

# 18

## The Achenbach System of Empirically Based Assessment

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The Achenbach System of Empirically Based Assessment (ASEBA) comprises a family of standardized instruments for assessing behavioral and emotional problems and adaptive functioning. A key feature of ASEBA instruments is that they assess functioning from multiple perspectives, including reports by parents, other collaterals, caregivers, teachers, youths, clinical interviewers, observers, and psychological examiners.

A second key feature is that ASEBA instruments have been developed according to a "bottom-up" approach. In the bottom-up approach, large pools of items are tested for their ability to tap adaptive and maladaptive functioning, as scored by particular kinds of raters under particular conditions. The items are scored quantitatively to reflect the degree to which individuals manifest particular characteristics. Items are retained if they discriminate effectively between individuals who are not functioning well and demographically similar individuals who are functioning well.

The items that tap behavioral and emotional problems are subjected to multivariate statistical analyses to identify syndromes of problems that co-occur. The term "syndrome" is used in its generic sense of "things

that occur together," without implying a specific cause. Some syndromes may reflect primarily biological causes, others may reflect primarily environmental causes, and still others may reflect a mixture of causes. Figure 18.1 illustrates the bottom-up approach to deriving syndromes.

The syndromes of co-occurring problem items are used to construct scales for scoring individuals to reflect the degree to which they manifest each syndrome. An individual's score on a syndrome is computed by summing his or her scores on each item of the syndrome. To determine how the individual's syndrome scores compare with scores obtained by similar individuals, the syndromes are displayed on profiles in relation to normative distributions of scores obtained by large samples of peers who were assessed with the same assessment procedures. The profiles display T-scores and percentiles for each syndrome, based on the relevant normative sample.

The ASEBA originated in research to provide better differentiated assessment of child and adolescent psychopathology at a time when the American Psychiatric Association's (1952) *Diagnostic and Statistical Manual of Mental Disorders* (first edition; DSM-I) had only the following two cate-

### BOTTOM-UP APPROACH TO PSYCHOPATHOLOGY

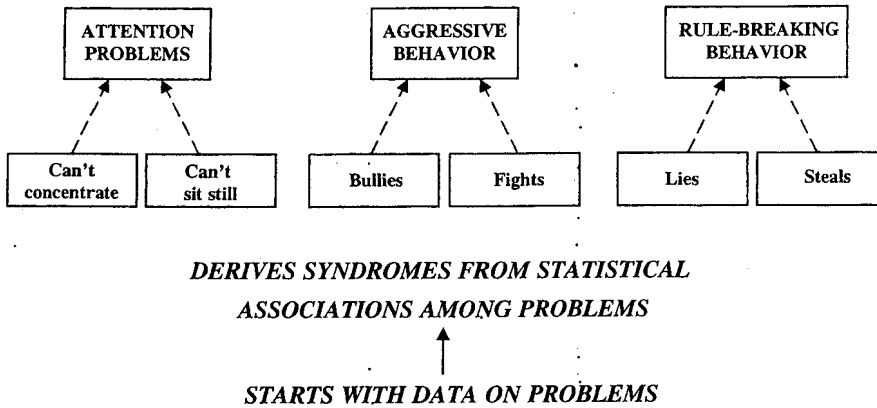


FIGURE 18.1. The “bottom-up” approach that derives syndromes from statistical associations among problems. For simplicity, only two problems (e.g., *Can't concentrate*) are shown for each syndrome (e.g., *Attention Problems*). In practice, many items are included in the analyses and about 6 to 27 items are found to comprise syndromes.

gories for such disorders: (1) adjustment reaction of childhood and (2) schizophrenic reaction, childhood type. The first ASEBA publication (Achenbach, 1966) revealed many more syndromes of behavioral and emotional problems than were evident in the two DSM categories. Later publications provided standardized procedures for assessing problems and competencies according to parent, teacher, and self-reports (Achenbach, 1978; Achenbach & Edelbrock, 1983, 1986, 1987). Since then, revised versions have featured cross-informant syndromes that embody patterns derived from ratings by multiple informants who view the subjects from different perspectives (Achenbach, 1991; Achenbach & Rescorla, 2000, 2001, 2003).

Because people's functioning often varies from one context and interaction partner to another, comprehensive assessment requires data from multiple sources. To help users see specific similarities and differences between problems manifested in different contexts, the ASEBA software compares reports by multiple informants who contribute their own perspectives on the functioning of the person being assessed.

In the following sections, we first describe forms that are completed by parents, caregivers, teachers, youths, and others who can

document the everyday functioning of the individuals being assessed. All the forms obtain quantitative scores for numerous items, plus specific details about individuals' functioning. After we describe the forms; we outline the scales and profiles on which these forms are scored. Thereafter, we present assessment procedures for use by clinical interviewers, direct observers in group settings, and professionals who administer standardized tests. We then illustrate applications to clinical and special educational services, outcome evaluations, therapeutic interventions, cross-cultural comparisons, and longitudinal, epidemiological, and etiological research.

#### FORMS COMPLETED BY PARENTS, OTHER COLLATERALS, CAREGIVERS, TEACHERS, AND THE INDIVIDUALS THEMSELVES

The forms described in this section are designed to be completed by people who do not have specialized training in assessment but who can document the functioning of the individuals in their usual environments, such as home and school. These forms are worded in nontechnical, idiomatic language that requires only fifth-grade reading skills.

For respondents who cannot read English but are literate in other languages, translations of one or more ASEBA forms are available in 65 languages (Bérubé & Achenbach, 2003). Options are also available for using scannable forms, including reflective read and TELEform formats, for direct computer entry of data by respondents, and for Web-based administrations via *Web-Link* (Achenbach & Rescorla, 2001).

### Forms Completed by Parents and Other Collaterals

The Child Behavior Checklist (CBCL) is completed by parents and others who see children under home-like conditions, including relatives, foster parents, and personnel in residential treatment facilities and group homes.

#### CBCL/1½–5

One version of the CBCL spans ages 1½–5 (CBCL/1½–5; Achenbach & Rescorla, 2000). It has 99 items that describe behavioral and emotional problems, plus an open-ended item for adding problems that were not specifically listed. Examples include *Avoids looking others in the eye* and *Cries a lot*. For each item, the respondent circles 0 if it is *not true* of the child, 1 if it is *somewhat or sometimes true*, and 2 if it is *very true or often true*, based on the preceding 2 months. Respondents are asked to describe problems when warranted. Respondents are also asked to describe any illnesses or disabilities that the child has, what concerns the respondent most about the child, and the best things about the child.

Because language development is a common reason for concern about young children, the CBCL/1½–5 includes the *Language Development Survey* (Rescorla, 1989), which is completed by parents of children under the age of 3. The Language Development Survey requests respondents to report up to five of the child's multiword phrases and to circle words that the child uses on a list of 310 words that are among the most common in young children's vocabularies. The respondent is also asked to provide information about factors that may be associated with language delays, such as premature birth, ear infections, relatives

with language delays, and multiple languages being spoken in the home.

#### CBCL/6–18

Another version of the CBCL spans ages 6–18 (CBCL/6–18; Achenbach & Rescorla, 2001). Like the CBCL/1½–5, the CBCL/6–18 has items that describe behavioral and emotional problems, which respondents score as 0, 1, or 2. Many of the items have counterparts on the CBCL/1½–5, but other items tap problems that are developmentally relevant to older ages. Respondents base their ratings on the child's functioning over the preceding 6 months.

To assess developmentally appropriate competencies, the first two pages of the CBCL/6–18 request information about the child's functioning in sports, nonsports activities, organizations, jobs and chores, friendships, relations with significant others, playing and working alone, and school. As on the CBCL/1½–5, respondents are also asked to describe any illnesses or disabilities, what concerns the respondent most about the child, and the best things about the child.

#### Adult Behavior Checklist

Mental health and educational professionals who work with children are often involved in assessing adults, as well. This is because mental health and special educational services that begin in childhood or adolescence may continue beyond the age of 18. In addition, to properly evaluate the effects of services begun before age 18, it is often necessary to assess functioning after the age of 18. When assessing children, it may also be helpful to assess their parents using parallel instruments that are tailored to the parents' developmental level.

Based on longitudinal research on a nationally representative sample, as well as on other research in the United States and abroad, we developed the Adult Behavior Checklist for ages 18–59 (ABCL; Achenbach, 1997; Achenbach & Rescorla, 2003). The ABCL can be filled out by parents, relatives, spouses, partners, friends, and others who know an adult well. The overall format is similar to that of the CBCL. Many of the problem items have developmentally appropriate counterparts of the CBCL items, but

other items are more specific to adults. Longitudinal studies have shown that child and adolescent CBCL scores strongly predict ABCL scores in adulthood (Achenbach, Howell, McConaughy, & Stanger, 1995; Hofstra, van der Ende, & Verhulst, 2000, 2002).

### Forms Completed by Day-Care Providers and Teachers

Children's functioning often differs between home and other settings. For assessment to be comprehensive, it should include data from people who see children in settings outside the home and who have perspectives that differ from parents' perspectives. Teachers play vital roles in children's lives, and children's problems often involve their functioning in school. It is therefore important to obtain data from teachers whenever possible. Because increasing numbers of children attend day-care and preschool programs, comprehensive assessment of young children should include data from day-care providers and preschool teachers whenever possible. The following sections describe forms that we have developed to assess children from the perspectives of day-care providers and teachers.

#### Caregiver-Teacher Report Form

The Caregiver-Teacher Report Form (C-TRF; Achenbach & Rescorla, 2000) is completed for 1½- to 5-year-olds by their day-care providers and preschool teachers. It has a format similar to that of the CBCL/1½-5, but 17 of the 99 problem items differ to reflect differences in home versus day-care and preschool environments. Respondents are asked to indicate whether they are primarily teachers or caregivers, the type of facility in which they see the child, the size of the child's group or class, how many hours per week the child spends at the facility, how well the respondent knows the child, and whether the child has been referred for special services. If a child attends both day-care and preschool programs, it is helpful to obtain ratings from all relevant staff members in each setting to document similarities and differences in what is seen by different people across multiple settings. C-TRFs can then be scored on profiles for comparison

with each other and for comparison with profiles scored from each CBCL/1½-5 completed by parents and others who see the child in home-like settings.

