Parent-Teacher Involvement: Parent Version

Year 2 / Grade 1
Fast Track Project Technical Report
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I. Scale Description

The Parent-Teacher Involvement Questionnaire: Parent version is a 26-item measure developed for this project to assess facets of parent and teacher involvement. Fast Track also has a 21-item teacher version, of which most items are included on the parent version (see separate report for more detailed information). The measure assesses the amount and type of contact that occurs between parents and teachers, the parent's interest and comfort in talking with teachers, the parent's satisfaction with their children's school and the parent's degree of academic stimulation with their child (e.g. reading to them, taking them to the library). The answers are coded on a 5-point scale including specific frequency ratings ("never", "once or twice a year", "almost every month", "almost every week", "more than once per week"), general impressions of frequency ("not at all", "a little", "some", "a lot", "a great deal") and level of agreement with statements about school ("strongly disagree", "disagree", "not sure", "agree", "strongly agree").

II. Scale Derivation

An exploratory principal components factor analysis with varimax rotation was conducted on the normative sample of Cohort 1, year 2 data. Six eigenvalues greater than 1.0 were found. Examination of the scree plot showed two large factors followed by two groups of two smaller factors. Maximum likelihood factor analyses with varimax and promax rotations were then conducted. Examination of 2,3 and 4-factor structures showed the 4-factor solution to yield the best findings in terms of minimizing the double loadings and providing a conceptual fit to the resulting subscales. Specifically:

<u>Items # 11-17</u>: assess the quality of the relationship between the parent and the child's teacher; <u>Items # 5,6,7,9,10 and 18-22</u>: assess the parent's involvement and volunteering in their child's school; <u>Items # 23-26</u>: assess the parent's endorsement of their child's school; <u>Items 1-4</u>: assess the frequency of parent-teacher contact.

Item # 8 (frequency of being invited to parent-teacher conferences) had low loadings on all the factors. Furthermore, it was not thought to be a relevant question, since all parents are invited to parent-teacher conferences. Therefore, it was deleted from future analyses.

Confirmatory factor analyses with 2, 3, and 4 factors were conducted. Chi-square tests showed consistence with the choice of the 4-factor solution.

The reliability coefficients were then computed for the 4-factor solution, as follows:

Teacher Relationship Quality Factor	0.91
Parent Involvement	0.82
Parent's Endorsement of school	0.92
Parent-Teacher Contact	0.75

III. Missing Data

Twenty-five subjects had missing data for this measure, One from the Washington site, 5 from the Pennsylvania site, 5 from the Nashville site and 14 from the Durham site. Nine of the 14 from the Durham site were missing the entire scale. As per guidelines for handling missing data, a new value was created for the subject by computing the mean value of the other items in this subscale, if less than 50% of the subscale data was missing for this subject.

IV. Subscale Means, SD's, and Reliabilities PTI-P COHORT 1 YEAR 2

Teacher Relationship Quality Subscale

All Groups Combined

Analysis Variable: P2FRQSCR Teacher Relationship Quality mean score

N Mean Std Dev Cronbach Alpha 583 3.0633948 0.8706442 0.912978

All Groups Combined by Site

Anal	ysis	Variable	:	P2FRQSCR	Teacher	Re.	lations	hip	Qua.	Lity	mean	score
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SITE	Obs	N	Mean	Std Dev
DURH	164	155	3.2682028	0.7909399
NASH	139	139	2.8691822	0.9673762
PENN	161	161	2.9955634	0.8357719
WASH	128	128	3.1116071	0.8471365

Normative Sample

Analysis Variable : P2FRQSCR Teacher Relationship Quality mean score

N Mean Std Dev Cronbach Alpha 362 3.0851280 0.8590704 0.910456 0.910456

Analysis	Variable	:	P2FRQSCR	Teacher Relationship Quality mean	score

SITE	NORM	Obs	N	Mean	Std Dev
DURH	N	100	96	3.3184524	0.7617266
NASH	N	94	94	2.9326965	0.8996972
PENN	N	95	95	3.0466165	0.8132632
WASH	N	77	77	3.0278293	0.9321904

Parent Involvement Subscale

All Groups combined:

