Teacher Social Competence Scale
Grade 4/Year 5 Update

FAST Track Project Technical Report
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Table of Contents

Citation

Instrument
        Conduct Problems Prevention Research Group (CPPRG). (1995). *Teacher - Social Competence Scale. A*vailable from the Fast Track Project Web site,
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Report
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Data Sources

Raw: t5h

Scored: tsc5

I.   Scale Description
The Revised Teacher Social Competence (TSC) measure is a revision and integration of two measures collected in the initial years of Fast Track: the Social Competence Scale—Teacher (SCT) and the Teacher Post Ratings (TPR). The SCT includes 25 items assessing competency across three primary areas—academic behavior, prosocial skills, and emotional regulation. The SCT was administered in kindergarten, first, and second grades for all three cohorts (excluding cohort 1, grade 1). The TPR is a brief 10 item instrument designed to evaluate changes in academic performance and behavioral functioning over the course of an academic year. The TPR was administered in grades 2 and 3 (cohort two was also administered the TPR in grade 1). Technical reports exist for both the SCT (hard copy only, dated 9/95) and the TPR (soft copy on-line, dated 10/95). It should be noted that teacher ratings of social competence are also collected on the Social Health Profile (SHP). The SHP includes 9 items evaluating both prosocial behavior and emotional regulation, and was administered to all cohorts, from grades1-6. A technical report detailing this scale is available in hard copy through data center.

The Revised Teacher Social Competence Scale was developed with three principal objectives: (1) to reduce the assessment load on teachers by integrating the SCT and the TPR into a shorter, more efficient scale; (2) to minimize overlap with the SHP; and (3) to reduce the likelihood of response bias by organizing items according to content. The resultant scale is a 17 item measure assessing several dimensions of social behavior including prosocial behavior, emotional regulation, and academic competence. Each item has two parts. The first part of each item allows the teacher to rate the frequency of individual social behaviors on a 6 point scale (ranging from "almost never" to "almost always"). The second part of each item allows the teacher to rate

improvement in the behavior over the course of the school year on a 7 point scale (ranging from "much worse" to "much improved").

II.   Report Sample

Initial exploration was conducted on Year 5, Cohort 1 data (the first year in which the instrument was used), including both high-risk control (n=155) and normative samples (n=387, including overlap; total N=463); treatment subjects were not included. Forty-seven children (10% of the cohort) were missing responses for the total scale including 30 normative students (6%) and 17 high-risk students (4%). Site, gender and racial differences in the number of non-respondents are summarized below:

Site: Durham-12, Nashville-11, Pennsylvania-10, Seattle-14
Gender: Boys-27, Girls-22
Race: African Americans-15, White-27, Asian-1, Hispanic-1, and Other-3

Finally, one subject is missing data for all but 5 items and another is missing all data pertaining to improvement over time. These students were omitted from analyses requiring those responses.

III.   Scaling

As noted, the TSC represents a revision and integration of two previous measures, the SCT and the TPR.   The SCT contains three conceptually derived scales—prosocial/communication skills, emotion regulation skills, and academic behavior skills—although factor analyses suggest that the prosocial and emotion regulation scales are highly intercorrelated. The TPR yields two relatively clean scales reflecting change in academic functioning and change in prosocial behavior.

While the TSC bears considerable conceptual similarity to the measures from which it derives, the changes made during the process of revision and integration are substantial. Consequently, exploratory factor analyses of the TSC (using Harris-Keiser rotation) were conducted. These analyses were conducted separately for each of the two sections of the TSC—once for items assessing the frequency of various socially competent behaviors and once for items assessing change in socially competent behavior over time. Results will be presented separately for each section.

Frequency items: Factor analyses of items assessing the frequency of socially competent behaviors reveal three eigenvalues greater than 1.0. These three factors and their corresponding items are listed below:

Scale name	Item #	Item Description	Factor 1	Factor 2	Factor 3	Scale Alpha
Prosocial behavior (TSCxPRF)	hcf2a	Recognize/label feelings	.53	.	.	.93
	hcf7a	Obeys rules	.65	.	.	
	hpb1a	Shows empathy	.95	.	.	
	hpb2a	Cooperative, helpful	.94	.	.	
	hpb3a	Takes turns	.85	.	.	
	hpb4a	Listens carefully	.91	.	.	
	hpb5a	Initiates interactions	.86	.	.	
Emotion regulation (TSCxEMF)	hcf1a	Calms down	.	.52	.38	.88
	hcf3a	Handles disagreements	.	.55	.43	
	hcf4aR	Gets angry (reverse scored)	.	.99	.	
	hcf5aR	Easily irritated (reverse scored)	.	.49	.	

	hcf6aR	Aggressive (reverse scored)	.	.83	.	
Academic competence (TSCxACF)	hac1a	Work toward goals	.	.	.62	.91
	hac2a	Read at grade level	.	.	.99	
	hac3a	Math at grade level	.	.	.91	
	hac4a	Turns in assignments	.41	.	.46	
	hac5a	At grade level overall	.	.	.97	

Note: Values less than 0.35 have been printed as ".".