#### Teacher's Report Form

The Teacher's Report Form (TRF) assesses the functioning of 6- to 18-year-olds in school settings, as seen by teachers, counselors, and other school personnel (Achenbach & Edelbrock, 1986; Achenbach & Rescorla, 2001). The TRF has many of the same problem items as the CBCL/6-18, but 23 of the 118 specific problem items differ to reflect differences in home versus school environments. The CBCL competence items are replaced by items assessing aspects of adaptive functioning that are evident in school. These include ratings of whether academic performance is below, at, or above grade level. They also include ratings of how hard the child is working, how appropriately the child is behaving, how much the child is learning, and how happy the child is. In addition, teachers are asked to provide achievement and ability test data if available, as well as to respond to open-ended questions about various aspects of the child's functioning. By having each teacher complete a TRF, users can compare profiles that reflect variations in the child's school functioning as seen by different teachers. Users can also compare the TRF profiles with CBCL profiles that reflect reports of the child's functioning at home.

#### Self-Report Forms

In addition to informants' reports, comprehensive assessment requires data from the subjects themselves. Play sessions, interviews, and observations in group settings and during testing can be used to directly assess children who are too young to provide self-ratings and other standardized data about their own functioning. However, by the age of 11, most youngsters become cognitively capable of completing standardized forms analogous to the CBCL and TRF.

#### Youth Self-Report

To obtain self-reports from 11- to 18-year-olds, we have developed the Youth Self-

Report (YSR; Achenbach & Edelbrock, 1987; Achenbach & Rescorla, 2001). The YSR has many of the same competence and problem items as the CBCL/6–18, but the items are worded in the first person. Items that would be developmentally inappropriate or difficult for youths to report about themselves are replaced with socially desirable items that most youths endorse. Youths are also asked to describe their illnesses and disabilities, concerns about school, other concerns, and the best things about themselves.

#### Adult Self-Report

The Adult Self-Report for ages 18–59 (ASR; Achenbach & Rescorla, 2003) parallels the ABCL but also has sections that assess adaptive functioning in areas that are relevant to various developmental paths that adults may follow. For all respondents, there are sections assessing relationships with friends and family. For respondents who are enrolled in educational programs and/or who are working or are in the military, there are items that assess functioning in these contexts. For respondents who are married or live with a partner, there are items to assess these relationships. In addition, there are items for assessing tobacco, alcohol, and drug use. When assessing children with ASEBA forms, practitioners may find it especially useful to have the children's parents complete the ASR to describe their own functioning. Table 18.1 summarizes the ASEBA forms described in the foregoing sections.

### NATIONALLY NORMED ASEBA PROFILES

Each form listed in Table 18.1 is scored on profiles made up of scales that display an individual's scores in relation to scores for national normative samples of peers who were rated by the same type of respondents. The scores and detailed descriptions for specific items are essential for comprehensive assessment of individuals' functioning. In addition, *comparisons* with scores for large representative samples of typical individuals are also essential for judging whether particular scores are deviant from the normal range. To be truly representative, normative samples should be selected by scientific sampling to give all individuals in the target population approximately equal probabilities of being included in the sample. Such samples are called *probability samples*.

The ASEBA profiles provide norms based on probability samples for which subjects were randomly selected according to scientific sampling procedures (for details, see Achenbach & Rescorla, 2000, 2001, 2003). A major purpose of the profiles is to enable users to distinguish between individuals whose scores are deviant enough to indicate a need for help and individuals who are in the normal range. Accordingly, the norms for the profiles are based on individuals from the national normative samples who were not referred for mental health or related services in the preceding year. In epidemiological terms, the normative samples were "healthy" samples, which were deemed to provide the most appropriate comparison

**TABLE 18.1. Forms Completed by Parents, Other Collaterals, Caregivers, Teachers, and the Subjects Themselves**

Form	Completed by	Age range
CBCL/1½–5	Parents, relatives, surrogates	1½–5 years
CBCL/6–18	Parents, relatives, surrogates	6–18 years
ABCL	Parents, spouses, partners, friends	18–59 years
C-TRF	Daycare providers (caregivers), teachers	1½–5 years
TRF	Teachers, other school staff	6–18 years
YSR	Youths	11–18 years
ASR	Adults	18–59 years

*Note.* CBCL/1½–5, Child Behavior Checklist for Ages 1½–5; CBCL/6–18, Child Behavior Checklist for Ages 6–18; ABCL, Adult Behavior Checklist; C-TRF, Caregiver Teacher Report Form; TRF, Teacher's Report Form; YSR, Youth Self-Report; ASR, Adult Self-Report.

groups for individuals who are being assessed for psychopathology and adaptive functioning. In the following sections, we describe ASEBA profile scales for scoring adaptive functioning and competencies. Thereafter, we describe scales for scoring behavioral and emotional problems.

### Profiles for Displaying Adaptive Functioning and Competencies

#### CBCL/1½-5

Language is one of the most crucial aspects of adaptive functioning for young children. Children's first use of words usually delights their parents and opens the door to vast opportunities for communication, learning, and socialization. Concerns about language development are among the most common reasons for seeking professional help for young children. To help practitioners quickly determine whether young children's use of language is within the normal range, parents' responses to the Language Development Survey of the CBCL/1½-5 are scored on a profile that compares the child's vocabulary with the vocabularies of a national sample of peers of the child's age and gender. Cutpoints distinguish between the normal range and delayed vocabulary growth. Normative comparisons are also provided for the number of multiword phrases reported on the Language Development Survey.

Whether referrals for help are prompted by concerns about language development or about behavioral and emotional problems, it is usually important to evaluate both. In some cases, delayed language may contribute to behavioral and emotional problems when children are frustrated or teased because of their inability to communicate. In other cases, behavioral and emotional problems contribute to language delays, or both may stem from a condition such as a pervasive developmental disorder (PDD). Because parents and surrogates are essential sources of information about children's language and behavioral and emotional problems, it is usually cost-effective to have the Language Development Survey, as well as the problem portion of the CBCL/1½-5, completed early in the evaluation of young children.

#### CBCL/6-18, TRF, YSR

After the preschool period, children are expected to develop competencies and adaptive skills for successful functioning in multiple contexts, such as the home, school, and peer group. Like lags in language development at earlier ages, lags in competencies may contribute to behavioral and emotional problems. Such lags may also stem from behavioral and emotional problems, or they may stem from conditions that contribute both to lags in competencies and to behavioral and emotional problems. Lags in competencies may thus be associated with behavioral and emotional problems for a variety of reasons. On the other hand, strong competencies may help to prevent behavioral and emotional problems or may offset the negative effects of problems. Comprehensive assessment should therefore include assessment of competencies and adaptive functioning, as well as problems.

#### CBCL/6-18 Competence Profile

On the CBCL/6-18, respondents list the child's favorite sports and nonsports activities. Respondents also indicate how often and how well the child does each one, compared to others of the same age. In a similar format, respondents list the organizations, clubs, teams, and groups the child belongs to; how active the child is in each one; jobs and chores the child has; and how well the child does each one. Thereafter, respondents indicate how many close friends the child has; how often the child does things with friends; how well the child gets along with siblings, other children, and parents; and how well the child plays and works alone. For children who attend school, respondents report on the child's performance in academic subjects, receipt of special remedial services, repetition of grades, and problems in school. The data provided by the respondent are scored on a profile that displays scales for *Activities*, *Social*, *School*, and *Total Competence*. Figure 18.2 shows a computer-scored version of the competence profile for a 13-year-old boy, Robert Morane (not his real name). Handscored profiles are also available.

In Figure 18.2, the graphic display shows where Robert's scores on the Activities, So-

# CBCL/6-18 - Competence Scale Scores for Boys 12-18

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ID: 1315-101

Name: Robert Morane

Gender: Male

Age: 13

Date Filled: 04/10/2000

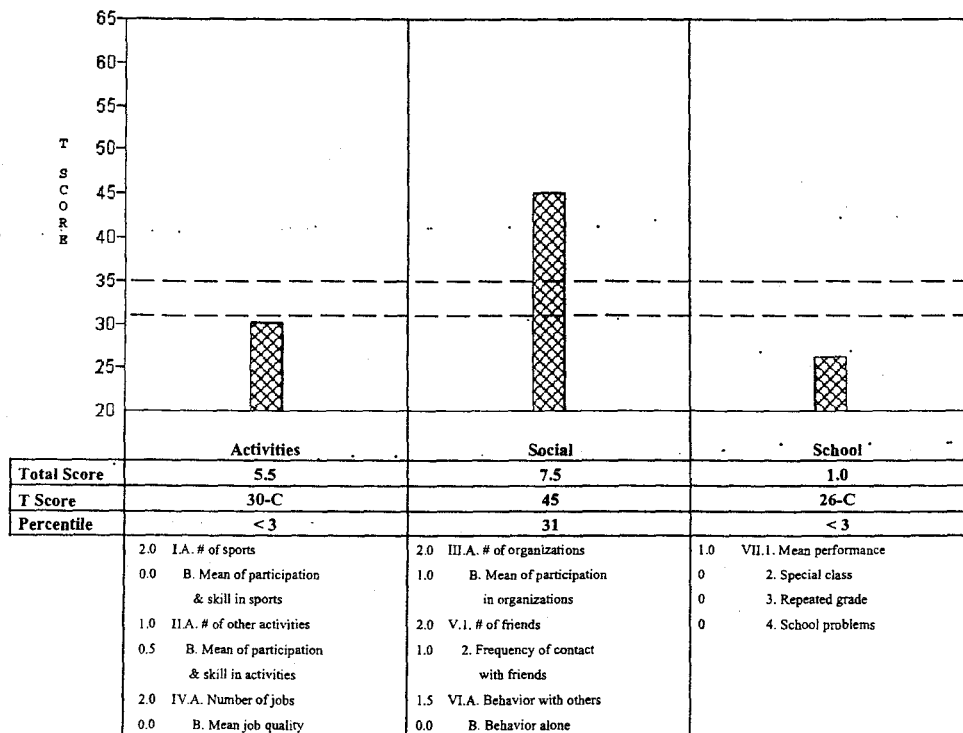
Birth Date: 07/01/1986

Clinician: Dr. Maxwell

Agency: Fairview

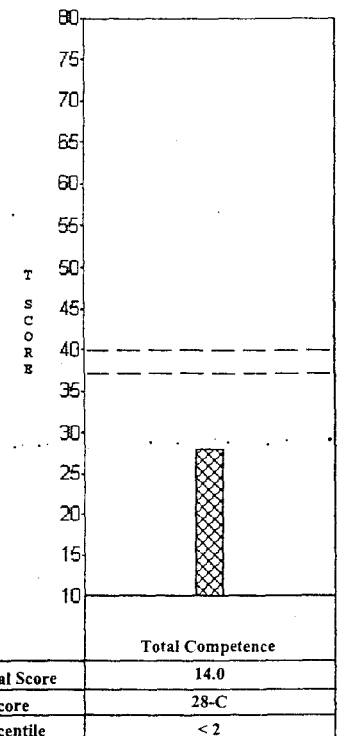
Informant: Thelma Morane

Relationship: Biological Mother



B = Borderline clinical range; C = Clinical range

Broken lines = Borderline clinical range



Total score for each scale is rounded to nearest 0.5.

