

Post-Intervention Ratings of Child and Parent Change (Grade 4+)

Grade 4/Year 4 Update

FAST Track Project Technical Report Cari McCarty & Suzanne Doyle December 2000

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Citation

Instrument

Conduct Problems Prevention Research Group. (1994). Post-Intervention Ratings of Child and Parent Change (Gr. 4+). [On-line]. Available: <http://www.fasttrackproject.org>

Report

McCarty, C.A. & Doyle, S.R. (2000). Post-Intervention Ratings of Child and Parent Change (Gr. 4+). (Technical Report) [On-line]. Available: <http://www.fasttrackproject.org>

Data Sources

Raw: p5t

Scored: pir5

I. Scale Description

The Post-Intervention Ratings of Child and Parent Change (Grade 4+) is a 25-item instrument that measures parent's perceptions of change of their own behavior and of their child's behavior. In the first 9 items, the parent is asked to rate the degree of behavior change of the target child, using a -3 to +3 scale (much worse, somewhat worse, a little worse, no change, a little improved, somewhat improved, much improved). In the following 16 items, the parent is asked to rate the change of his/her own behavior towards the target child, using the same -3 to +3 scale.

II. Report Sample

This technical report is based upon Year 5, Cohort 1 data, including both High-Risk Control and Normative samples. With missing cases excluded, the total N (including overlap) was 420, with 350 normative and 141 high-risk control youth.

Parents of 43 youth (9% of cohort) were missing observations for the entire measure, including parents of 37 Normative youth (10%) and parents of 14 High-Risk Control youth (9%). Most of the missing data are due to attrition from the baseline Fast Track sample at Year 1. The missing cases included 8 parents from the Durham site, 10 parents from Nashville, 14 parents from Pennsylvania, and 11 parents from Seattle. Data were missing for 17 girls and 26 boys. Ethnic breakdown for missing data was: 1 Asian, 13 Black, 1 Hispanic, 26 White, 2 Other. In addition, 23 cases were missing responses for individual ratings.

III. Scaling

Exploratory factor analyses were conducted using the normative sample to inform scaling, separately for the Child and the Parent items (see Addendum). The two parent items on Social Cognition (parent items 3 & 4) were not included in the analysis due to a theoretical interest in preserving them in their own scale. Combining the factor analysis results with this theoretically-based distinction, three scales were constructed. Each scale score was calculated by taking an average of the items comprising the scale. None of the observations were missing 50% or more data. The resulting scales, items that compose them, and internal consistencies (Cronbach's coefficient Alpha) are provided below.

	<u>Normative (n=350)</u>	<u>HRC (n = 141)</u>
Child Behavior Change (Child Items 1-9)	.90	.90
Parent Behavior Change (Parent Items 1, 2, 5 –16)	.95	.94
Parent Social Cognition (Parent Items 3 & 4)	.75	.77

IV. Differences Between Groups

A series of independent t-tests were conducted to assess differences between the Low Risk respondents (Normative sample excluding the overlapping High Risk Subjects, n = 279) and the High Risk Control sample (including 71 overlapping Normative youth, n = 141). Results indicated that the High Risk Control respondents had significantly higher scores on Parent Behavior Change and Parent Social Cognition scales (indicating more positive change) than did the Low Risk respondents.

<u>PIRC Scale</u>	<u>DF</u>	<u>t Value</u>	<u>Pr > t </u>	<u>Low-Risk Mean (n=279)</u>	<u>High-Risk Mean (n=141)</u>
Child Behavior Change	418	-0.09	0.93	1.27	1.28
Parent Behavior Change	418	-2.33	0.02	1.32	1.55
Parent Social Cognition	418	-2.26	0.02	1.11	1.39

V. Recommendations for Use

Factor analyses suggest that this measure yields rather global measures of parent and child change, rather than specific domains of change. This may be because parents tended to indicate similar levels of change across different behaviors.

