

## **Parent-Teacher Involvement: Parent Version**

Year 2 / Grade 1

Fast Track Project Technical Report

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### **Table of Contents**

- I. Scale Description
- II. Scale Derivation
- III. Missing Data
- IV. Subscales Means, SD's and Reliability Coefficients
- V. Subscales Correlations
- VI. Recommendations for use

### **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:

Items # 11-17: assess the quality of the relationship between the parent and the child's teacher;

Items # 5,6,7,9,10 and 18-22: assess the parent's involvement and volunteering in their child's school;

Items # 23-26: assess the parent's endorsement of their child's school;

Items 1-4: 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:

<i>Teacher Relationship Quality Factor</i>	0.91
<i>Parent Involvement</i>	0.82
<i>Parent's Endorsement of school</i>	0.92
<i>Parent-Teacher Contact</i>	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**

Analysis Variable : P2FRQSCR **Teacher Relationship Quality mean score**  
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

**Normative Sample by Site**

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:

Analysis Variable : P2FPISCR **Parent Involvement mean score**  
N Mean Std Dev Cronbach Alpha  
583 0.7682847 0.3325789 0.804813

#### All Groups Combined by Site

Analysis Variable : P2FPISCR **Parent Involvement mean score**  
SITE Obs N Mean Std Dev  
DURH 164 155 0.9504516 0.3901870  
NASH 139 139 0.7576978 0.3070177  
PENN 161 161 0.6184472 0.2501613  
WASH 128 128 0.7476563 0.2673771

#### Normative Sample

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

#### Normative Sample by Site

Analysis Variable : P2FPISCR **Parent Involvement 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

Analysis Variable : 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

### Normative Sample by Site

Analysis Variable : P2FPESCR **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

**Normative Sample by Site**

Analysis Variable : P2FTCSCR **Parent-Teacher Contact mean score**

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:

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