Factor 1 corresponds to "Prosocial Behavior," factor 2 to "Emotion Regulation," and factor 3 to "Academic Competence." While three items had crossloadings above 0.35, they were nevertheless included on the scale with which they had the highest loading. The Cronbach alphas for all scales were adequate.

Consistent with earlier measures, the Prosocial Behavior and Emotion Regulation subscales are highly intercorrelated (r=.81). Due to this high correlation, a summated scaled score combining across items from these two dimensions has also been created (TSCxPEF, alpha 0.95) and may be more appropriate for most research purposes.   Moderate intercorrelations were observed between the Academic Competence subscale and each of the remaining subscale scores: Prosocial Behavior (r=.64), Emotion Regulation (r=.54), and the combined Prosocial/Emotion Regulation score (r=.61).

Finally, a global rating of social competence (TSCxTLF), created by combining all 17 items across the three subscales, yielded an alpha of 0.95.

Change items: Factor analyses conducted on items assessing change in socially competent behaviors reveal two eigenvalues greater than 1.0, with a third eigenvalue of 0.92. Examination of the two and three factor solutions suggests that the three-factor solution provides an adequate empirical fit and the best conceptual fit to the data. Factor loadings and scale alphas are summarized in the table below:

Scale name	Item #	Item Description	Factor 1	Factor 2	Factor 3	Scale Alpha
Prosocial behavior (TSCxPRC)	hpb1b	Shows empathy	.62	.	.	.88
	hpb2b	Cooperative, helpful	.92	.	.	
	hpb3b	Takes turns	.66	.	.	
	hpb4b	Listens carefully	.70	.	.	
	hpb5b	Initiates interactions	.90	.	.	
Emotion regulation (TSCxEMC)	hcf1b	Calms down	.	.84	.	.90
	hcf2b	Recognize/label feelings	.	.48	.	
	hcf3b	Handles disagreements	.	.68	.	
	hcf4bR	Gets angry (reverse scored)	.	.87	.	
	hcf6bR	Aggressive (reverse scored)	.	.92	.	
	hcf7b	Obeys rules	.	.51	.	
Academic competence (TSCxACC)	hcf5bR	Easily irritated by trouble with tasks (reverse scored)	.	.	.39	.87
	hac1b	Work toward goals	.	.	.65	
	hac2b	Read at grade level	.	.	.80	
	hac3b	Math at grade level	.	.	.72	
	hac4b	Turns in assignments	.	.	.56	
	hac5b	At grade level overall	.	.	.87	

Note: Values less than 0.35 have been printed as ".".

Here, factor 1 corresponds to changes in "Prosocial Behavior," factor 2 to changes in "Emotion Regulation," and factor 3 to changes in "Academic Competence." However, it should be noted that these scales do not map precisely onto the scales outlined for frequency items. Items hcf2b and hcf7b now load on the Emotion Regulation factor while item hcf5b has moved to the academic competence factor. The Cronbach alphas are all adequate.

Once again, Prosocial Behavior and Emotion Regulation are highly intercorrelated (r=.87), suggesting that a scaled score combining items from these two dimensions would be appropriate for most research purposes (TSCxPEC, alpha 0.93). Moderate intercorrelations were found between Academic Competence and each of the remaining scales: Prosocial Behavior (r=.61), Emotion Regulation (r=.57), and Prosocial/Emotion Regulation (r=.66).

Finally, an overall score reflecting global improvement across all three dimensions of social competence was also created (TSCxTLC), yielding a coefficient alpha of .93

IV.   Differences between groups

A series of t-tests indicated significant differences at the .05 level between the high risk sample and the normative sample (excluding those students also in the high risk sample) on every individual item assessing frequency. Across items, means were higher in the normative sample, indicating that children in the normative sample were rated as more competent than their peers in the high risk sample in all areas. Conversely, normative and high risk children differed significantly on only one item assessing change over time. That is, high risk children scored significantly higher on item hcf7b (obeys classroom rules and direction), indicating greater improvement in this area.

Consistent with these results, significant differences between the high risk and normative samples were found on all three frequency subscales but on none of the subscales measuring change. Specifically, normative children were rated as more socially competent than their high risk peers in the areas of academic competence, prosocial behavior, and emotion regulation as well as on the combined scale assessing prosocial behavior and emotional regulation. A similar pattern of differences emerged for the global measures of social competence (TSC5TLF) and change (TSC5TLC).

V.   Recommendations for use

As noted, the TSC can be divided into two sections, the first assessing the frequency of 17 social behaviors and the second assessing change in these behaviors over the course of an academic year. Results from the analyses conducted here strongly suggest that these two sections should be scored separately and treated as distinct.