\*\*\*\* = missing data

nc = The score was not computed due to missing data.

On Activities and Social Scales, if one item is missing, the mean of the other items is substituted.

cial, and School scales fall in relation to a national normative sample of 12- to 18-year-old boys. The two broken lines printed across the graphic display demarcate a borderline clinical range, from the third to the seventh percentile of the national normative sample. Scores below the bottom broken line are in the clinical range, because they are lower than scores obtained from parents' reports for 97% of the national normative sample of nonreferred 12- to 18-year-old boys.

Based on the CBCL/6-18 completed by Robert's mother, Thelma, Figure 18.2 shows that Robert's score for the Activities scale was just below the borderline clinical range. By looking to the left of the graphic display, we can see that Robert's score is equivalent to a *T*-score of 30. By looking below the graphic display, under the title *Activities*, we can see that Robert's total score for the Activities scale was 5.5. Beneath Robert's total score for Activities is his *T*-score of 30, followed by the letter C. The C indicates that Robert scored in the clinical range. And beneath Robert's *T*-score, <3 is printed to indicate that he scored below the third percentile of the national normative sample of nonreferred boys. If we now look beneath the <3 indicating Robert's percentile on the Activities scale, we will see the scores that Robert obtained for each item of the Activities scale. These item scores were summed to obtain Robert's total score of 5.5 on the Activities scale.

By looking at the center of the profile in Figure 18.2, we see that Robert obtained a score for the Social scale that was in the normal range, corresponding to a *T*-score of 45 and the 31st percentile. By looking at the rightmost portion of the profile in Figure 18.2, we see that Robert's score on the School scale was in the clinical range, beneath the bottom broken line, corresponding to a *T*-score of 26, well below the third percentile. Beneath the scale title *School*, the letter C is printed to the right of the *T*-score of 26. The C indicates that Robert's School scale score was in the clinical range.

On the right side of Figure 18.2, we can see Robert's Total Competence score, which is the sum of his scores on the three scales of the competence profile. As the cross-hatched bar shows, Robert's Total Compe-

tence score corresponded to a *T*-score of 28 for 12- to 18-year-old boys. On the Total Competence score, the borderline range spans *T*-scores of 37 to 40, whereas the clinical range is below 37. The cutpoints for the borderline and clinical range are thus less conservative than for the more specific Activities, Social, and School scales, for which the borderline cutpoint is a *T*-score of 35 and the clinical cutpoint is a *T*-score of 31. The cutpoints for the Total Competence score are closer to the mean of the normative sample because the Total Competence score is based on more numerous and more diverse items than the Activities, Social, and School scales. Robert's Total Competence score was well below the borderline range.

The YSR includes many counterparts of the competence items rated by parents on the CBCL/6-18. The YSR competence items are scored on a profile similar to the profile shown in Figure 18.2 for the CBCL/6-18.

On the TRF, teachers' ratings of academic achievement and adaptive characteristics are scored on an adaptive functioning profile analogous to the competence profiles of the CBCL and YSR.

## ASR

Because people follow a variety of developmental pathways during adulthood, the ASR assesses adaptive functioning in areas that are relevant to each individual. All respondents are asked to complete sections of the ASR pertaining to relations with friends and family members. However, sections pertaining to educational programs, jobs, and relations with spouse or partner are completed only by respondents for whom they have been relevant during the preceding 6 months. Scores for each adaptive functioning scale are displayed on a profile resembling the CBCL/6-18 competence profile shown in Figure 18.2. The ASR profile also displays a mean adaptive *T*-score that is computed by averaging the *T*-scores of all the adaptive functioning scales completed by the respondent.

## Profiles for Displaying Behavioral and Emotional Problems

The ASEBA forms have profiles for displaying scores on empirically based syndromes



of behavioral and emotional problems as well as DSM-oriented scales.

### CBCL/6-18 Syndrome Profile

Figure 18.3 illustrates the syndrome profile scored from the CBCL/6-18 completed for 13-year-old Robert Morane by his mother. By looking at Figure 18.3, we see the following eight syndrome scales, reading from left to right: *Anxious/Depressed*, *Withdrawn/Depressed*, *Somatic Complaints*, *Social Problems*, *Thought Problems*, *Attention Problems*, *Rule-Breaking Behavior*, and *Aggressive Behavior*. These syndromes were derived from parents' ratings on the CBCL/6-18, teachers' ratings on the TRF, and self-ratings on the YSR (Achenbach & Rescorla, 2001). Because they reflect patterns of problems that had counterparts across instruments completed by different kinds of informants, they are called *cross-informant syndromes*.

As Figure 18.3 shows, the profile displays Robert's scores for the eight syndromes in relation to the scores obtained by the national normative sample of 12- to 18-year-old boys. The overall layout is similar to the competence profile that was shown in Figure 18.2. However, unlike the competence profile, *high* scores on the syndrome scales indicate clinical deviance. Thus, scores *above* the *top* broken line in Figure 18.3 are in the *clinical* range, whereas scores *below* the *bottom* broken line are in the normal range. Scores *between* the broken lines are in the *borderline* range. As we can see in Figure 18.3, Robert obtained scores in the clinical range on the Social Problems, Attention Problems, and Aggressive Behavior syndromes, and in the normal range on the other syndromes.

The other nationally normed ASEBA instruments for rating preschool children, school-age children, and adults are all scored on profiles of syndromes resembling the profile shown in Figure 18.3. The profiles for the TRF and YSR display the same eight syndromes as the profile for the CBCL/6-18 shown in Figure 18.3. However, there are some small differences in the problem items of the CBCL/6-18, TRF, and YSR versions of the syndrome scales. For example, the TRF version of the Attention Problems scale includes several problem

items that are specific to the school context and are not on the CBCL/6-18 or YSR.

### Inattention and Hyperactivity-Impulsivity Scales

Because teachers may be especially well positioned to observe different patterns of behaviors related to attention problems, we have factor-analyzed the items of the TRF Attention Problems syndrome for 4,437 children, separately for each gender at ages 6-11 and 12-18 (Achenbach & Rescorla, 2001). For all four gender/age groups, the factor analyses revealed two patterns within the TRF Attention Problems syndrome. One pattern was similar to the DSM-IV primarily inattentive type of ADHD, whereas the second pattern was similar to the DSM-IV primarily hyperactive-impulsive type (American Psychiatric Association, 1994).

The software for scoring the TRF automatically computes children's scores and percentiles for the Inattention and Hyperactivity-Impulsivity subscales, as well as for the entire Attention Problems scale. The TRF handscored profile also enables users to compute scores for the two Attention Problems subscales.

### CBCL/6-18 DSM-Oriented Profile

An innovation in the ASEBA 21st-century editions is the inclusion of DSM-oriented scales and profiles. The DSM-oriented scales were constructed by asking leading psychiatrists and psychologists from many cultures around the world to identify ASEBA problem items that were very consistent with particular diagnostic categories of the DSM-IV (American Psychiatric Association, 1994). The items identified by a substantial majority of the experts were used to form scales that are displayed on profiles with age- and gender-specific norms based on the same national probability samples. As Figure 18.4 shows, the DSM-oriented scales scored from the CBCL/6-18, TRF, and YSR are designated as: *Affective Problems*, *Anxiety Problems*, *Somatic Problems*, *Attention Deficit/Hyperactivity Problems*, *Oppositional Defiant Problems*, and *Conduct Problems*. Like the empirically based Attention Problems syndrome, the DSM-oriented Attention Deficit/Hyperactivity Problems

# CBCL/6-18 - Syndrome Scale Scores for Boys 12-18

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ID: 1315-101  
Name: Robert Morane

