

Child and Adolescent Functional Assessment Scale

The Child and Adolescent Functional Assessment Scale (CAFAS; Hodges 1990, 1994) is an inventory for measuring functional impairment in children and adolescents that was originally designed for use in a mental health policy research project. The instrument consists of five child scales: ARole Performance,@ AThinking,@ A Behavior Toward Self and Others,@ AMood/Emotions,@ and ASubstance Abuse,@ as well as two child=s caregiver scales: ABasic Needs@ and AFamily/Social Support.@ For each scale, the extent of problems is rated on a 4-point scale, where 30 corresponds to Asevere,@ 20 to Amoderate,@ 10 to Amild,@ and 0 to Aminimal or no disruption.@ In addition, the child total score is defined as the sum of scores on the five individual child scales. The instrument can assess youths= dysfunction during various periods of time that usually range from one to three months.

The CAFAS is a global g, multidimensional measure. When scoring on the CAFAS, the rater is required to directly assess either behavioral impairment itself or behavioral indicators of cognitive or emotional problems. In addition, the rater determines the severity level for each scale by choosing among provided behavior descriptions. These two features are important in assuring that the CAFAS is consistently used in the intended way.

The validity and reliability of the CAFAS 1990-version (Hodges 1990) have been empirically documented (Hodges & Summerfelt, in press; Hodges & Wong, in press) and the evidence obtained is summarized in table 6. Its inter-rater reliability (IRR) was demonstrated for raters with various levels of experience, including naive undergraduates (Hodges & Summerfelt, in press). For the CAFAS child total score, both inter-rater and test-retest reliability values obtained with student raters were similar to those for the Children=s Global Assessment Scale (CGAS; Shaffer et al. 1983) obtained with highly trained professionals (Hodges & Summerfelt, in press).

The child ARole Performance@ and ABehavior Toward Self and Others@ scales, and the caregiver AFamily/Social Support@ scale were found to have lower reliability (Hodges & Summerfelt, in press) and, hence, were changed in a subsequent revision of the CAFAS (Hodges 1994). In an effort to reduce inconsistency, the ARole Performance@ scale=s items were divided into three separate subscales: ARole Performance at Work/School,@ ARole

Performance at Home, and Role Performance in the Community. Further, the Behavior Toward Self and Others scale items regarding self-harm formed an independent Self-Harmful Behavior subscale. Finally, the caregiver Family/Social Support scale was improved by adjusting its items to be more objective.

The improved 1994-version of the CAFAS (Hodges 1994) was selected for including in the MHSIP Mental Health Report Card. When using this new version, it is essential to take into account that its reliability is somewhat uncertain, since the effects of the scale's modification have yet to be determined in empirical investigations. Additionally, the Report Card users should consider limitations of the correlation coefficients for the purposes of determining reliability, described on page 2, that also apply to the CAFAS studies.

Study	Subjects	Raters	Procedure	Convergent Validity	Construct Validity	Discriminant Validity	Reliability
Hodges & Summerfelt, in press (part 1)		<ul style="list-style-type: none"> ◦ Undergraduates (N=20); ◦ Graduate students in clinical psychology (two samples, N=14 & 11); ◦ Front-line social service and juvenile court workers from an agency serving children (N=9); ◦ All raters were trained in CAFAS administration 	<ul style="list-style-type: none"> ◦ Written vignettes from real interviews with parents and children were rated by all four groups of raters; ◦ Students rated 20 vignettes, while agency workers only 15 				<ul style="list-style-type: none"> ◦ Average Pearson rs between raters= scorings and the criterion score, which was defined by the first author and a board-certified child psychiatrist, for four rater samples ◦ for the child total scale ranged from .92 to .96; ◦ for child individual scales¹ ranged from .74 to .99; and ◦ for the caregiver AFamily/Social Support@scale from .73 to .84; ◦ Intraclass rs for four rater samples ◦ for the child total scale ranged from .84 to .87; ◦ for child individual scales (see footnote 8) ranged from .63 to .96; and ◦ for the caregiver AFamily/Social Support@scale ranged from .65 to .74

