<u>Teacher Rating of Student Adjustment</u> Grade 10 /Year 11

Fast Track Project Technical Report *Clara G. Muschkin* July 10, 2003

Table of Contents

- I. Scale Description
- II. Report Sample
- III. Scaling
- IV. Differences Between Groups
- V. Recommendations for Use
- VI. Scale Means and SD's
- VII. Scale Correlations

Citations

Instrument

Conduct Problems Prevention Research Group (CPPRG). (1995). *Teacher Rating of Student Adjustment* [On-line]. Available: <u>http://www.fasttrackproject.org/</u>

Report

Muschkin, C. G. (2003). *Teacher Rating of Student Adjustment* (Fast Track Project Technical Report) [On-line]. Available: <u>http://www.fasttrackproject.org/</u>

Research Paper

Muschkin, C. G., and Malone, P. S. (2003). Multiple Teacher Ratings: An Evaluation of Measurement Strategies. Manuscript in preparation: Duke University.

Data Sources

Unscored: T11K Scored: TSA11

I. Scale Description

The Teacher Rating of Student Adjustment is a 7-item instrument developed by the Fast Track Project to assess dimensions of success in adjusting to middle and high school. The first item queries how well the teacher knows the child; the remaining items target the teacher's perceptions of a student's academic performance, academic motivation, social skills, adult relationships, conduct, and personal maturity. Responses are coded on a five-point scale ranging from 1 to 5, as follows: Poor, unsatisfactory skills (1); Below average skills (2); Average skills (3); Above average skills (4); and Excellent skills (5).

II. Report Sample

This report contains data collected on Cohort 1, Year 11. The data include a high-risk control sample (n=155) and a normative sample (n = 387) for a total N = 463, including overlap. Of the 463 subjects, 170 (37 percent) are missing all responses for this measure, including 138 from the normative group (16 from Durham, 27 from Washington, 41 from Pennsylvania, and 54 from Nashville), and 63 from the control group (6 from Durham, 21 from Nashville, 21 from Pennsylvania, and 15 from Washington), with overlap between the normative and control groups.

III. Scaling

Prior years of data from this measure are distinctive in that multiple teacher ratings of the target behaviors were obtained for each student in grades 6, 7, and 8. The goal was to administer the instrument to teachers in each of the student's core classes, as most middle school students move among several classrooms for core academic subjects. The decision to use multiple informants raised methodological issues that impact scaling and analysis of these data. These issues are addressed in Muschkin and Malone (2003) and are discussed in the corresponding technical reports for years 7, 8, and 9. The data collected in year 10 differ from previous years, in that the instrument was administered to multiple teachers in only two of the four Fast Track sites (Nashville and Pennsylvania). The other two sites collected data from only one teacher. In order for the year 10 data to be comparable across sites, student adjustment ratings were selected randomly from among the set of teacher ratings available for each student. Thus, beginning in year 10, the TSA datasets contain ratings provided by a single teacher on each of the student adjustment items. In years 11 and 12, ratings on the student adjustment items for each student were obtained from a single teacher at all of the Fast Track sites.

IV. Differences Between Groups

	Normative Sample		Control Sample		DF	t Value	Pr > t
	Mean	SD	Mean	SD			
Academic Performance	2.78	1.13	2.63	1.19	289	-1.06	.2912
	2.70	1.13	2.03	1.19	209	-1.00	.2912
Academic Motivation	2.80	1.27	2.50	1.14	291	-1.91	.0567
Social Skills	3.44	1.02	3.00	.99	290	-3.45	.0006
Relationships with Adults	3.26	1.01	3.02	1.04	291	-1.85	.0658
Conduct	3.48	1.26	2.85	1.23	291	-4.04	<.0001
Personal Maturity	2.94	1.33	2.46	1.21	291	-3.01	.0029

T-tests of means on the aggregate scores between the normative and control samples yielded the following results:

These results reveal significant differences between the normative and control samples for only three of the six scores. In each domain that exhibits significant differences, the normative group received a higher mean rating as compared with the control group. This finding indicates that students in the normative group were, on average, significantly more successful in these dimensions of adjustment to tenth grade, as compared with the high-risk control group. The differences between groups on ratings of academic performance, academic motivation, and relationships with adults were not statistically significant.