Gender: Male  
Age: 13

Date Filled: 04/10/2000  
Birth Date: 07/01/1986

Clinician: Dr. Maxwell  
Agency: Fairview  
Verified: Scanned

Informant: Thelma Morane  
Relationship: Biological Mother

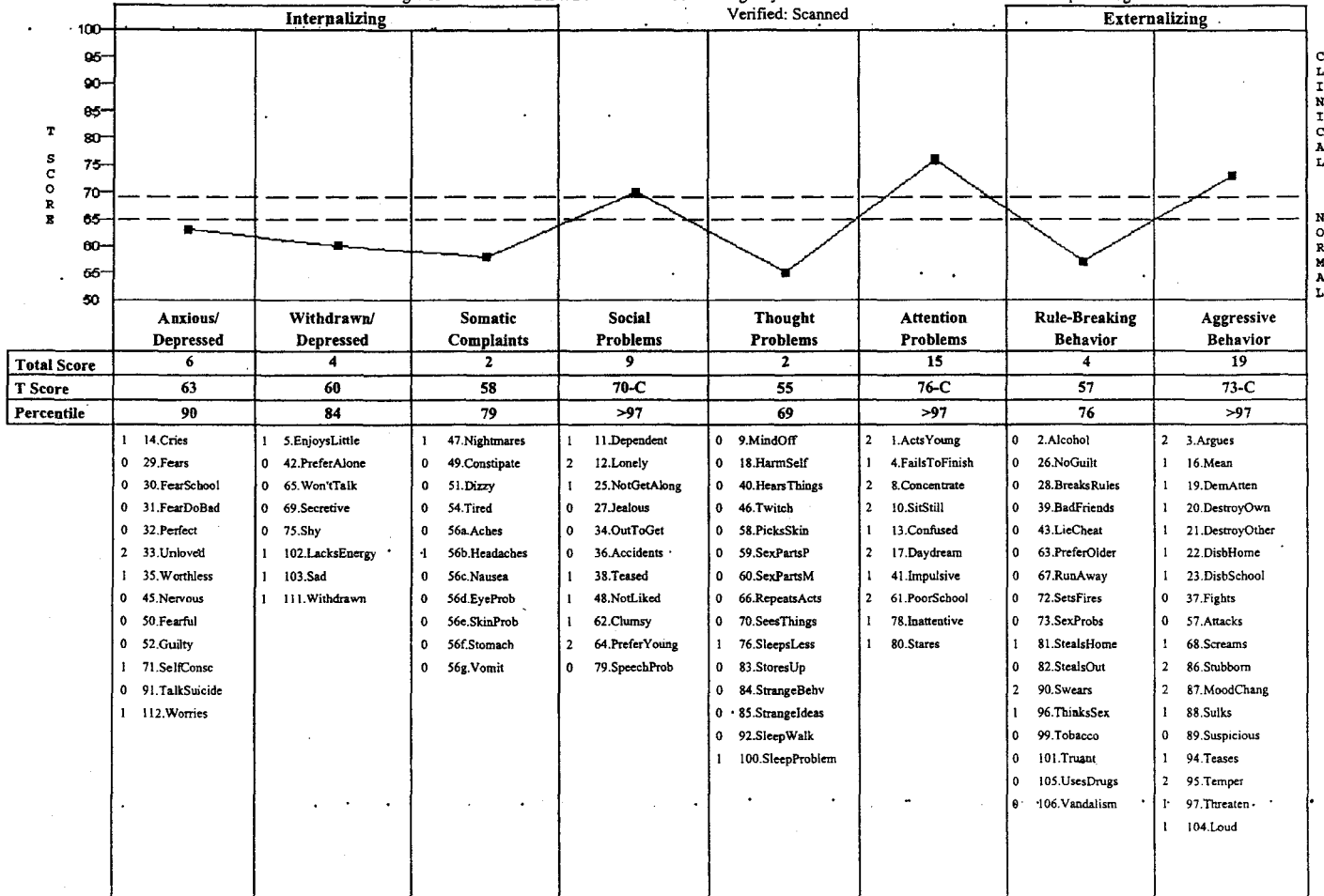


FIGURE 18.3. Computer-scored version of CBCL syndrome profile for 13-year-old Robert Morane.

ID: 1315-101  
Name: Robert Morane

Gender: Male  
Age: 13

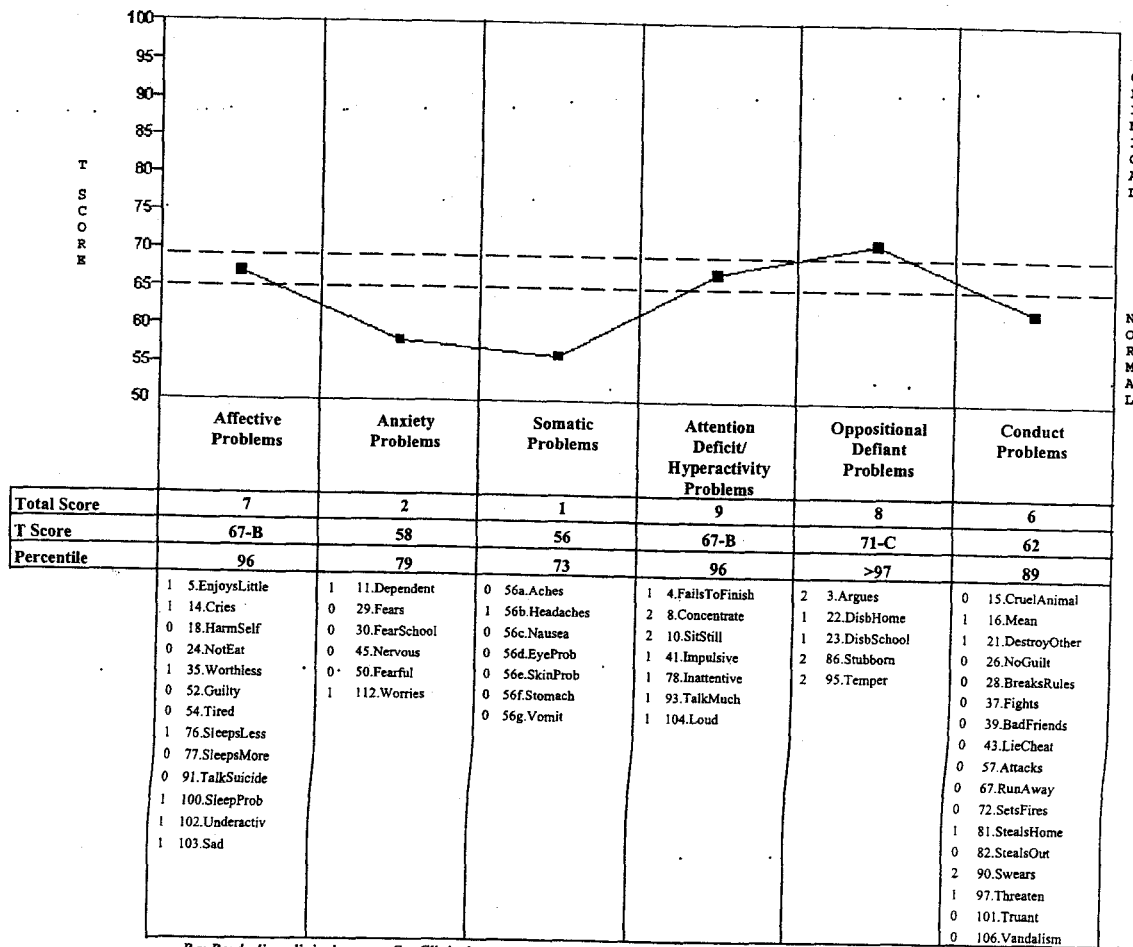
# CBCL/6-18 - DSM-Oriented Scales for Boys 12-18

Date Filled: 04/10/2000  
Birth Date: 07/01/1986

Clinician: Dr. Maxwell  
Agency: Fairview

Informant: Thelma Morane  
Relationship: Biological Mother

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B = Borderline clinical range; C = Clinical range

Broken lines = Borderline clinical range

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FIGURE 18.4. Computer-scored version of CBCL DSM-oriented profile for 13-year-old Robert Morane.

scale is also scored from the TRF in terms of the Inattention and Hyperactivity-Impulsivity subscales.

## COMPUTERIZED CROSS-INFORMANT COMPARISONS

To help users integrate data from multiple informants, the ASEBA software makes systematic comparisons among problem scores obtained from up to eight forms completed for each individual. The following sections describe the comparisons that are made in terms of item scores, correlations between item scores from each pair of informants, and graphic displays of scale scores.

### Cross-Informant Comparisons of Item Scores

To illustrate comparisons among item scores obtained from different rating forms for the same child, Figure 18.5 displays the printout of problem item ratings of Robert Morane by his mother and father, by Robert himself on the YSR, and by Robert's English, math, and science teachers.

The left portion of Figure 18.5 displays the 0, 1, and 2 scores given by each rater to the items of the Anxious/Depressed syndrome. By quickly scanning the rows of scores for each item, we can easily see items that all raters scored 0, items that all raters scored 1 or 2, and items that were scored 0 by some raters but 1 or 2 by other raters. The items on which raters were unanimous reflect consistency in how Robert is perceived by raters who see him from different perspectives and in different contexts. If all raters scored an item 0, such as item 69, *Secretive*, we can be confident that it is not currently problematic for Robert. Conversely, if all raters including Robert scored an item 1 or 2, such as item 103, *Sad*, we can be confident that it is currently problematic.

What does it mean if some raters score an item 0 while others score it 1 or 2? Discrepancies of this sort can be just as informative as unanimous agreements. For example, if all teachers score a problem 1 or 2 but both parents score it 0, this suggests that the problem may be evident in school but not at home. Or, if a youth circles 2 for an item such as 18, *I deliberately try to hurt or kill*

*myself*, as Robert did, but all adults score the item 0, this suggests that the adults are unaware of the youth's self-destructive behavior. Discrepancies among scores obtained from different raters are often clinically useful because they give practitioners opportunities for probing differences in perspectives, tolerance, awareness, and attitudes toward particular problems.

### Cross-Informant Correlations among Scores

Meta-analyses of many studies using many different assessment instruments have revealed correlations averaging .60 for agreement between ratings by informants who played similar roles with respect to the children they rated (e.g., pairs of parents and pairs of teachers), correlations averaging .28 between informants who played different roles with respect to the children they rated (e.g., parents vs. teachers), and correlations averaging .22 between children's self-ratings and ratings by adults who knew them (Achenbach, McConaughy, & Howell, 1987). We should thus not be surprised when agreement between particular pairs of informants is not very high. To help users evaluate the level of agreement between particular pairs of informants, the ASEBA software displays correlations between the item scores obtained from each pair of informants, as illustrated in Figure 18.6.

