Parent Daily Report

Kindergarten / Year 1
Fast Track Project Technical Report
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I.   Scale Description

The PDR is a 30 item checklist of behavior problems developed at the Oregon Social Learning Center. Parents are asked to indicate the presence of each behavior problem on a 0-1 scale (did or did not occur) during the past 24 hours. The first administration of the PDR took place during the summer interview with parents. Then, parents received several follow-up telephone calls from interview staff during the two weeks following the summer interview. During the first year of the project, four follow-up telephone calls were made to parents. After initial analyses suggested that it required only three reports to get a reliable estimate of child behavior problems, the number of follow-up telephone calls was reduced to two in addition to one administration at the time of the interview). The PDR also included some items about parenting behavior (e.g., how parents reacted to various behaviors). This report includes only the items on the PDR that refer to the child's behavior problems.

For all of the following analyses, parent's reports of their child's behavior were averaged across the first three administrations of the PDR. (The fourth and fifth administration for Cohort 1 was not included in order to achieve comparability between the three cohorts.)

II.   Scale Derivation

We have performed a principal components analysis (with varimax rotation) of the "Parent Daily Report" based on Year One, Cohort One Normative Sample data. Due to the multiple PDR's administered to each parent and the dichotomous nature of the data, ratings on the first three PDR's were aggregated and averaged, resulting in a single set of 4 point scales. By default, we extracted all components with eigenvalues greater than 1. The five factors that emerged represented four of the Fast Track theoretical constructs of child behavior problems, and accounted for 60% of the variance: 1) the first factor, physical/verbal aggression represented the construct of Overt Aggression, 2) the second and third factors, verbal negativism and non-compliance represented the construct of Oppositional Behavior, 3) the fourth factor, activity/hyperactivity represented the construct of Hyperactivity, and 4) the fifth factor, sad/negative affect represented the construct of Depression. Five items on the PDR had very low base rates and did not load on any of these factors. These five items (25-lies, 27-police contact, 28-firesetting, 29-steals, and 30-runs away) represented the construct of Covert Antisocial behaviors.

								Mean
Scale Name Description	Items	Fact. One Alpha	Fact. Two Correlation	Fact. Three	Fact. Four	Fact. Five	Scale Item	Scale Inter-Item

Scale Name Description	Items	Fact. One	Fact. Two	Fact. Three	Fact. Four	Fact. Five	Item Description	Mean
Physical/ .78	P1KP3		.4				**Fight w/sib** .84	.46
Verbal .73	P1KP6		3 4				**Hit anybody** **Yelled**	
Aggression .69	P1KP13						**Act aggressive/tough** **Argue**	
Verbal		.78					**Pout**	
P1KP22		.78					.76	.51
Negativism	PlKP11	.60					**Whined**	
Non-			.71				**Refusal/Upsets parents**	.72
P1KP15		.65 .56					.36	
compliance	P1KP24	.47					**Throws fit/Tantrum**	
P1KP16		.54 .53					**Talk back to adult**	
P1KP21							**Irritable/Cross**	
Activity/		•		.86			**Run around home**	.76
P1KP19 **Hyper-**				.82			.51	
P1KP20 **activity**				.70			**Hyper/Overactive**	
Sad/				.6 7			**Seemed afraid**	
P1KP8 **Negative**				*A* .53			.28 >3	**Seemed**
P1KP7 **Affect**				**sad** 0			**Cried**	

NOTE: Values less than 0.4 have been printed as '.'

Factor 1 corresponds to a "Physical/Verbal Aggression", factor 2 corresponds to "Verbal Negativism", factor 3 corresponds to "Noncompliance", factor 4 corresponds to "Activity/Hyperactivity", and factor 5 corresponds to "Expression of Sad/Negative Affect". Factor based scales were calculated by summing the values of items on each factor and rescaling the summary score to a 0-10 scale. While three items had crossloadings above .40, all were nevertheless included on the scale with which they had the highest loading. The Cronbach's alphas for all scales were adequate, with the exception of "Sad/Negative Affect". Nevertheless, the average inter-item correlation for the three variables forming this scale was an acceptable .28. Following is an intercorrelation matrix of the five subscales based on Year One, Cohort One, Normative data:

