sample (N = 600)

	I	F1:	F	2:	
General	Externalizing		Interna	alizing	
S	$\overline{P}$	S	P	S	$h^2$
.806	.978	.910	107	.512	.835
.780	.904	.867	059	.513	.753
.786	.902	.870	050	.521	.759
.778	.705	.797	.146	.592	.649
.699	.426	.645	.347	.617	.489
.613	118	.398	.816	.741	.557
.847	.141	.654	.810	.899	.821
.587	101	.386	.769	.705	.503
.563	020	.396	.657	.644	.415
.785	.242	.644	.635	.788	.656
	5.0	67	1.	44	
	53.	41	10.	96	
	]	F1	F	2	
		_			
	.6	33	-	-	
	\$ .806 .780 .786 .778 .699 .613 .847 .587	General         External           S         P           .806         .978           .780         .904           .786         .902           .778         .705           .699         .426           .613        118           .847         .141           .587        101           .563        020           .785         .242   5	S         P         S           .806         .978         .910           .780         .904         .867           .786         .902         .870           .778         .705         .797           .699         .426         .645           .613        118         .398           .847         .141         .654           .587        101         .386           .563        020         .396           .785         .242         .644           F1           -         .633	General         Externalizing         Internalizing           S         P         S         P           .806         .978         .910        107           .780         .904         .867        059           .786         .902         .870        050           .778         .705         .797         .146           .699         .426         .645         .347           .613        118         .398         .816           .847         .141         .654         .810           .587        101         .386         .769           .563        020         .396         .657           .785         .242         .644         .635           F1           F1           .633	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

Figure A1 BASC-3 Teacher Rating Scale-Preschool Sources of Clinical Scales Variance for the Standardization Sample (N = 500)

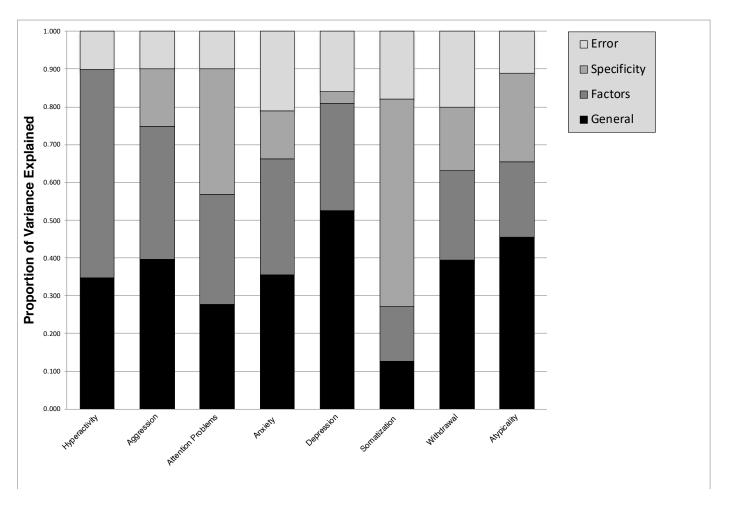


Figure A2 BASC-3 Teacher Rating Scale-Child Sources of Clinical Scales Variance for the Standardization Sample (N=600)

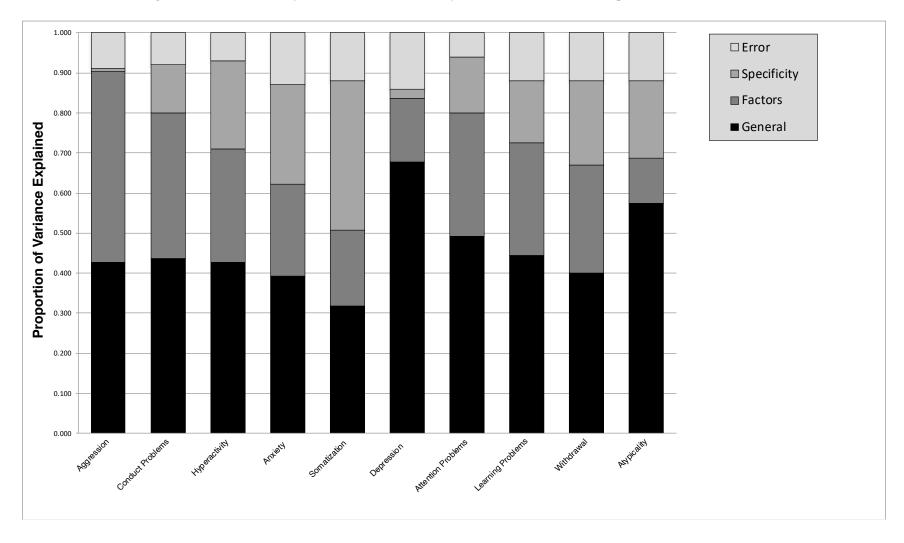


Figure A3
BASC-3 Teacher Rating Scale-Adolescent Sources of Clinical Scales Variance for the Standardization Sample (N = 600)