Additionally, while this measure was developed to include three conceptual subscales (prosocial behavior, emotion regulation, and academic competence), the prosocial behavior and emotion regulation subscales are highly intercorrelated (this is true for both frequency and change sections). Hence, the two subscales should be scored separately only when a strong theoretical rationale supports making this distinction. For most research purposes, the items in these two scales should be combined in order to score a single social competence dimension.

VI.　Item and scale means and SD's

A. Items and scales pertaining to FREQUENCY

Item #	Content (paraphrased)	Normative sample		High-risk controls	
		Mean	SD	Mean	SD
t5hac1a	Effectively set and work toward goals	2.86	1.51	2.09	1.31
t5hac2a	Able to read at grade level and answer questions	3.25	1.60	2.49	1.63
t5hac3a	Able to solve grade level math problems	3.28	1.42	2.60	1.40
t5hac4a	Reliable in turning in assignments	3.37	1.63	2.70	1.60
t5hac5a	Performing academically at grade level	3.19	1.65	2.43	1.64
t5hcf1a	Stop and calm down when excited	3.09	1.48	2.22	1.32
t5hcf2a	Recognize and label feelings	2.94	1.27	2.10	1.19
t5hcf3a	Handle disagreements in a positive way	2.93	1.43	2.01	1.30
t5hcf4a	Gets angry when provoked	3.02	1.39	2.03	1.39
t5hcf5a	Easily irritated when troubled by task	3.41	1.29	2.64	1.50
t5hcf6a	Shows physical and verbal aggression	3.72	1.31	2.85	1.51
t5hcf7a	Obey classroom rules and directions	3.62	1.42	2.97	1.21
t5hpb1a	Show empathy and compassion	3.01	1.32	2.28	1.17
t5hpb2a	Provide help, cooperate with others	3.38	1.27	2.64	1.21
t5hpb3a	Take turns, play fair, follow rules	3.51	1.21	2.70	1.19
t5hpb4a	Listen carefully to others	3.05	1.24	2.28	1.01
t5hpb5a	Initiate interactions in positive manner	3.16	1.33	2.37	1.12

Scale	Scale name	Normative sample		High-risk controls	
		Mean	SD	Mean	SD
TSC5PRF	Prosocial behavior subscale	3.24	1.10	2.48	0.92
TSC5EMF	Emotion regulation subscale	3.23	1.14	2.35	1.10
TSC5PEF	Prosocial/Emotion regulation subscale	3.36	1.05	2.42	0.93
TSC5ACF	Academic competence subscale	3.19	1.35	2.47	1.27
TSC5TLF	Summated score—reflects overall social competence across all areas	3.22	1.04	2.44	0.89

B. Items and scales pertaining to CHANGE

Item #	Content (paraphrased)	Normative sample		High-risk controls	
		Mean	SD	Mean	SD
t5hac1b	Effectively set and work toward goals	3.51	0.93	3.49	1.13
t5hac2b	Able to read at grade level and answer questions	3.61	0.88	3.69	1.02
t5hac3b	Able to solve grade level math problems	3.69	1.01	3.71	1.09
t5hac4b	Reliable in turning in assignments	3.37	1.01	3.46	1.24
t5hac5b	Performing academically at grade level	3.46	0.94	3.41	1.15
t5hcf1b	Stop and calm down when excited	3.38	0.89	3.56	1.12
t5hcf2b	Recognize and label feelings	3.43	0.74	3.45	0.86
t5hcf3b	Handle disagreements in a positive way	3.46	0.96	3.49	0.99
t5hcf4b	Gets angry when provoked	3.28	0.87	3.28	1.14
t5hcf5b	Easily irritated when troubled by task	3.31	0.92	3.47	0.97
t5hcf6b	Shows physical and verbal aggression	3.20	0.83	3.29	1.30

t5hcf7b	Obey classroom rules and directions	3.36	1.03	3.61	1.28
t5hpb1b	Show empathy and compassion	3.40	0.84	3.49	1.05
t5hpb2b	Provide help, cooperate with others	3.57	0.88	3.64	1.14
t5hpb3b	Take turns, play fair, follow rules	3.39	0.86	3.51	1.03
t5hpb4b	Listen carefully to others	3.35	0.83	3.49	0.97
t5hpb5b	Initiate interactions in positive manner	3.53	0.94	3.56	1.05

Scale	Scale name	Normative sample		High-risk controls	
		Mean	SD	Mean	SD
TSC5PRC	Prosocial behavior subscale	3.45	0.72	3.54	0.87
TSC5EMC	Emotion regulation subscale	3.35	0.72	3.45	0.90
TSC5PEC	Academic competence subscale	3.49	0.72	3.54	0.82
TSC5ACC	Prosocial/Emotion regulation subscale	3.35	0.63	3.37	0.77
TSC5TLC	Summated scale--reflects improvement in social behavior across all areas	3.43	0.62	3.50	0.76