	Physical/ Verbal Aggression	Immaturity	Noncompliance	Activity/ Hyperactivity	Expression of Sad/ Negative Affect
Physical/	1.00000	0.51995	0.59956	0.30844	0.44861
Verbal	0.0	0.0001	0.0001	0.0001	0.0001
Aggression	366	366	366	366	366
Immaturity	0.51995	1.00000	0.59253	0.20584	0.52806
	0.0001	0.0	0.0001	0.0001	0.0001
	366	386	386	386	386
Noncompliance	0.59956	0.59253	1.00000	0.27999	0.49299
	0.0001	0.0001	0.0	0.0001	0.0001
	366	386	386	386	386
Activity/	0.30844	0.20584	0.27999	1.00000	0.28099
Hyperactivity	0.0001	0.0001	0.0001	0.0	0.0001
	366	386	386	386	386
Expression of	0.44861	0.52806	0.49299	0.28099	1.00000
Sad/Negative	0.0001	0.0001	C.0001	0.0001	0.0
Affect	366	386	386	386	386

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Key:  Pearson Correlation Coefficients / Prob
      > |R| under Ho: Rho=0 / Number of
      Observations
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"Activity/ Hyperactivity" was only modestly correlated with the other scales (r=.21 to .31); all other intercorrelations were somewhat higher (r=.45 to .60).   None of the scales approximated normality. This general pattern was approximated with the high risk sample, however if the default extraction criteria were used (all eigenvalues greater than one), "Physical/Verbal Aggression" and "Verbal Negativism" merged into one factor.

III.   Missing Data

Included in an appendix is a detailed account of missing data on the PDR. One item, 3 "Fights with Sib" which is scored on the Overt Aggression scale, has missing data for 5.4% of the Normative Sample and 6.5% of the High Risk Sample, apparently because t&0se children had no siblings. For these children, the mean of the other items on the Overt Aggression scale was substituted for this missing item.

Other items, particularly items reflecting Covert Antisocial behavior, have very low base rates. For example, items which have a percentage of means equal to 96% nonoccurrence or higher are 5 (destructive in normative sample only), 27 (police contact), 28 (firesetting), 29 (stealing), and 30 (runs away). When analyses are done that involve breaking down the population by race, site, or sex, these small base rates result in missing values in the correlation matrix. For example, no white children and no girls in the Normative Sample engaged in firesetting (28) or running away (30). Similarly, there were no instances of the following behaviors in the Normative Sample broken down by site: 5 (destructive) in Durham, 27 (police contact) in Nashville, 28 (fire setting) anywhere but Nashville, 30 (runs away) in Penn. In the High Risk sample, there were no instances of firesetting by girls, and no instances of running away or police contact in Penn, or of firesetting in Durham and Penn. The fact that these covert antisocial behaviors have low base rates is not surprising and they may indicate particularly severe conduct problems. However, their low base rate and the possibility of no occurrences in subgroups that may be analyzed suggest that these items and this scale must be treated carefully. It should probably not be simply summed in with the other conduct problem scales at this age, as it may bias or skew the distribution of conduct problems.

IV.   Subscale Means. SDs and Reliability Coefficients

The enclosed Tables prepared by Craig Mason at the Seattle site provide information about the factor subscales of the PDR. First the information is provided for the Normative Sample and then for the High Risk Sample, Cohort 1. Note that in these analyses, the verbal negativism and non-compliance are shown as separate scales as they emerged as separate factors in the factor analyses.

Following the Tables provided by the Seattle site are Tables showing information about summed scales scored according to our theoretical model. These Tables show the characteristics of the Oppositional Scale, when it is scored as the combination of the verbal negativism and non-compliance factors.   In addition, the characteristics of some higher-level summed scales are given: a AggOpp scale (the sum of the Overt Aggression and Oppositional scales) and a AggOppHyp scale (the sum of the Overt Aggression, Oppositional, and Hyperactive scales). For some studies, the desired level of analyses will be at this summed scale level. Covert Antisocial behaviors are scored separately, because of their very low base rates at this age.

VI.   High vs. Low Risk Group Comparisons

Analyses comparing the high and low risk groups on five dimensions of the PDR were conducted by the staff at the Durham site. The analyses are included. Basically, there was no evidence of any significant difference between the intervention and control high-risk group at any site. All subscales except for the Depression scale revealed significant differences between the High-Risk and Normative comparison samples, although there was some variability across site.

VI.   Recommendations of Use

For studies in which a highly-differentiated assessment of daily problem behaviors is desired, the narrow band scales of Overt Aggression, Oppositional Behavior, Hyperactivity, and Depression should be used. Covert Antisocial Behavior can also be scored from this measure, but will probably be included only in analyses in which these very rare but severe conduct problems are of interest.

        For studies in which a moderate-level of differentiated assessment of conduct problems is desired, the OppAgg summed scale can be used to represent Disruptive Behaviors. For studies in which a broader band measure of conduct problems is desired, the OppAggHyp summed scale score from this measure can be used to represent a total score of conduct problems. It is not suggested that Covert Antisocial Behaviors be included in this total score at this age, because of their very low base rates.