All Groups Combined by Site

Analysi	s Var	iable	:	P2FPISCR	Parent	t	Involvement	mean	score
SITE	Obs	N		Mea	n		Std Dev		
DURH	164	155		0.950451	6 (ე.	3901870		
NASH	139	139		0.757697	8 (Э.	3070177		
PENN	161	161		0.618447	2 (ე.	2501613		
WASH	128	128		0.747656	3 (ე.	2673771		

Normative Sample

Analysis Variable : P2FPISCR Parent Involvement mean score
N Mean Std Dev Cronbach Alpha
362 0.7539227 0.3238259 0.817282

Analys	sis Var	iable :	P2FPISC	CR Parent Inv	olvement mean	score
SITE	NORM	N Obs	N	Mean	Std Dev	
DURH	N	100	96	0.9270833	0.3745816	
NASH	N	94	94	0.7458511	0.3067429	
PENN	N	95	95	0.6190526	0.2376215	
WASH	N	77	77	0.7142857	0.2746837	

Parent Endorsement of School Subscale

All Groups Combined

Analysis Variable : P2FPESCR Parent Endorsement means score

N Mean Std Dev Cronbach Alpha 583 3.1831046 0.7999045 0.918211

All Groups Combined by Site

Analys	sis Var	iable	:	P2FPESCR	Parent Endorsement	means	score
SITE	Obs	N		Mean	Std Dev		
DURH	164	155		3.3064516	0.7010824		
NASH	139	139		2.8992806	0.9516002		
PENN	161	161		3.2049689	0.7420875		
WASH	128	128		3.3144531	0.7305524		

Normative Sample

Analysis Variable : P2FPESCR Parent Endorsement means score
N Mean Std Dev Cronbach Alpha
362 3.2002762 0.8132047 0.920756

Analy	sis Var	iable :	P2FF	PESCR	Parent	Endorsement means	score
SITE	NORM	Obs	N		Mean	Std Dev	
DURH	N	100	96	3.	2994792	0.7827245	
NASH	N	94	94	2.	9494681	0.9242694	
PENN	N	95	95	3.	2736842	0.7275667	
WASH	N	77	77	3.	2922078	0.7548120	

Parent-Teacher Contact Subscale

All Groups Combined

Analysis Variable: P2FTCSCR Parent-Teacher Contact mean score

N Mean Std Dev Cronbach Alpha 583 1.2251286 0.8240394 0.753895

All Groups Combined by Site

Analysis Variable : P2FTCSCR Parent-Teacher Contact mean score $\$

SITE	Obs	N	Mean	Std Dev
DURH	164	155	1.3790323	0.9781936
NASH	139	139	1.3794964	0.7879025
PENN	161	161	0.9627329	0.6207425
WASH	128	128	1.2011719	0.8054066

Normative Sample

Analysis Variable : P2FTCSCR Parent-Teacher Contact mean score

N Mean Std Dev Cronbach Alpha 362 1.1505525 0.8029786 0.754810

Analy	sis Vari	able :	P2FTCS	CR Parent-Teacl	ner Contact mean sco	ore
SITE	NORM	Obs	N	Mean	Std Dev	
DURH	N	100	96	1.2239583	0.9411843	
NASH	N	94	94	1.2659574	0.7609492	
PENN	N	95	95	0.9368421	0.6079793	
WASH	N	77	77	1.1818182	0.8415958	

V. Subscale Correlations

Normative Sample:

	Teacher Relationship Quality	Parent Involvement	Parent Endorsement of School	Parent-Teacher Contact
Teacher Relationship	1	0.28	0.57	0.11
Quality Parent Involvement	0.28000	1.00000	0.21000	0.35000
Parent Endorsement of School Parent-Teacher Contact	0.57 0.11000	0.21 0.35000	1 -0.01000	-0.01 1.00000

VI. Recommendations for Use

It is recommended that the mean subscales scores for Teacher Relationship Quality, Parent Involvement, Parent Endorsement of School and Parent-Teacher Contact be utilized for analyses. Raters tend to view aspects of Teacher Relationship Quality and Endorsement of School in a unidimensional fashion, as evidenced by the moderately high inter-subscale correlation.