Observer Impressions (Grade 8, Year 9 Update)

Fast Track Project Technical Report
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Citation
Instrument
     Antony, J., Nelson, D., McMahon, R.J. & Conduct Problems Prevention Research Group. (1996). Observer Impressions [On-line]. Available: http://www.fasttrackproject.org/

Report
     Doyle, S.R. & McCarty, C.A. (2001). Observer Impressions (Grade 8, Year 9 Update) (Technical Report) [On-line]. Available: http://www.fasttrackproject.org/

I.   Scale Description

Observer Impressions is a live rating system used to code the three observational tasks that children engage in with their Primary Caregiver: Daily Debriefing Task (4 minutes), Problem Solving Activity (7 minutes), and Planning a Positive Activity (5 minutes). The sequence of tasks is always the same, and occurs in the child's home, at grades 5 and 8. Observer Impressions is a 58-item measure that consists of three types of ratings completed by the child interviewer. The frequencies of various behaviors by parent and child are rated on 3-point scales. For the most part, the same behaviors are rated for each of the tasks, except for three task-specific codes.

Categories of ratings are based in part on the Oregon Social Learning Center's Lab Task Impressions Rating Scale (5th Grade), which can be found online via OSLC's website (www.oslc.org).

II.   Report Sample

This technical report is based upon Year 9, Cohort 1 data, including both high-risk control and normative samples. With missing cases excluded, the total N (including overlap) was 346, with 285 normative and 118 high-risk control youth.

117 parent-child dyads (25% of cohort) were missing observations for the entire measure, including 81 low-risk normative and 36 high-risk youth. Most of the missing data are assumed to have resulted from natural attrition from baseline at Year 1. The missing cases included 26 observations from the Durham site, 35 observations from Nashville, 25 observations from Pennsylvania, and 31 observations from Seattle. Data were missing for 49 girls and 68 boys. Ethnic breakdown for missing data was: 1 Asian, 51 Black, 5 Hispanic, 55 White, 5 Other.

III.   Scaling

Scales for the PCIT Observer Impressions Scale were obtained from previous exploratory factor analyses on responses from the Normative sample [see PCIT Observer Impressions (Grade 5+) Technical Report *Addendum*]. Separate analyses were conducted on the Parent and Child items. Items 37, 56, 57, and 58 were excluded from the scaling. The results indicated 5 factors or scales for the Parent items and 6 scales for the Child items. Each scale score was calculated by taking an average of items comprising the scale if 50% or more of the item responses were available. The resulting scales, associated reliability estimates and descriptive indices for the Normative (Norm) and High-Risk Control (HRC) samples are provided below.

Cronbach's Coefficient Alpha

	Norm (n=285)	HRC (n=118)
Parent Scales		
PC - Positive Communication/Involvement (Items 1,3,4,15,19,21,22,33,38,40,41,52)	.63	.72
NB - Negative Behavior (Items 2,16,20,34,39,53)	.86	.90
ST - Staying on Task/Not Interrupting (Items 11,12r,29,30r,48,49r)*	.57	.66
PP - Positive Physical Contact (Items 6,24,43)	.77	.42
NP - Negative Physical Contact (Items 5,23,42)	-	-

* r – item scale reversed

	Norm	HRC
Child Scales		
NB - Negative Behavior (Items 7,18,25,36,44,55)	.78	.85
ST - Staying on Task/Positive Involvement (Items 13,17,31,35,50,54)	.68	.73
PP - Positive Physical Contact (Items 10,28,47)	.50	.64
NP - Negative Physical Contact (Items 9,27,46)	-	-
IN - Interrupting (Items 14,32,51)	.58	.73
AE - Appropriate Emotional Expression (Items 8,26,45)	.48	.34

NOTE: There was not enough item response variability to calculate a reliability estimate for Negative Physical Contact.