VI. Item and Scale Means and SD's

Post-Intervention Ratings of Change Items - Normative Sample

Variable	Label	Mean	Std Dev	N	Minimum	Maximum
P5TCH1	Your Child's Self-Esteem	1.457	1.238	350	-3	3
P5TCH2	TC's Ability to Get Along w/oth Children	1.343	1.274	350	-3	3
P5TCH3	TC's Ability to Get Along w/ Adults	1.370	1.304	349	-3	3
P5TCH4	Your Child's Ability to Follow Rules	1.166	1.331	350	-3	3
P5TCH5	Your Child's Self-Reliance	1.500	1.194	350	-3	3
P5TCH6	Your Child's Ability to Read	1.917	1.112	349	-2	3
P5TCH7	TC's Willingness to Follow Instructions	1.206	1.366	349	-3	3
P5TCH8	TC's Ability to Stop or Calm Down	0.877	1.250	349	-3	3
P5TCH9	How Much TC Fights w/ Other Children	0.597	1.258	350	-3	3
P5TPA1	Your Ability to Increase TC's Pos/Behav.	1.537	1.083	350	-2	3
P5TPA2	Your Ability to Decrease TC's Neg/Behav.	1.268	1.115	347	-1	3
P5TPA3	Your Satisfaction w/being Parent to TC	1.523	1.345	350	-1	3
P5TPA4	Difficulty in Parenting Your Child	0.794	1.347	349	-3	3
P5TPA5	Your Ability to Stop/Calm Down wh. Upset	1.189	1.241	350	-2	3
P5TPA6	Amount of Yelling at Your Child	0.963	1.247	350	-2	3
P5TPA7	Amount of Praise You Give Your Child	1.547	1.218	349	-1	3
P5TPA8	Your Ability to Clearly State Yr. Wishes	1.471	1.220	350	-1	3
P5TPA9	Your Ability to Follow Through w/Inst'ns	1.329	1.257	350	-2	3
P5TPA10	Your Ability to Punish Child Effectively	1.074	1.232	349	-3	3
P5TPA11	How Well You & TC Get Along w/Each Other	1.486	1.332	350	-1	3
P5TPA12	Abil to Communicate Generally w/Child	1.577	1.191	350	-1	3
P5TPA13	Abil to Communicate abt Child's Friends	1.383	1.169	350	-1	3
P5TPA14	Abil to Communicate abt School w/Child	1.461	1.272	349	-3	3
P5TPA15	Abil to Communicate abt Sensitive Issues	1.536	1.294	349	-1	3
P5TPA16	Abil to Effectively Supervise Child	1.351	1.354	350	-1	3

Post-Intervention Ratings of Change Items - High-Risk Control Sample

Variable	Label	Mean	Std Dev	N	Minimum	Maximum
P5TCH1	Your Child's Self-Esteem	1.163	1.257	141	-3	3
P5TCH2	TC's Ability to Get Along w/oth Children	1.390	1.235	141	-3	3
P5TCH3	TC's Ability to Get Along w/ Adults	1.546	1.268	141	-3	3
P5TCH4	Your Child's Ability to Follow Rules	1.221	1.336	140	-3	3
P5TCH5	Your Child's Self-Reliance	1.348	1.213	141	-3	3
P5TCH6	Your Child's Ability to Read	1.979	0.963	140	0	3
P5TCH7	TC's Willingness to Follow Instructions	1.291	1.262	141	-3	3
P5TCH8	TC's Ability to Stop or Calm Down	0.851	1.281	141	-3	3
P5TCH9	How Much TC Fights w/ Other Children	0.709	1.350	141	-3	3
P5TPA1	Your Ability to Increase TC's Pos/Behav.	1.688	0.957	141	-2	3
P5TPA2	Your Ability to Decrease TC's Neg/Behav.	1.355	1.070	141	-2	3
P5TPA3	Your Satisfaction w/being Parent to TC	1.624	1.312	141	-1	3
P5TPA4	Difficulty in Parenting Your Child	1.136	1.364	140	-2	3
P5TPA5	Your Ability to Stop/Calm Down wh. Upset	1.426	1.261	141	-2	3
P5TPA6	Amount of Yelling at Your Child	1.227	1.261	141	-2	3
P5TPA7	Amount of Praise You Give Your Child	1.759	1.183	141	-1	3
P5TPA8	Your Ability to Clearly State Yr. Wishes	1.617	1.144	141	-1	3
P5TPA9	Your Ability to Follow Through w/Inst'ns	1.511	1.217	141	-2	3
P5TPA10	Your Ability to Punish Child Effectively	1.270	1.206	141	-3	3
P5TPA11	How Well You & TC Get Along w/Each Other	1.674	1.268	141	-1	3
P5TPA12	Abil to Communicate Generally w/Child	1.730	1.114	141	-1	3
P5TPA13	Abil to Communicate abt Child's Friends	1.567	1.091	141	-1	3
P5TPA14	Abil to Communicate abt School w/Child	1.610	1.264	141	-3	3
P5TPA15	Abil to Communicate abt Sensitive Issues	1.702	1.291	141	-1	3
P5TPA16	Abil to Effectively Supervise Child	1.539	1.273	141	-1	3

Scale Means

Scale	Normative Sample (n=350)		High Risk Control (n=141)	
	Mean	SD	Mean	SD
Child Behavior Change	1.27	0.93	1.28	0.94
Parent Behavior Change	1.37	0.94	1.55	0.88
Parent Social Cognition		1.16	1.21	1.39
				1.21

VII. Scale Correlations

Pearson Correlation Coefficients, Normative Sample above Diagonal (n=350), High Risk Controls below diagonal (n=141).

