Social Competence: Parent Version

Kindergarten / Year 1 Fast Track Project Technical Report Shari Miller-Johnson and Anne Maumary-Gremaud 3/16/95

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I. Scale Description

The Social Competence scale is a 12-item measure that was developed for this project. The scale assesses prosocial behaviors targeted in the integrated intervention program. The parent is asked to describe how the statement best applies to their child, using a 0 - 4 scale (not at all, a little, moderately well, very well). Five of the 12 items were chosen from the Health Resource Inventory, a measure of children's competency-related behavior (Gesten, 1976). Additional items were developed by the FAST Track Pi's for the project. FAST Track also includes a 25-item Teacher Social Competence Scale which contains the 12 items from the parent version and an additional 13 statements (see the separate technical report for more detailed information). The Parent Social Competence Scale was administered as part of the summer parent interview. Data is available on all subjects across Cohorts I, II, and III.

II. Scale Derivation

Analyses were completed in the normative sample for Year 1, Cohort I. The 12 items were subjected to principal components analysis with varimax rotation. Eigenvalues of 5.02 and 1.20 were shown on the first two factors. Rotated factor loadings showed a relatively clear pattern. Specifically, six items assessing *Frustration Tolerance* (1,2,3,5,6,8) displayed moderate to high loadings on the first factor (range of .42 - .77) and six items assessing *Cooperative Communication* behaviors (4,7,9,10,11,12) displayed moderate to high loadings on the second factor (range from .35 - .91). It is noted that two items doubled loaded on both factors (item 4: loadings of .35 and .51; item 6: loadings of .39 and .51).

From these findings, two six-item subscales were created from statements loading most strongly on each factor Cooperative Communication and Frustration Tolerance. Internal consistency of the subscales was high (.81 for Cooperative Communication and .80 for Frustration Tolerance). Most of the between subscale correlations were lower than the within subscale correlations. However, there were some exceptions (see Appendix B), leading to the conclusion that the subscales are not highly distinct. Accordingly, the correlation between the 2 subscales was .64.

III. Missing Data

Two observations had missing values, with one missing item on the frustration subscale. As per guidelines for handling missing data, a new value was created for the subject by computing the mean of the other items in the subscale.

IV. Subscale Means. SD's. and Reliabilities

SOCIAL COMPETENCE SCALE COHORTI YEARI

Frustration Tolerance Subscale

All Groups Combined

Analysis VariableP1DFSCR Frustration scale mean scoreNMeanStd DevChronbach Alpha6181.92951740.73498370.778883

All Groups Combined by Site

Analysis	Variable	P1DFSCR Frustration scale	mean score
SITE	Obs N	Mean Std Dev 2.0060976	0.7938264
DURH	164 164	1.8104095 0.7304387	1.9054878
NASH	146 146	0.6384977 1.9904302	0.7623609
PENN	164 164		
WASH	144 144		

High-Risk Sample by Control/Intervention Group

Anal	ysis '	Variable	P1DFSCR	Frustration scale	e mean score	
HR	Obs	Ν	Mean	n Std Dev	Chronbach	Alpha
С	155	155	1.5849462	0.6111541	0.671088	
I	155	155	1.7387097	0.6803306	0.710063	
HR					0.696271	

High-Risk Sample by Site and Control/Intervention Group

Analysis Variable : P1DFSCR Frustration scale mean score

SITE	HR	obs	Ν	Mean	Std Dev
DURH	С	39	39	1.8247863	0.6212004
	I	39	39	1.6452991	0.7103861
NASH	С	40	40	1.4583333	0.5426930
	I	41	41	1.7804878	0.7900765
PENN	С	40	40	1.5458333	0.6003175
	I	40	40	1.7291667	0.6289406
WASH	С	36	36	1.5092593	0.6361397
	I	35	35	1.8047619	0.5723557

Normative Sample

Analysis	Variable	P1DFSCR Frustr	ation	scale	mean	score
Ν	Mean	Std Dev	Chro	nbach	Alph	a
387 2	2.0752155	0.7450011		0.795	693	

Normative Sample by Site

Analysis Variable : P1DFSCR Frustration scale mean score

SITE	NORM	Obs	N	Mean	Std Dev
DURH	N	100	100	2.2133333	0.8085819
NASH	N	100	100	1.8315313	0.7167298
PENN	N	98	98	2.1105442	0.5698334
WASH	N	89	89	2.1549283	0.8162177

Cooperative communication aubscale

All Groups Combined

Analy N 618	ysis V 2.	Variable Mean 5477346	P	IDCCSCR Coope Std Dev 0.803378	erative Commun Chronbach	ication scale mean sc Alpha 0.7471751
All G	Groups	Combin	ed by	/ Site		
Analy SITE DURH NASH PENN WASH	vsis V Ob 16 14 16 14	Variable os N 64 164 66 146 64 164 64 144	: P	IDCCSCR Coope Mean 2.4390244 2.4337900 2.6422764 2.6793981	erative Commun Std Dev 0.8419846 0.7687576 0.6527807 0.6791031	ication scale mean sc
<u>High-</u>	Risk	Sample 1	ov Co	ontrol/Interve	ention Group	
Analy HR C I HR <u>High-</u>	obs Obs 155 155 Risk	ariable N 155 155 Sample	: 2. 2. bv S	PIDCCSCR Coop Mean 2967742 0 3709677 0 ite and Contr	perative Commu Std Dev .6859419 .7413640 ol/Interventio	nication scale mean sc Chronbach Alpha 0.759395 0.775632 0.767958 on Group
Analv	vsis V	Variable	: P	IDCCSCR Coope	erative Commun	ication scale mean sc
SITE DURH	HR C I	Obs 39 39	N 39 39	Mean 2.2094017 2.2136752	n Std Dev 0.7805362 0.8315320	7 2)
NASH	С	40	40	2.2041667	0.7553112	2
PENN	L C I	41 40 40	41 40 40	2.3943089 2.3375000 2.4041667	0.689963 0.624166 0.6525072	9 L 2
WASH	C I	36 35	36 35	2.4490741 2.4809524	0.543094 0.7908499	1 Ə
Norma	ative	Sample				

Analysis	Variable	PIDCCSCR	Cooperative	Commun	lcation	scale	mean	SC
Ν	Mean	Std Dev	Chro	nbach	Alpha			
387 2	.6662360	0.74492	13 C	.81009	99			

Normative Sample by Site

Analys	is Var	iable	P1DFSC	CR Frustratic	on scale mean score	9
SITE	NORM	Obs	N	Mean	Std Dev	
DURH	Ν	100	100	2.2133333	0.8085819	
NASH	Ν	100	100	1.8315313	0.7167298	
PENN	Ν	98	98	2.1105442	0.5698334	
WASH	Ν	89	89	2.1549283	0.8162177	

V. Subscale Correlations

Correlations between the Frustration-Tolerance and Cooperative Communication subscales in the following samples:

Normative Sample r=0.64 High-Risk Sample r=0.60

VI. Recommendations for Use

It is recommended that the mean scores for Cooperative Communication and Frustration Tolerance Subscaies be utilized for future analyses. Results are consistent with a priori hypotheses put forth by the Pi's when the scale was originally developed. Findings do suggest that parents have a tendency to view prosocial behaviors in a unidimensional fashion. However, the subscaies demonstrate adequate reliability and distinctions between Cooperative Communication and Frustration Tolerance may prove useful in detecting intervention effects over time.