In the first row of the large box in the middle of Figure 18.6, agreement is shown between CBCL ratings by Robert's mother and father. Under the heading, *Cross-Informant Agreement*, the words "Above average" indicate that their agreement was above average for mothers and fathers rating their adolescent sons. The designation of Above average for their correlation of .81 is based on the correlations found for large reference samples of parents. Their actual correlation is shown under the heading *Q Corr*, followed by correlations for the 25th percentile, mean, and 75th percentile correlations found for large reference samples of parents. If the correlation between ratings for a particular pair of raters is between the 25th and 75th percentiles, it is designated "average." If the correlation is below the 25th percentile, it is designated as "below average." And if it is above the 75th per-

# Cross-Informant Comparison - Problem Items Common to the CBCL/TRF/YSR

Page 1 of 4

ID: 1315

Name: Robert Morane

Gender: Male

Birth Date: 07/01/1986

Comparison Date: 04/17/2000

Form	Eval ID	Age	Informant Name	Relationship	Date	Form	Eval ID	Age	Informant Name	Relationship	Date
CBC1	102	13	J. Morane	Biological Father	04/11/2000	TRF5	103	13	J. Dell	Classroom Teacher {F}	04/14/2000
CBC2	101	13	T. Morane	Biological Mother	04/10/2000	YSR6	106	13	Self	Self	04/12/2000
TRF3	104	13	J. Garcia	Classroom Teacher {M}	04/17/2000						
TRF4	105	13	J. Barnes	Classroom Teacher {M}	04/17/2000						

	CBC	CBC	TRF	TRF	TRF	YSR			
	1	2	3	4	5	6	7	8	
<b>Anxious/Depressed</b>									
14.Cries	1	1	0	0	0	1			
29.Fears	0	0	0	0	0	1			
30.FearSchool	0	0	0	0	0	0			
31.FearDoBad	0	0	0	0	0	0			
32.Perfect	0	0	0	0	0	1			
33.Unloved	1	2	0	0	0	2			
35.Worthless	1	1	2	2	2	1			
45.Nervous	1	0	2	2	1	1			
50.Fearful	0	0	0	0	0	1			
52.Guilty	0	0	0	0	0	0			
71.SelfConc	1	1	2	2	1	0			
91.Suicide	0	0	0	0	0	2			
112.Worries	1	1	0	0	0	0			

<b>Withdrawn/Depressed</b>									
5.EnjoysLittle	1	1	0	0	0	1			
42.PreferAlone	0	0	1	0	0	0			
65.Won'tTalk	0	0	2	2	1	0			
69.Secretive	0	0	0	0	0	0			
75.Shy	0	0	0	0	0	1			
102.LacksEnergy	0	1	1	1	1	1			
103.Sad	1	1	2	1	1	2			
111.Withdrawn	0	1	2	2	1	1			

<b>Somatic Complaints</b>									
51.Dizzy	0	0	0	0	0	0			
54.Tired	0	0	0	0	0	1			
56a.Aches	0	0	0	0	0	0			
56b.Headaches	0	1	0	0	1	1			
56c.Nausea	0	0	0	0	0	0			
56d.EyeProb	0	0	0	0	0	0			
56e.SkinProb	0	0	0	0	0	0			
56f.Stomach	0	0	0	0	0	0			
56g.Vomit	0	0	0	0	0	0			

	CBC	CBC	TRF	TRF	TRF	YSR			
	1	2	3	4	5	6	7	8	
<b>Social Problems</b>									
11.Dependent	0	1	2	1	1	2			
12.Lonely	1	2	0	0	1	1			
25.NotGetAlong	1	1	2	2	2	1			
27.Jealous	0	0	0	0	0	0			
34.OutToGet	1	0	2	0	1	1			
36.GetsHurt	0	0	0	0	0	0			
38.Teased	1	1	2	2	2	1			
48.NotLiked	1	1	2	2	2	2			
62.Clumsy	1	1	1	1	1	1			
64.PreferYoung	2	2	2	2	1	1			
79.SpeechProb	0	0	0	0	0	0			

<b>Thought Problems</b>									
9.MindOff	0	0	0	0	0	1			
18.HarmSelf	0	0	0	0	0	2			
40.HearsThings	0	0	0	0	0	0			
46.Twicht	0	0	0	0	0	1			
58.PicksSkin	0	0	0	0	0	0			
66.RepeatsActs	0	0	0	0	0	0			
70.SeesThings	0	0	0	0	0	0			
83.StoresUp	0	0	0	0	0	0			
84.StrangeBehav	0	0	0	0	0	0			
85.StrangeIdeas	0	0	0	0	0	1			

<b>Attention Problems</b>									
1.ActsYoung	1	2	1	2	2	1			
4.FailsToFinish	1	1	2	2	2	1			
8.Concentrate	2	2	2	2	2	1			
10.SitStill	1	2	2	2	2	1			
13.Confused	2	1	2	1	1	0			
17.Daydream	1	2	1	1	1	1			
41.Impulsive	1	1	1	2	2	1			
61.PoorSchool	2	2	2	2	2	2			
78.Inattentive	1	1	2	2	2	1			

	CBC	CBC	TRF	TRF	TRF	YSR			
	1	2	3	4	5	6	7		
<b>Rule-Breaking Behavior</b>									
26.NoGuilt	0	0	0	0	0	0			
28.BreaksRules	0	0	0	0	0	0			
39.BadFriends	0	0	0	0	0	0			
43.LieCheat	0	0	0	0	0	0			
63.PreferOlder	0	0	0	0	0	0			
82.StealsOther	0	0	0	0	0	0			
90.Swears	1	2	1	1	0	1			
96.ThinksSex	1	1	0	0	0	1			
99.Tobacco	0	0	0	0	0	0			
101.Truant	0	0	0	0	0	0			
105.UsesDrugs	0	0	0	0	0	0			

<b>Aggressive Behavior</b>									
3.Argues	2	2	0	0	1	1			
16.Mean	1	1	0	0	0	0			
19.DemAtten	1	1	0	0	1	0			
20.DestroyOwn	1	1	1	0	1	0			
21.DestroyOthers	0	1	0	0	0	0			
23.DisobeySchl	1	1	0	0	1	1			
37.Fights	1	0	0	1	0	1			
57.Attacks	0	0	0	0	0	0			
68.Screams	1	1	0	0	0	0			
86.Stubborn	1	2	1	1	0	1			
87.MoodChang	1	2	1	0	0	1			
89.Suspicious	0	0	0	0	0	0			
94.Teases	1	1	0	1	1	1			
95.Temper	2	2	0	0	0	1			
97.Threaten	1	1	0	0	0	0			
104.Loud	1	1	0	2	1	1			

<b>Other Problems</b>									
44.BiteNail	0	0	0	0	0	0			
55.Overweight	0	0	0	0	0	0			
56h.OtherPhys	0	0	0	0	0	0			

# Cross-Informant Comparison - Cross-Informant Correlations CBCL/TRF/YSR

Page 2 of 4

ID: 1315

Name: Robert Morane

Gender: Male

Birth Date: 07/01/1986

Comparison Date: 04/17/2000

Form	Eval ID	Age	Informant Name	Relationship	Date	Form	Eval ID	Age	Informant Name	Relationship	Date
CBC1	102	13	J. Morane	Biological Father	04/11/2000	TRF5	103	13	J. Dell	Classroom Teacher (F)	04/14/2000
CBC2	101	13	T. Morane	Biological Mother	04/10/2000	YSR6	106	13	Self	Self	04/12/2000
TRF3	104	13	J. Garcia	Classroom Teacher (M)	04/17/2000						
TRF4	105	13	J. Barnes	Classroom Teacher (M)	04/17/2000						

Q Correlations Between Item Scores						
Forms	Informants	Cross-Informant Agreement	Q Corr	Reference Group		
				25th %ile	Mean	75th %ile
CBC1 x CBC2	Biological Father x Biological Mother	Above average	0.81	0.51	0.59	0.69
CBC1 x TRF3	Biological Father x Classroom Teacher (M)	Above average	0.53	0.09	0.23	0.37
CBC1 x TRF4	Biological Father x Classroom Teacher (M)	Above average	0.54	0.09	0.23	0.37
CBC1 x TRF5	Biological Father x Classroom Teacher (F)	Above average	0.61	0.09	0.23	0.37
CBC1 x YSR6	Biological Father x Self	Average	0.38	0.17	0.29	0.40
CBC2 x TRF3	Biological Mother x Classroom Teacher (M)	Above average	0.47	0.09	0.23	0.37
CBC2 x TRF4	Biological Mother x Classroom Teacher (M)	Above average	0.50	0.09	0.23	0.37
CBC2 x TRF5	Biological Mother x Classroom Teacher (F)	Above average	0.57	0.09	0.23	0.37
CBC2 x YSR6	Biological Mother x Self	Above average	0.50	0.17	0.29	0.40
TRF3 x TRF4	Classroom Teacher (M) x Classroom Teacher (M)	Above average	0.85	0.40	0.51	0.63
TRF3 x TRF5	Classroom Teacher (M) x Classroom Teacher (F)	Above average	0.80	0.40	0.51	0.63
TRF3 x YSR6	Classroom Teacher (M) x Self	Above average	0.39	0.07	0.19	0.30
TRF4 x TRF5	Classroom Teacher (M) x Classroom Teacher (F)	Above average	0.85	0.40	0.51	0.63
TRF4 x YSR6	Classroom Teacher (M) x Self	Above average	0.40	0.07	0.19	0.30
TRF5 x YSR6	Classroom Teacher (F) x Self	Above average	0.43	0.07	0.19	0.30

nc = not calculated due to insufficient data

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FIGURE 18.6. Correlations between CBCL, YSR, and TRF scores for 13-year-old Robert Morane, plus correlations between informants in large reference samples.

centile, it is designated as "Above average." The same is true for correlations between each of the other pairs of informants whose correlations are compared with correlations found for large reference groups of similar informants.

### Cross-Informant Comparisons of Syndrome Scores

To help users compare syndrome scores obtained from different raters of the same individual, the ASEBA software prints bar graphs showing side-by-side comparisons of the scores obtained from each rater on each syndrome. As an example, let us look in the upper left corner of Figure 18.7. We see bars representing the *T*-scores for the Anxious/Depressed syndrome scored by Robert's mother and father on the CBCL, by Robert's three teachers on the TRF, and by Robert on the YSR. Robert's scores on the Anxious/Depressed syndrome were in the normal range according to ratings by his parents and two teachers. They were in the borderline clinical range according to ratings by one teacher and Robert himself. This indicates that four raters viewed Robert as being in the normal range on the Anxious/Depressed syndrome but that two raters reported more problems on this syndrome than reported for 93% of the normative sample of boys. By looking at the other bar graphs in Figure 18.6, we can compare the syndrome scores obtained from each rater on each syndrome. For example, all raters scored Robert in the borderline or clinical range on Social Problems and all but Robert himself scored him in the borderline or clinical range on Attention Problems. This one-page visual display of multi-informant syndrome scores can be especially useful for describing Robert's problems in meetings with parents, teachers, and others involved in his case. Similar bar graphs compare DSM-oriented scale scores obtained from each rater.