IV. Differences Between Groups

A series of independent t-tests were conducted to assess differences between the Normative and High-Risk Control samples. For these analyses, the Normative sample consisted of only Low-Risk respondents, excluding the 58 High Risk subjects previously included in the Normative samples. Results indicated statistically significant higher mean scores for the Low-Risk Normative sample on the Parent and Child scales of Staying on Task/Not Interrupting. There was also a statistically significant lower mean score for the Low-Risk Normative sample for the Parent scale of Negative Behavior. However, given the extremely low variability of this scale, one is cautioned in ascribing much importance to this outcome.

Low-Risk Normatives (n=227) vs High Risk Controls (n=118)

Parent Scales	T-value	Pr > |t|
PC - Positive Communication/Involvement	0.89	0.373*
NB - Negative Behavior	-2.00	0.047*
ST - Staying on Task/Not Interrupting	2.18	0.031*
PP - Positive Physical Contact	1.77	0.078*
NP - Negative Physical Contact	0.64	0.524*

* T-test with Satterthwaite correction for degrees of freedom (df) given statistical inequality of variances.

Child Scales	T-value	Pr > |t|
NB - Negative Behavior	-1.81	0.071*

ST - Staying on Task/Positive Involvement	3.55	0.001*
PP - Positive Physical Contact	0.46	0.646*
NP - Negative Physical Contact	-0.19	0.849*
IN - Interrupting	-0.29	0.773
AE - Appropriate Emotional Expression	1.12	0.265

* T-test with Satterthwaite correction for degrees of freedom (df) given statistical inequality of variances.

V. Recommendations for Use

All scales used in this Technical Report aggregate similar items across the three tasks in which parent-child dyads participated. Analysts interested in task-related differences in behavior will need to consider an alternate scaling algorithm.

A note of caution that the Alpha coefficients for the Parent Negative Physical Contact cannot be calculated and for the Child Appropriate Emotional Expression scale it is quite low. For the Parent Negative Physical scale, this is due to extremely low variability of the items that comprise that scale. Despite this circumstance, a decision to retain this scale was made on the basis that although infrequent, the presence of this behavior during the interaction may be very meaningful.

VI. Item and Scale Means and SD's

	Norm (n=285)		HRC (n=118)	
Parent Scales	Mean	SD	Mean	SD
PC - Positive Communication/Involvement	0.887	0.266	0.875	0.308
NB - Negative Behavior	0.118	0.293	0.182	0.407
ST - Staying on Task/Not Interrupting	1.920	0.167	1.887	0.218
PP - Positive Physical Contact	0.080	0.294	0.042	0.177
NP - Negative Physical Contact	0.012	0.078	0.008	0.053
Child Scales				
NB - Negative Behavior	0.199	0.338	0.257	0.424
ST - Staying on Task/Positive Involvement	1.784	0.291	1.697	0.356
PP - Positive Physical Contact	0.026	0.143	0.020	0.118
NP - Negative Physical Contact	0.006	0.059	0.006	0.061
IN - Interrupting	0.086	0.235	0.088	0.248
AE - Appropriate Emotional Expression	0.245	0.372	0.206	0.326

VII. Item and Scale Correlations

Normative Sample (n=285) above diagonal, High Risk Control (n=118) below diagonal

Parent Scales

	PC	NB	ST	PP	NP
PC	1.00	-.15	.21	.11	.02
NB	-.24	1.00	-.26	-.06	.13
ST	.31	.32	1.00	.03	-.03
PP	.13	-.01	-.00	1.00	-.10
NP	-.02	.37	-.04	-.04	1.00

Child Scales

	NB	ST	PP	NP	IN	AE
NB	1.00	-.24	-.07	-.03	.31	.13
ST	-.35	1.00	.07	-.03	-.19	.06
PP	.04	.02	1.00	.17	.00	.08
NP	-.02	-.05	-.02	1.00	-.04	-.03
IN	.52	-.43	.06	-.03	1.00	.02
AE	.15	.02	.12	-.06	.10	1.00