V. Recommendations for Use

As noted earlier, the data presented in this report are item ratings from a single teacher for each student. The researcher must keep in mind that these variables are not directly comparable to the aggregate scores described in the technical reports for years 7 through 9. Those data were aggregated by averaging the multiple teacher ratings available for each student, to create an average scale score for each of the six behavior domains. The rating scores for year 10 represent the rating from a single teacher, where the score is randomly selected from the set of rating available for each student. It is recommended that analysts wishing to examine student adjustment over time should create random-selection teacher rating variables (described in the year 10 report) for years 7 through 9, using the year 10 scoring program. Comparisons over time would thus involve a single teacher's rating for each student. These scores would then be comparable to the single teacher ratings contained in the year 11 dataset. A discussion of the use of multiple and single teacher ratings of student adjustment is presented in the cited research paper.

Analysts should note the large proportion of cases missing this measure (37 percent), and take into consideration, when making comparisons over time, the potential impact of variation in sample size across project years.

VI. Scale Means and SDs

Variable	Label	Mean	Ν	Std Dev
st11k1	single teacher acad. performance	2.76	247	1.15
st11k2	single teacher acad. motivation	2.74	249	1.26
st11k3	single teacher social skills	3.34	248	1.03
st11k4	single teacher student-adult rel.	3.20	249	1.03
st11k5	single teacher student conduct	3.38	249	1.29
st11k6	single teacher personal maturity	2.87	249	1.34

Means and Standard Deviations for Average Scores, Teacher Ratings of Student Adjustment Cohort 1, Year 11 Normative Sample

Means and Standard Deviations for Average Scores, Teacher Ratings of Student Adjustment Cohort 1, Year 11 Control Sample

Variable	Label	Mean	N	Std Dev
st11k1	single teacher acad. performance	2.63	92	1.19
st11k2	single teacher acad. motivation	2.50	92	1.14
st11k3	single teacher social skills	3.00	92	0.99
st11k4	single teacher student-adult rel.	3.02	92	1.04
st11k5	single teacher student conduct	2.85	92	1.23
st11k6	single teacher personal maturity	2.46	92	1.21

VII. <u>Scale Correlations</u>

Pearson Correlation Coefficients Prob > r under H0: Rho=0 Number of Observations								
	st11k1	st11k2	st11k3	st11k4	st11k5	st11k6		
st11k1 single teacher acad. performance	1.000 291.000	0.756 0.000 291.000	0.398 0.000 290.000	0.469 0.000 291.000	0.487 0.000 291.000	$0.702 \\ 0.000 \\ 291.000$		
st11k2 single teacher acad. motivation	0.756 0.000 291.000	1.000 293.000	0.453 0.000 292.000	0.599 0.000 293.000	0.534 0.000 293.000	0.818 0.000 293.000		
st11k3 single teacher social skills	0.398 0.000 290.000	0.453 0.000 292.000	1.000 292.000	0.682 0.000 292.000	0.488 0.000 292.000	$0.474 \\ 0.000 \\ 292.000$		
st11k4 single teacher student-adult rel.	0.469 0.000 291.000	0.599 0.000 293.000	0.682 0.000 292.000	1.000 293.000	0.641 0.000 293.000	$\begin{array}{c} 0.609 \\ 0.000 \\ 293.000 \end{array}$		
st11k5 single teacher student conduct	0.487 0.000 291.000	0.534 0.000 293.000	0.488 0.000 292.000	0.641 0.000 293.000	1.000 293.000	0.674 0.000 293.000		
st11k6 single teacher personal maturity	0.702 0.000 291.000	0.818 0.000 293.000	0.474 0.000 292.000	0.609 0.000 293.000	0.674 0.000 293.000	1.000 293.000		

Teacher Ratings of Student Adjustment – Average Score Correlations Report Sample, Year 11