Teacher Rating of Student Adjustment

Grade 9 /Year 10

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

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Citations

Instrument

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

Report

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

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: T10K Scored: TSA10

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 10. 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, 104 (23 percent) are missing all responses for this measure, including 88 from the normative group (13 from Durham, 23 from Washington, 15 from Pennsylvania, and 37 from Nashville), and 39 from the control group (4 from Durham, 14 from Nashville, 11 from Pennsylvania, and 10 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 data to be comparable across sites, student adjustment ratings were selected randomly from among the set of teacher ratings available for each student. This process resulted in the variable set rtk1-rtk6, which represents the ratings provided by a single teacher on each of the student adjustment items.

IV. Differences Between Groups

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

	Normative Sample		Control Sample		DF	t Value	Pr > t
	Mean	SD	Mean	SD			
Academic Performance	3.07	1.12	2.44	1.03	355	-5.02	<.0001
Academic Motivation	3.07	1.24	2.55	1.29	355	-3.71	.0002
Social Skills	3.52	0.95	3.04	1.07	348	-4.31	<.0001
Relationships with Adults	3.26	1.02	2.80	1.16	348	-3.77	.0002
Conduct	3.56	1.21	2.83	1.23	353	-5.24	<.0001
Personal Maturity	3.16	1.31	2.40	1.33	354	-5.09	<.0001

These results reveal significant differences between the normative and control samples for all of the aggregated scores. For each domain of student adjustment, 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 ninth grade, as compared with the high-risk control group.

V. Recommendations for Use

As noted earlier, the data presented in this report are item ratings randomly selected from the set of teacher ratings available 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. It is recommended that analysts wishing to examine student adjustment over time should create random-selection teacher rating variables, as described in this report, for each of the previous years. The year 10 scoring program attached to this report can be adapted to create random-selection ratings variables for years 7, 8, and 9. Comparisons over time would thus involve a single teacher's rating for each student. The rationale for using the random selection method is

discussed in the cited research paper. In models predicting the TRSA domains, Muschkin and Malone found no differences between using reports from a randomly selected teacher and from selection based on the item assessing how well the teacher knows the child. Given these results, the random selection process is preferred because relying on teachers' reports of how well they know the student introduces a potential source of bias.

VI. Scale Means and SDs

Means and Standard Deviations for Average Scores, Teacher Ratings of Student Adjustment Cohort 1, Year 10 Normative Sample

Variable	Label	Mean	N	Std Dev
rt10k1	random teacher academic performance	2.96	298	1.13
rt10k2	random teacher academic motivation	2.99	298	1.24
rt10k3	random teacher social skills	3.45	291	1.00
rt10k4	random teacher student-adult rels.	3.20	291	1.06
rt10k5	random teacher student conduct	3.45	296	1.23
rt10k6	random teacher personal maturity	3.06	297	1.34

Means and Standard Deviations for Average Scores, Teacher Ratings of Student Adjustment Cohort 1, Year 10 Control Sample

Variable	Label	Mean	N	Std Dev
rt10k1	random teacher academic performance	2.44	115	1.03
rt10k2	random teacher academic motivation	2.55	115	1.29
rt10k3	random teacher social skills	3.04	112	1.07
rt10k4	random teacher student-adult rels.	2.80	112	1.16
rt10k5	random teacher student conduct	2.83	115	1.23
rt10k6	random teacher personal maturity	2.40	114	1.34

VII. Scale Correlations

Teacher Ratings of Student Adjustment – Average Score Correlations Report Sample, Year 10

Pearson Correlation Coefficients Prob > r under H0: Rho=0 Number of Observations							
	rt10k1	rt10k2	rt10k3	rt10k4	rt10k5	rt10k6	
rt10k1 random teacher academic performance	1.000 357.000	0.772 0.000 357.000	0.409 0.000 350.000	0.000	0.000	0.000	
rt10k2 random teacher academic motivation	0.772 0.000 357.000	1.000 357.000	0.000	0.000	0.644 0.000 355.000	0.000	
rt10k3 random teacher social skills	0.409 0.000 350.000	0.457 0.000 350.000	1.000 350.000	0.000	0.000	0.000	
rt10k4 random teacher student-adult rels.	0.534 0.000 350.000	0.632 0.000 350.000	0.000	1.000 350.000	0.701 0.000 350.000	0.000	
rt10k5 random teacher student conduct	0.516 0.000 355.000	0.644 0.000 355.000	0.499 0.000 350.000	0.701 0.000 350.000	1.000 355.000	0.000	
rt10k6 random teacher personal maturity	0.670 0.000 356.000	0.784 0.000 356.000	0.485 0.000 350.000	0.000	0.759 0.000 354.000		