### INTERVIEW, DIRECT OBSERVATION, AND TEST OBSERVATION INSTRUMENTS

In addition to parent, teacher, and self-reports, the ASEBA system includes instruments for clinical interviewing, observing

behavior in group settings, and observing behavior during test sessions. These direct assessment instruments provide cross-checks on information obtained from other sources as well as providing new information that is not available from other sources.

### Semistructured Clinical Interview for Children and Adolescents

The Semistructured Clinical Interview for Children and Adolescents (SCICA; McConaughy & Achenbach, 1994, 2001) applies empirically based assessment to interviews with 6- to 18-year-olds. The SCICA protocol form includes instructions plus open-ended questions and tasks covering activities, school, peer relationships, family relationships, self-perceptions and feelings, and selected problems reported by parents and/or teachers. For ages 6–11, there are optional tests of reading and math achievement, writing samples, and fine and gross motor screening. For ages 12–18, additional questions cover somatic complaints, substance use, and trouble with the law. During the SCICA, the interviewer makes brief notes on the protocol form regarding behavioral and emotional problems observed during the interview and reported by the child. The SCICA generally takes from 60 to 90 minutes, depending on whether optional sections are administered.

After finishing the SCICA, the interviewer scores the child on 120 observation items and 114 items describing the child's self-reported problems. Nineteen additional self-report items are scored for ages 12–18. Many of the SCICA items are similar to problem items on the CBCL/6–18, TRF, and YSR, but they are adapted to the interview setting. Each item is scored on the following 4-point scale: 0 = no occurrence; 1 = very slight or ambiguous occurrence; 2 = definite occurrence with mild to moderate intensity and <3 minutes duration; 3 = definite occurrence with severe intensity or ≥3 minutes duration.

The interviewer's ratings are scored on the SCICA profile, which resembles profiles for other ASEBA forms. The profile provides raw scores, *T*-scores, and percentiles for total observed problems, total self-reported problems, Internalizing, Externalizing, and eight syndromes. Five syndromes

# Cross-Informant Comparison - Syndrome Scale T Scores CBCL/TRF/YSR

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ID: 1315

Name: Robert Morane

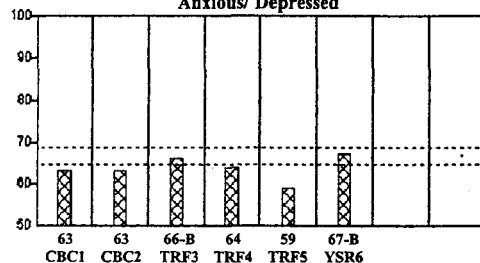
Gender: Male

Birth Date: 07/01/1986

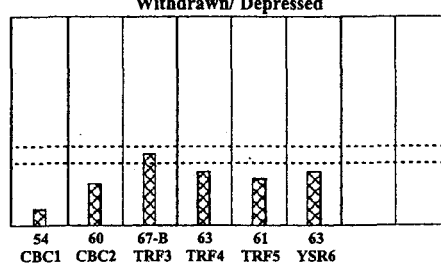
Comparison Date: 04/17/2000

Form	Eval ID	Age	Informant Name	Relationship	Date	Form	Eval ID	Age	Informant Name	Relationship	Date
CBC1	102	13	J. Morane	Biological Father	04/11/2000	TRF5	103	13	J. Dell	Classroom Teacher (F)	04/14/2000
CBC2	101	13	T. Morane	Biological Mother	04/10/2000	YSR6	106	13	Self	Self	04/12/2000
TRF3	104	13	J. Garcia	Classroom Teacher (M)	04/17/2000						
TRF4	105	13	J. Barnes	Classroom Teacher (M)	04/17/2000						

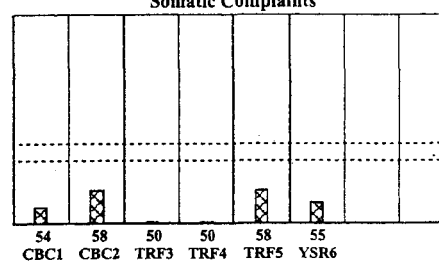
Anxious/Depressed



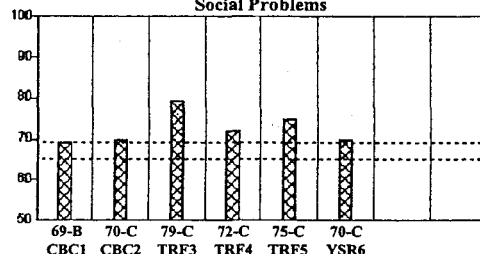
Withdrawn/Depressed



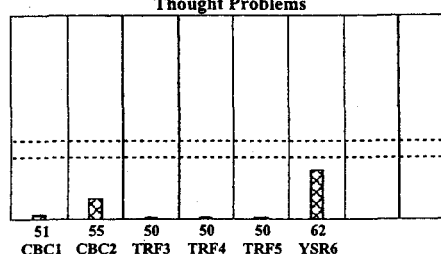
Somatic Complaints



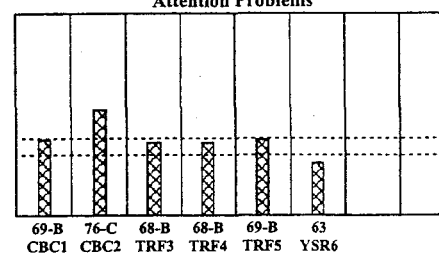
Social Problems



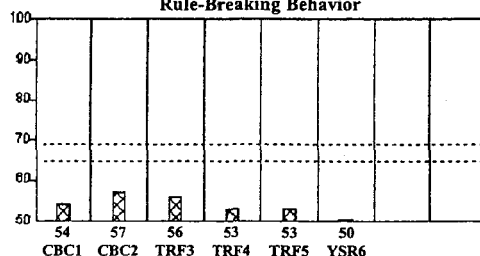
Thought Problems



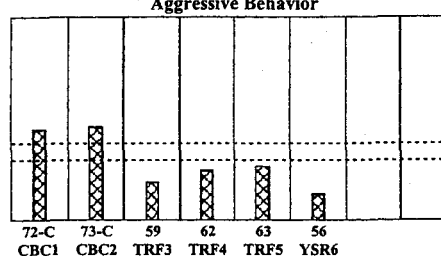
Attention Problems



Rule-Breaking Behavior



Aggressive Behavior



B = Borderline clinical range; C = Clinical range

Broken lines = Borderline clinical range

(F)=Female (M)=Male

nc = not calculated due to insufficient data

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FIGURE 18.7. Bar graph comparisons of CBCL, YSR, and TRF syndrome scores for 13-year-old Robert Morane.



are based on ratings of observed problems: *Anxious*, *Withdrawn/Depressed*, *Attention Problems*, and *Self-Control Problems*. Three syndromes are based on ratings of the child's self-reported problems: *Anxious/Depressed*, *Aggressive/Rule-Breaking*, and *Somatic Complaints*. (for ages 12–18 only). Six DSM-oriented scales that are like those of the CBCL/6–18, TRF, and YSR are also scored on a profile for the SCICA.

The SCICA profiles differ from other ASEBA profiles by comparing a child's scores to scores for clinically referred children rather than to nonreferred children. The SCICA profiles visually display the levels of problems revealed during the clinical interview in relation to levels of problems for other clinically referred children. Like other ASEBA profiles, scores on most SCICA scales are significantly higher for clinically referred children than for demographically similar nonreferred children (McConaughy & Achenbach, 2001). In addition, scores on five SCICA syndromes, plus total observations, total self-reports, and Externalizing, were found to be significantly higher for children who were eligible for special education for emotional or behavioral disorders (EBD) than for matched samples of nonreferred children.

### Direct Observation Form

The Direct Observation Form (DOF; Achenbach, 1986; McConaughy, Achenbach, & Gent, 1988) is used to rate observations of children's behavior in group situations. In space provided on the DOF protocol, the observer writes a narrative description of the child's behavior as it occurs over a 10-minute interval. The observer also checks boxes to indicate whether the child is on task at the end of each 1-minute interval within the 10-minute period. Immediately after the 10 minutes, the observer scores the child on 96 DOF items, using a 4-point scale similar to the scale for the SCICA. Eighty-six DOF items have counterparts on the TRF, while 73 have counterparts on the CBCL/6–18.

DOF ratings are scored on a profile for ages 5–14. The DOF computer program provides a mean on-task score, plus raw scores and *T*-scores for Internalizing, Externalizing, total problems, and six syn-

dromes: *Withdrawn-Inattentive*, *Nervous-Obsessive*, *Depressed*, *Hyperactive*, *Attention Demanding*, and *Aggressive*. The DOF profile was normed on 287 nonreferred 5- to 14-year-olds.

Because children's behavior may vary considerably from one occasion to another, we recommend that at least three separate 10-minute samples of behavior be rated, preferably on different days. The DOF computer program prints profiles based on averages of all item and scale scores for up to six observation sessions. To compare a child's problems with those of other children in the same setting, the program also prints a profile of scores averaged from observations of one or two comparison children.

DOF observations can be done by professionals or paraprofessionals, such as teacher aides, child-care workers, and trained lay observers. The DOF is especially useful for documenting problem behaviors in classrooms and other contexts, such as group activities in residential facilities and summer programs. Using the DOF, direct observers may detect behaviors that are not readily assessable by other means, as well as corroborating problems reported by other informants.

### Test Observation Form

Cognitive testing is commonly used to assess children experiencing academic problems. Moreover, comprehensive psychoeducational evaluations, which generally include cognitive testing, are required to qualify children for special education services (Individuals with Disabilities Education Act, 1990; reauthorized 1997). The structured and relatively uniform conditions of cognitive test sessions offer unique opportunities for observing problems that may not be apparent under the more variable conditions of home or school. Examiners' observations may also contribute to their evaluations of children's test performance.

