

Establishing the Validity of the School Functioning Scale as a Brief Measure of Academic Functioning in High School Students with ADHD

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Introduction

Teens with ADHD are at greater risk than peers without ADHD for

- poor academic performance (Frazier et al., 2007)
- difficulty completing assignments on time (Barkley et al., 1991)
- grade retention, suspensions, and school dropout (Kent, 2010)

High school teachers typically instruct many students and interact with each student for less than 50 minutes per day (Benner & Graham, 2009). Therefore, collecting data from multiple teachers may be valuable. However, most rating scales exceed 20 items and create a time burden for busy teachers. Thus, a brief measure of academic functioning in high school students would benefit both teachers and researchers.

This study explores **the validity of the newly-developed 9-item School Functioning Scale (SFS). The SFS is a teacher rating scale that assesses academic enablers (e.g., classroom preparedness, participation, homework completion), maladaptive behaviors (e.g., noncompliance, disrespecting adults/peers, disrupting classroom instruction) that may hinder academic success, and social functioning.**

Method

Aim: Explore the criterion validity of a newly-developed brief teacher measure of academic functioning in high school students with ADHD.

Participants:

- 85 high school students with ADHD
- 81.2% Male, 72.9% Caucasian
- M_{age} =16.04 years
- grades 9th -11th from 3 Ohio and 3 Pennsylvania high schools

Measures:

- School Functioning Scale (SFS) – Teacher version
- Adolescent Academic Problems Checklist (Sibley et al., 2014) – Parent version
- Student report cards

Analyses:

Pearson’s *r* correlations between

- SFS ratings and corresponding student grades in English, Math, and Science
- SFS ratings and parents’ AAPC scores

Results

SFS Items	English		Math		Science	
	Grade	AAPC	Grade	AAPC	Grade	AAPC
Classroom Preparedness	.586**	-.094	.655**	-.421**	.586**	-.228
	N=33	N=32	N=41	N=38	N=35	N=31
Classroom Participation	.623**	-.213	.489**	-.447**	.528**	-.307
	N=32	N=31	N=41	N=38	N=35	N=31
Homework Completion	.717**	-.251	.626**	-.375*	.540**	-.277
	N=32	N=31	N=41	N=36	N=35	N=31
Test/Quiz Grades	.720**	-.188	.732**	-.406*	.604**	-.200
	N=32	N=31	N=41	N=38	N=35	N=30
Noncompliance	-.511**	.374*	-.547**	.461**	-.102	.176
	N=33	N=32	N=41	N=38	N=36	N=32
Disrespect	-.522**	.293	-.358*	.511**	.037	-.169
	N=33	N=32	N=41	N=38	N=36	N=32
Disruptive Behavior	-.390**	.241	-.390*	.336*	.022	.019
	N=47	N=32	N=41	N=38	N=36	N=32

Discussion

Our results indicate criterion validity for the SFS, which is a first step in establishing this teacher measure as a valid and efficient instrument for assessing academic functioning in high school. Parent AAPC scores correlated with all of the Math teachers’ SFS ratings (7/7 items), but only correlated with noncompliance in English class. No Science teacher SFS items about academic enablers or maladaptive behaviors correlated with Science grades or AAPC scores. Previous research indicates that a student’s behavior and achievement differ between classes in secondary schools (Evans et al., 2005), thus suggesting value for the individual teacher reports in order to identify academic and behavioral strengths and weaknesses. Future research investigating the validity of the SFS should use a larger and a more diverse sample to expand generalizability.

Note: *Correlation is significant at the 0.05 level. **Correlation is significant at the 0.01 level. AAPC academic index was used for the correlations with SFS items 1-4. AAPC disruptive behavior index was used for the correlations with SFS items 5-7.