	CBC	PBC	PSC
Child Behavior Change	1.00	0.64	0.61
Parent Behavior Change	0.49	1.00	0.80
Parent Social Cognition	0.57	0.77	1.00

Addendum to Post-Intervention Ratings of Child and Parent Change (Grade 4+) Technical Report.
Grade 4/Year 5
FAST Track Project Technical Report
Cari McCarty & Suzanne Doyle
12/8/00

This addendum is based upon Year 5, Cohort 1, Normative sample data without any missing items (n=343). Scales for the Post Intervention Ratings of Change (Grade 4+) measure were created on the basis of exploratory factor analyses using an Alpha extraction with a varimax rotation. Separate analyses were conducted on the Parent and Child Items, and Parent items 3 and 4 were excluded from the analysis and preserved in their own separate scale.

The number of factors retained was derived by considering the magnitude of the eigenvalues, scree plots, the proportion of variance extracted, and interpretability of the resulting factors.

1. Parent Behavior Items.

The results for the Parent Items (excluding items 3 & 4) indicated one factor, accounting for 56% of the total variance. The eigenvalue for this factor was 13.00. Communality estimates ranged from .39 to .69, with an average of .56. Coefficient alpha prior to the rotation was approaching 1.0.

Preliminary Eigenvalues: Total = 14 Average = 1

	Eigenvalue	Difference	Proportion	Cumulative
1	13.002	12.192	0.9287	0.9287
2	0.810	0.273	0.0578	0.9866
3	0.536	0.043	0.0383	1.0249
4	0.493	0.236	0.0352	1.0601
5	0.258	0.151	0.0184	1.0785
6	0.107	0.101	0.0076	1.0861
7	0.006	0.021	0.0004	1.0866
8	-0.015	0.071	-0.0011	1.0855
9	-0.086	0.055	-0.0061	1.0794
10	-0.140	0.015	-0.0100	1.0693
11	-0.156	0.081	-0.0111	1.0582
12	-0.237	0.029	-0.0169	1.0413
13	-0.266	0.046	-0.0190	1.0223
14	-0.312		-0.0223	1.0000

Factor Pattern

		Factor1
P5TPA1	Your Ability to Increase TC's Pos/Behav.	0.665
P5TPA2	Your Ability to Decrease TC's Neg/Behav.	0.700
P5TPA5	Your Ability to Stop/Calm Down wh. Upset	0.762
P5TPA6	Amount of Yelling at Your Child	0.625
P5TPA7	Amount of Praise You Give Your Child	0.778
P5TPA8	Your Ability to Clearly State Yr. Wishes	0.812
P5TPA9	Your Ability to Follow Through w/Inst's	0.774
P5TPA10	Your Ability to Punish Child Effectively	0.690
P5TPA11	How Well You & TC Get Along w/Each Other	0.828
P5TPA12	Abil to Communicate Generally w/Child	0.807
P5TPA13	Abil to Communicate abt Child's Friends	0.753
P5TPA14	Abil to Communicate abt School w/Child	0.775
P5TPA15	Abil to Communicate abt Sensitive Issues	0.684
P5TPA16	Abil to Effectively Supervise Child	0.747

Variance Explained by Each Factor		
Factor	Weighted	Unweighted
Factor1	13.9995917	7.77160193

2. Child Behavior Items.

The results for the Child Items also indicated one factor, accounting for 50% of the total variance. The eigenvalue for this factor was 8.91. Community estimates ranged from .23 to .67, with an average of .50. Coefficient alpha prior to the rotation was approaching 1.00.

	Eigenvalue	Difference	Proportion	Cumulative
1	8.909	8.286	0.9899	0.9899
2	0.623	0.388	0.0692	1.0591
3	0.234	0.065	0.0260	1.0851
4	0.170	0.115	0.0189	1.1040
5	0.055	0.026	0.0061	1.1101
6	0.029	0.208	0.0032	1.1133
7	-.179	0.203	-0.0199	1.0934
8	-.382	0.076	-0.0425	1.0509
9	-.458		-0.0509	1.0000

Factor Pattern

		Factor1
P5TCH1	Your Child's Self-Esteem	0.64652
P5TCH2	TC's Ability to Get Along w/oth Children	0.78008
P5TCH3	TC's Ability to Get Along w/ Adults	0.78678
P5TCH4	Your Child's Ability to Follow Rules	0.81909
P5TCH5	Your Child's Self-Reliance	0.73067
P5TCH6	Your Child's Ability to Read	0.56479
P5TCH7	TC's Willingness to Follow Instructions	0.78366
P5TCH8	TC's Ability to Stop or Calm Down	0.69550
P5TCH9	How Much TC Fights w/ Other Children	0.48102

Variance Explained by Each Factor

Factor	Weighted	Unweighted
Factor1	8.99996473	4.49854223