To obtain systematic observations of test session behavior, we developed the Test Observation Form (TOF; McConaughy & Achenbach, 1999), modeled on the DOF and SCICA observation forms. To develop the TOF, we selected appropriate items from the DOF and from the SCICA observation form and added new items for prob-

lems specific to testing situations. Many TOF items also have counterparts on the CBCL/6-18, TRF, and YSR. Each TOF item is scored on a 4-point scale similar to the DOF and SCICA. Examiners are instructed to score the one item that best describes each observed characteristic, based on written scoring rules. During cognitive testing, the examiner briefly notes observations of the child's behavior. After finishing the testing, the examiner rates the child on 126 TOF items that describe behavioral and emotional problems observed during testing.

Analyses of TOF scores for 463 clinically referred 6- to 16-year-olds yielded four syndromes: *Attention Problems/Uninhibited, Withdrawn, Anxious*, and *Language/Motor Problems*. There was also a weaker *Impulsive* syndrome. Scores on the Attention Problems/Uninhibited syndrome have significantly discriminated children with Attention-deficit/hyperactivity disorder (ADHD) from matched samples of clinically referred children without ADHD.

Examiners can use the TOF to obtain systematic ratings of their test session observations. Examiners can also compare an individual's raw scores on the four TOF syndromes and total problems to mean scores for clinically referred and nonreferred samples.

## APPLICATIONS OF ASEBA IN CLINICAL AND SCHOOL CONTEXTS

ASEBA procedures are designed for easy application to many tasks under many conditions, as outlined in the following sections. More detailed illustrations of practical applications under diverse conditions are presented in the ASEBA manuals (Achenbach & Rescorla, 2000, 2001, 2003; McConaughy & Achenbach, 2001).

### Intake Assessments in Mental Health Settings

It is helpful to have forms completed by appropriate informants early in the evaluation process. For example, if parents are seeking mental health services for their child, the CBCL/1½-5 or CBCL/6-18 can be mailed to them for completion before their first in-

terview. If it is impractical to have parents complete the CBCL in advance, 20 minutes can be provided at the beginning of their visit for them to complete the relevant form. Whenever possible, it is desirable to have each parent or parent surrogate complete a separate form, rather than having only one parent do it or having them collaborate. By having each one complete a separate form, practitioners can be more certain of obtaining each one's own views.

A receptionist or other person who is familiar with the CBCL should be available to answer questions about the overall purpose of the CBCL and the meaning of words. For respondents who may not be able to complete forms independently, the following procedure is recommended: An interviewer hands the respondent a copy of the relevant form while retaining a second copy. The interviewer says, "I'll read you the questions on this form and I'll write down your answers." Respondents who can read well enough will usually start answering the questions without waiting for them to be read. However, even respondents who are not able to read well can be helped by seeing the standardized format of the questions. Interviewers need not have clinical training and should not clinically probe the respondents' replies. Instead, to maintain standardization, interviewers should adhere closely to what is on the forms, while explaining any words that respondents do not understand.

If there is time to score profiles before the practitioner sees the parents, the practitioner looks at the profiles and CBCLs completed by the parents. The practitioner can then ask the parents if they had any questions about the CBCL and can use their comments and the items endorsed on the CBCL as take-off points for interviewing.

When youths and adults are seen for services, they can be asked to complete the YSR or ASR. These forms can serve as "ice breakers" in that the respondents often endorse items and write comments that provide practitioners with opportunities to raise issues that are otherwise hard for people to discuss.

### Initial Assessments in School Settings

In schools, the C-TRF and TRF can be used as key components of teachers' referrals for

evaluation of behavioral and emotional problems and disorders, such as attention-deficit/hyperactivity disorder. The C-TRF and TRF can also be useful for screening for behavioral and emotional problems in children with language delays or learning disabilities. By completing these forms, teachers score children's adaptive functioning and problems in ways that enable practitioners to compare the teachers' reports with national norms for the child's age and gender. Because the forms encourage teachers to write their concerns about the child, the best things about the child, and descriptions of particular problems, teachers can provide specific details that facilitate communication and cooperation. If one of a child's teachers initiates a referral, the practitioner can ask the child's counselor and other teachers to complete the C-TRF or TRF in order to document similarities and differences in how the child's functioning is perceived.

### Additional Assessments

By having ASEBA forms completed during initial assessments, practitioners obtain a picture of the individual's functioning on which to base plans for further assessments and interventions. For example, if initial CBCLs show that a child is in the clinical range on the School scale and on one or more problem scales, the practitioner may request parents' permission to have the child's teachers complete the TRF. Conversely, if initial TRFs indicate that further evaluation is needed, parents can be asked to fill out the CBCL for comparison with the TRF results and with other data about their child.

Whereas parent, teacher, and self-report forms document functioning over periods of months, as reported by involved informants, the SCICA, DOF, and TOF assess specific samples of behavior rated by trained observers. Because most mental health practitioners use clinical interviews to assess child clients, practitioners can routinely use the SCICA to score what children do and say during interviews. When the scores are displayed on the SCICA profile, they enable practitioners to identify areas in which children manifest or report problems and to compare these problems to what was

revealed by data from other sources. Because practitioners can flexibly tailor the SCICA to their needs, the SCICA can achieve several goals of clinical interviews, such as obtaining children's own views of problems and obtaining samples of interactions with the practitioner who may be the provider of subsequent services. The SCICA can also help practitioners uncover issues that may not be revealed by reports from others, evaluate children's candidacy for talking therapies versus other approaches, and build therapeutic alliances.

The DOF is especially helpful for documenting functioning in school classes and other group situations. Determination of eligibility for special education often requires the type of observational data obtained by the DOF. The DOF may also reveal reasons for discrepancies between reports by different teachers and discrepancies between reports by teachers, parents, and children. For example, the DOF may document behaviors that are not reported by some teachers, as well as variations in behavior across settings.

If cognitive tests are administered, the TOF can document functioning in the test situation that can identify similarities and differences between what is seen by the examiner and what is reported in other contexts. If children have difficulty on tests, the TOF may reveal aspects of functioning that are not evident elsewhere but that may interfere with effective learning and problem solving. The TOF may also document behavioral signs of attention and learning problems.

### Evaluations of Progress and Outcomes

Initial assessments guide decisions about whether help is needed and, if so, what kind of help. As interventions proceed, the effects should be periodically evaluated to determine whether functioning is improving, worsening, or remaining the same. Although interventions are often targeted on relatively specific aspects of functioning, such as aggression, attention problems, or social skills, reassessments should include a broad range of competencies and problems. If only the specific targets of the interventions are reassessed, we may miss both unfavorable and favorable changes occurring

in other areas. For example, if attention problems are targeted for change, reassessments only of attention problems could miss worsening or improvements in other areas, such as depression and social skills.

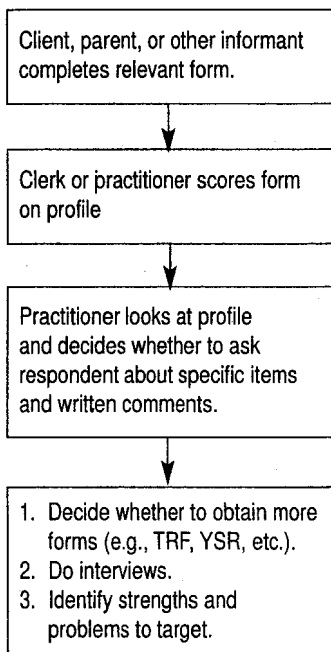
ASEBA instruments administered prior to interventions can be repeated periodically to assess change as perceived by different informants. If ASEBA instruments are to be readministered over intervals shorter than the baseline period specified for ratings on the instrument (e.g., 6 months on the CBCL/6–18, YSR, ASR, and ABCL), the instructions can be changed to specify shorter periods (e.g., 2 months). However, to avoid confounding the length of rating intervals with changes in what is being rated, both the initial and subsequent reassessments should specify the same rating periods (e.g., 2 months for the initial and subsequent assessments). Because the standard instructions specify 2-month intervals for the CBCL/1½–5, C-TRF, and TRF, there would typically be no need to change them. Because the SCICA, DOF, and TOF capture specific time samples, there would also be no need to change them. Figure 18.8 out-

lines a typical sequence for using ASEBA instruments in clinical and school settings.

## CROSS-CULTURAL APPLICATIONS

ASEBA procedures are designed to be used by diverse practitioners under diverse conditions. The flexibility with which ASEBA procedures can be used has inspired translations into 65 languages, as well as published reports of findings from 50 cultures (Bérubé & Achenbach, 2003). As mental health services have advanced in recent decades, ASEBA instruments have been used to assess large epidemiological samples of people around the world. This has fostered international collaborations to assess cross-cultural similarities and differences in rates, correlates, and patterns of problems. For example, Crijnen, Achenbach, and Verhulst (1997, 1999) have compared CBCL Internalizing, Externalizing, Total Problems, and syndrome scores for 13,697 children from 12 cultures. The worldwide use of ASEBA instruments has also made it possible to compare developmental trajectories in different cultures. For example, Dutch and American studies found similar long-term predictive pathways from ASEBA scores in childhood and adolescence to ASEBA scores and signs of disturbance in adulthood (Achenbach, Howell, McConaughy, & Stanger, 1995, 1998; Ferdinand & Verhulst, 1995a, 1995b; Ferdinand, Verhulst, & Witznitzer, 1995).

The diverse translations and cross-cultural studies make ASEBA forms especially useful for assessing the many refugees and immigrants whose host countries need to provide appropriate educational and mental health services. When questions arise about whether particular behaviors are pathological or are normative for people from a particular culture, scores obtained on forms in their native language can be compared with scores obtained by other people from the same culture. (For the convenience of users who do not speak the relevant languages, the foreign language forms can be scored on English-language hand-scored or computer-scored profiles.) The translations include Latino Spanish translations that were developed through the collaboration of people from diverse Latino back-



**FIGURE 18.8.** Typical sequence for using ASEBA instruments in clinical and school settings.

grounds, as well as Castillian Spanish translations.