¹Score for AThinking@child scale is not included. Calculations for this scale could not be made due to the low frequency of formal thought problems in the vignettes, which were designed to be representative of typical clinical presentations (Hodges & Summerfelt in press)

Study	Subjects	Raters	Procedure	Convergent Validity	Construct Validity	Discriminant Validity	Reliability
Hodges & Summerfelt, in press (part 2)	<ul style="list-style-type: none"> ◦ Youths, aged from 5 to 17 (N=56); ◦ 32 of the subjects received outpatient services in local community mental health centers; ◦ 24 were recruited from the community 	Graduate students in psychology (N=4)	<ul style="list-style-type: none"> ◦ Children were rated on the CAFAS based on telephone interviews with their parents; ◦ Each scale's score was based on the youths' most severe level of dysfunction during the last three months 				<ul style="list-style-type: none"> ◦ IRR ranged from .95 to .98 for the child total scale; from .83 to 1.00 for child individual scales; and from .74 to .95 for the caregiver AFamily/Social Support@scale; ◦ Approx. One week test-retest reliability (TRR), measured by Pearson r, for the child total scale was .95 in the entire sample and .88 in the outpatient sample; for child individual scales² TRR ranged from .82 to .91 in the entire sample and from .68 to .87 in the outpatient sample; and for the caregiver AFamily/Social Support@scale TRR was .79 in the entire sample and .75 in the outpatient sample; ◦ Paired t-test between test and retest was not significant for any of the scores; ◦ k statistic for the child total scale that was categorized into four levels was .83 in the entire sample and .70 in the outpatient sample

²Scores for ASubstance Use@child scale is not included. Calculations for this subscale could not be made due to the low frequency of substance abuse problems in the studied sample

--	--	--	--	--	--	--	--

Study	Subjects	Raters	Procedure	Convergent Validity	Construct Validity	Discriminant Validity	Reliability
<p> C Hodges & Sommerfelt, in press (part 3) & C Hodges & Wong, in press; C Both studies were based on the Ft. Bragg Demonstration Project (Bickman et al. 1993) </p>	<p> C Youth aged from 5 to 17, referred for mental health services (N=984) </p>	<p> C Research assistants without prior experience of providing psychiatric services to children trained C All but one either were in college or had a college degree; C (N=28) </p>	<p> C Children and parents were interviewed at intake and 6 and 12 months post intake; C Each scale's score was based on the youths' most severe level of dysfunction during the last month </p>	<p> The CAFAS child total scale had Pearson r's C of .59 with the total score on the Parent Version of Child Assessment Schedule (PCAS); Hodges et al. 1982); C of .54 with the Child Assessment Schedule's (CAS; Hodges et al. 1982) total score; C of .42 with Child Behavior Checklists (CBCL; Achenbach 1991) total score; and C of .36 with Burden of Care Questionnaire's (BCQ; Brannan et al. 1995) total score </p>	<p> C The CAFAS total child score at intake had Pearson r's of .45, .41, .37, and .38 with the most restrictive type of care, total cost of services, number of bed days, and number of services, respectively, assessed in the first six post intake months; C r's ranged from .30 to .35 for the next six post intake months; C The CAFAS total child score at intake, in comparison to other traditional outcome measures, best predicted the youths' most restrictive service setting in the first six post intake months; compared with the CAFAS, relative validity³ was C .64 for PCAS total score, C .16 for Axis V score (APA 1987) C .45 for BCQ total score, C .18 for CBCL total score, and C .00 for CAS total score </p>	<p> At each of the three CAFAS administrations significant differences were found in the CAFAS child total scores between youths who at intake received inpatient services (N=224) and youths who at intake received outpatient (N=626) services </p>	

³Relative validity was calculated based on Hodges and Sommerfelt's (in press) data as a ratio of F statistic that resulted from a regression predicting the setting restrictiveness based on the instrument's score at intake relative to the CAFAS F statistic

