Section 3

Statistical Properties of the FBA Profiler

Scores provided by the various scales of the FBA Profiler:

Target Behaviors

Presently, the norm-referenced t-scores provided within the FBA Profiler target behavior category are based upon a normative sample of over 4200 individuals ages 3 through 60, across the United States. Norms are provided for parent ratings, teacher ratings, and student ratings across all age groups.

T-scores in each "target behavior" area or within the overall "internalizing" or "externalizing" composites reflect how a particular subject's rating compares to the population "norm" for that rating group (parent, teacher, or student) based upon the subject's age and gender. The mean is set at 50 and the standard deviation set at 10 in order to facilitate interpretation similar to most other behavior rating scales. These standard scores are plotted on the FBA Profiler computer generated report to provide a visual display of relatively significant behavioral concern. T-scores below 60 are considered to fall within the average or "normal" range. T-scores between 60 and 70 are considered "at risk" and suggest "moderate" behavioral concern. T-scores of 70 or above are considered "clinically significant" and suggest relatively severe behavioral concern.

Functions of Behavior

Ratings within the "function of behavior" category simply reflect relative levels of concern based upon average item ratings within each specific functional category. Average item scores greater than 1.8 and less than or equal to 2.2 are rated "at risk" and average scores greater than 2.2 are rated "clinically significant".

Mental Health Screening

Ratings within the mental health screening area are determined simply by the number of behaviors identified with an item score of 3 ("very true") corresponding with current DSM criteria within the various mental health classifications chosen for evaluation. When a sufficient number of specific items within a given category are endorsed in order to meet DSM criteria for that mental health disorder, the rating is considered "clinically significant". When a rating falls just short of DSM criteria, it is identified at the "at risk" level. Ratings lower than "at risk" are considered to fall within the normal range. Note: Due to the nature of criteria within the Thought Disorder and Autism spectrum Disorder categories, these particular areas can be prone to false positive identification which can result in considerable confusion and concern. In order to minimize such needless concern or distress, the FBA Profiler software provides the option to suppress the ratings in these areas entirely when deemed appropriate.

Reliability of the FBA Profiler:

Internal Consistency - In order to assess the internal consistency and overall reliability of the FBA Profiler a split-half method was employed in which the entire FBA Profiler item pool and each subscale was randomly divided into 2 similar forms. These split-half correlations were then gathered from the entire normative sample of 4212 cases and are presented in Tables 3.1 (female) and 3.2 (male). Correlations across the entire item pool range from .90 to .98. This data verifies that the FBA Profiler has very strong internal consistency.

Table 3.1
Split-Half Reliability Coefficients (female)

	All ages	4-7	7-11	11-15	15-19	19-23	23+
Self-Ratings	.92			.91	.91	.92	.92
Parent Ratings	.93	.94	.93	.92	.90	.94	.91
Teacher Ratings	.93	.95	.93	.93	.91	.92	.93

Table 3.2
Split-Half Reliability Coefficients (male)

	All ages	4-7	7-11	11-15	15-19	19-23	23+
Self-Ratings	.92			.94	.93	.91	.91
Parent Ratings	.93	.93	.93	.92	.92	.92	.90
Teacher Ratings	.94	.95	.93	.94	.93	.98	.95

Validity of the FBA Profiler:

Content Validity - The initial item selection and categorization for the FBA Profiler (within the target behavior and functions of behavior categories) was derived through an empirically-based process which utilized published research findings related to emotional/behavioral development along with hundreds of direct observations and interviews with parents and teachers of children and adolescents. The initial item groupings were then refined through an extensive process of factor analysis to ensure that each item was indeed loading on the specific emotional or behavioral factor being rated.

Construct Validity – Construct validity of the FBA Profiler has been established through correlational studies comparing internalizing and externalizing t-scores derived form the FBA Profiler with those obtained from the same raters using the BASC-2. Table 3.3 provides correlational data obtained which confirms strong construct validity for the FBA Profiler.

Table 3.3
Correlations between FBA Profiler and BASC-2

	Internalizing	Externalizing
Self-Rating	.92	.93
Parent Rating	.89	.91
Teacher Rating	.88	.92

Overall, these reliability and validity studies provide very strong support for the FBA Profiler as a screening and assessment instrument for emotional and behavioral disorders.