## RESEARCH APPLICATIONS

ASEBA instruments are easy to use for research, as well as for practical applications. During their development, ASEBA forms are subjected to research on their items, scales, norms, reliability, validity, discriminative power, and correlates. Because so much remains to be learned about assessment, prevention, and treatment of psychopathology, ASEBA forms are designed to encourage further research on diverse topics and to facilitate communication between researchers from many backgrounds. To help researchers, practitioners, and trainees access studies employing ASEBA instruments, the *Bibliography of Published Studies Using ASEBA Instruments* (Bérubé & Achenbach, 2003) is updated periodically. Available on a CD-ROM that now lists some 4,500 published studies by some 8,000 authors, the bibliography enables researchers, practitioners, teachers, supervisors, and trainees to identify studies grouped under hundreds of topics and to view or print full bibliographic references for studies and topics chosen by the user. Table 18.2 lists examples of the topics under which publications are listed in the bibliography, with the number of published studies shown in parentheses.

### Kinds of Research

ASEBA instruments are designed to advance knowledge about psychopathology and adaptive functioning through many kinds of research, as outlined in the following sections.

#### Research on Causes of Problems

Because many factors are related to psychopathology, many approaches are needed to elucidate the causal factors. Research on genetic influences is expanding rapidly, with at least 54 published studies reporting use of ASEBA instruments in genetic research (e.g., Hudziak, Rudiger, Neale, Heath, & Todd, 2000). The ASEBA instruments are especially useful for genetic research, because ASEBA scales provide quantitative

measures that are far more flexible and powerful than categorical diagnoses, which classify all individuals as either having or not having each disorder. The ASEBA scales also offer the advantages of providing age-specific and gender-specific norms and distributions of scores. Another major advantage is that phenotypical variations in functioning can be captured by combining data from multiple raters who see subjects in different contexts and at different times. Data from the different raters can be combined to form phenotypical measures that can reflect underlying genotypical characteristics more validly than single measures or diagnostic classifications.

Other possible causal factors have been researched in many studies employing ASEBA instruments. These factors include traumatic experiences, parent-child relationships, brain damage, and many medical disorders (e.g., Ackerman, Newton, McPherson, Jones, & Dykman, 1998; Light et al., 1998).

#### Treatment and Outcome Research

Managed care firms, government agencies, schools, and other funding sources are increasingly demanding evidence for the effectiveness of services. This requires both rigorous, well-controlled research studies and continuing use of outcome assessments in everyday practice. ASEBA instruments have been used in numerous controlled studies of treatments and preventive interventions, including medication, behavior therapy, group therapy, parent training, and psychotherapy (e.g., Kazdin & Crowley, 1997; Kendall, 1994; McArdle et al., 2002). Because ASEBA instruments can be routinely used in most service settings, they can be administered at intake and again following services to measure change over the course of interventions for each case, as well as for research on particular interventions and programs.

To systematically measure change, users should ensure that all clients receive the same standardized assessments before interventions begin and then again after the interventions end. Because the duration of interventions often varies, it is helpful to target a particular interval for performing all outcome assessments. For example, if the

**TABLE 18.2. Examples of Topics Listed in Bibliography of Published Studies Reporting Use of ASEBA Instruments<sup>a</sup>**

Abdominal Pain (11)	Drug Studies (73)	Parent-Child Relationships (214)
Abuse (104)	DSM (65)	Parent Management Training (15)
Academic Performance (72)	Dutch (177)	Parent Perceptions (180)
ADHD (332)	Emotional Disorders (90)	Parent Psychopathology (120)
Adjustment (341)	Epidemiology (120)	Parent Stress (34)
Adolescence (604)	Epilepsy (26)	Pediatrics (86)
Adoption (49)	Factor Analysis (36)	Peer Interaction (87)
African American (55)	Family Functioning (293)	Poverty (38)
Aggression (179)	Family Problems (57)	Pre-School (205)
Alcohol (45)	Follow-up (382)	Prenatal (32)
Anger (16)	Foster Care (26)	Preterm (14)
Antisocial Conduct (76)	Gender Problems (24)	Prevention (19)
Anxiety (124)	Genetic Factors (54)	Psychiatric Disorders (70)
Arthritis (24)	German (66)	Psychosocial Development (32)
Asian (24)	Hispanic (47)	PTSD (34)
Asthma (41)	HIV (14)	Reading Disability (14)
At-Risk (229)	Homeless (33)	Resilience (14)
Attachment (38)	Hormones (27)	Rheumatic Disease (15)
Australian (117)	Hyperactivity (174)	Schizophrenia (21)
Autism (16)	Illness (38)	School Behavior (47)
Behavior Change (34)	Injury (35)	Self-Concept (35)
Birth Defects (19)	Inpatients (88)	Self-Esteem (34)
Brain Damage (28)	Intelligence (23)	SES (52)
British (51)	Internalizing-Externalizing (194)	Sex Differences (26)
Canadian (154)	Interview (32)	Sexual Abuse (85)
Cancer (47)	Israeli (37)	Siblings (56)
Caregivers (23)	Language Disorders (20)	Sickle Cell Anemia (14)
CBCL Reliability (17)	Learning Problems (67)	Social Competence (154)
CBCL Validity (32)	Leukemia (15)	Special Education (20)
Chinese (24)	Life Events (13)	Stress (125)
Cognitive Ability (53)	Low Birthweight (36)	Substance Abuse (76)
Comorbidity (69)	Marital Problems (45)	Suicide (44)
Conduct Disorder (122)	Mental Retardation (32)	Swedish (23)
Conflict (28)	Multiple Informants (20)	Taxonomy (27)
Coping Strategies (63)	Native American (10)	Teacher Perceptions (54)
Critiques & Reviews (98)	Neglected (18)	Temperament (33)
Cross Cultural Research (696)	Neuropathology (34)	Thai (10)
Cross-Informant Program (17)	Norwegian (32)	Therapy (31)
Delinquent Behavior (48)	Obesity (14)	Tourette's Syndrome (22)
Depression (251)	Obsessive-Compulsive Behavior (20)	Trauma (41)
Developmental Changes (24)	Oppositional Defiant Disorder (36)	Treatment (228)
Developmental Disorders (25)	Outcomes (221)	TRF (430)
Diabetes (46)	Outpatients (76)	Turner's Syndrome (16)
Diagnosis (85)	Pain (18)	Violence (49)
Disruptive Behavior (63)	Parent Characteristics (187)	YSR (324)
Divorce (54)		
DOF (24)		

Note. Numbers in parentheses indicate the number of published studies. <sup>a</sup>Bérubé & Achenbach, 2003.

interventions in a particular setting typically last from 2 to 4 months, an interval of 6 months between intake and outcome assessments may be suitable. A 6-month interval is long enough to ensure that all cases will have finished their interventions, but not so

long that the effects will become diluted or that many cases are lost to follow up. A uniform interval has the advantage of keeping data comparable across many cases and minimizing effects that may be associated with terminating or with dropping out of

treatment. For example, some people may decide to terminate because they are feeling especially well at that moment, which might change soon afterwards.

#### Longitudinal and Developmental Research

Assumptions are often made about the likely long-term outcomes of particular kinds of problems. Some problems, for example, are assumed to lead to poor outcomes, whereas other problems are assumed to be benign. There is a growing body of longitudinal and developmental research on the course of various kinds of problems. However, to maximize the value of such research, it is important to use assessment procedures that are as similar as possible at each assessment point. Assessment procedures also need to take account of developmental changes. ASEBA instruments are designed to maintain continuity of format and scaling models over multiple developmental periods but also to take account of developmental changes in problems, competencies, and sources of data. Numerous studies demonstrate strong predictive relations between ASEBA scores from early childhood through adulthood (e.g., Achenbach et al., 1995; Ferdinand et al., 1995; Hofstra et al., 2000, 2002).

Longitudinal studies also reveal changes in syndrome patterns across certain developmental transitions. For example, in a national sample, the ASEBA Aggressive Behavior syndrome identified in children and adolescents was found to separate into two syndromes among adults (Achenbach, 1997; Achenbach & Rescorla, 2003). One adult syndrome, called *Intrusive*, consisted of socially intrusive but not the overtly aggressive behavior that is included in the preadult Aggressive Behavior syndrome. The other adult syndrome, called *Aggressive Behavior*, retained the overtly aggressive behaviors of the preadult Aggressive Behavior syndrome. High scores on both adult syndromes were strongly predicted by high scores on the preadult Aggressive Behavior syndrome. However, the splitting of Aggressive Behavior into two syndromes suggests that during the transition to adulthood, some aggressive adolescents become less overtly aggressive while still retaining their intrusive characteristics. Further research of this sort is needed to identify both continu-

ities and discontinuities that highlight opportunities for change through appropriate interventions.

#### SUMMARY

ASEBA instruments assess problems and adaptive functioning from multiple perspectives. Syndrome scales for scoring problems are derived from statistical analyses that reflect actual patterns of problems found to occur in large samples of individuals. Nationally normed ASEBA profiles display syndrome, DSM-oriented, and adaptive functioning scales scored from ratings by parents, teachers, caregivers, others who know the individuals who are being assessed, and the individuals themselves. Profiles for scoring teachers' ratings include empirically based and DSM-oriented Inattention and Hyperactivity-Impulsivity subscales. Other ASEBA profiles display scales scored from ratings by clinical interviewers, observers of behavior in group settings such as classrooms, and psychological examiners. In addition to quantitative scores, ASEBA forms obtain descriptive details of functioning as reported by each respondent.

Software for scoring ASEBA instruments displays cross-informant comparisons of item and scale scores. To enable users to evaluate levels of agreement between informants, the software displays correlations between scores obtained from different informants and comparisons with correlations obtained from large reference samples of informants. ASEBA software is available for scanning machine-readable ASEBA forms and for interactive entry of data by parents, teachers, and youths. ASEBA Web-Link provides Web-based applications.

ASEBA instruments are used for practical applications and research throughout the world, with translations in 65 languages and some 4,500 published reports from 50 cultures. Applications in clinical and school contexts include intake assessments, additional assessments needed for comprehensive evaluation, and evaluation of progress and outcomes. The numerous translations and cross-cultural studies make ASEBA forms especially useful for assessing refugees and immigrants whose host countries need to provide services. ASEBA forms

are easy to apply to many kinds of research, including research on causes of problems, treatment outcomes, longitudinal studies, and developmental changes.

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