

## CHAPTER I

# Defining Psychosocial Impairment

As noted in the Introduction, impairment in psychosocial functioning is usually a requirement for the definition of the vast majority of mental disorders of childhood and adolescence, as well as for the determination of some disabilities in this age range that arise from both medical and mental disorders. As was discussed in the manual for the adult version of the BFIS (Barkley, 2011a), the term “to impair” or “impairment” has been variously defined as:

- “To cause to diminish, as in strength, value, or quality” (*American Heritage Dictionary of the English Language*, 2000).
- “A disability, any loss of physiological, psychological, or anatomical structure or function” (*wikipedia.org*).
- “Weakening, damage, or deterioration, especially as a result of injury or disease” (*American Heritage Medical Dictionary*, 2009).
- “To make or cause to become worse; diminish in ability, value, excellence, etc.; weaken or damage” (*dictionary.reference.com*).
- “To damage or make worse by or as if by diminishing in some material respect” (*Merriam-Webster’s Medical Dictionary*, 2007).
- “A disorder in structure or function resulting from anatomic, physiologic, or psychologic abnormalities that interfere with normal activities” (*Mosby’s Medical Dictionary*, 2009).
- “A significant deviation, loss, or loss of use of any body structure or function in an individual with a health condition, disorder or disease” (American Medical Association, 2008).

Surprisingly, although psychosocial impairment is a criterion for the diagnosis of the vast majority of Axis I mental disorders for children and adolescents in DSM-IV-TR (American Psychiatric Association, 2000), the term itself is undefined in the manual. Instead, one finds the phrase “causes clinically significant distress or impairment in social, occupational, or other important areas of functioning” (p. 7) appended to the discussion of the term “disorder.”

Explicit in most definitions of “impairment” is that it represents diminished functioning in important psychosocial domains of human life. It is useful to contrast this idea with the meaning of the term “symptoms,” which are:

- “Any sensation or change in bodily function that is experienced by a patient and is associated with a particular disease” (*www.wordnetweb.princeton.edu*).
- “A departure from normal function or feeling which is noticed by a patient, indicating the presence of disease or abnormality” (*www.wikipedia.org*).
- “Something that a patient experiences in his or her body that is different from what is normal, and that may be the result of a disease or its treatment” (*www.gemzar.com*).
- “A sign of a disease or dysfunction (or illness)” (*American Heritage Dictionary*, 2000).
- “A feeling, sensation, or experience associated with or resulting from a physical or mental disorder and noticeable by the patient” (*Mosby’s Medical Dictionary*, 2009).

A “symptom” is therefore a physical, cognitive, or behavioral manifestation of a disorder. By contrast, “impairment” refers to the *consequences* that arise from the expression of the disorder, usually through its symptoms. These consequences usually include functional ineffectiveness in one or more major psychosocial domains of human life.

I previously noted (Barkley, 2011b) that a useful view of impairment could be found in the widely regarded definition of “disorder” by Wakefield (1992, 1997) in which a disorder is defined as a “harmful dysfunction” in an evolved mental or physical mechanism. “Impairment” in this definition is the harm that can result to an individual due to some such dysfunction. Such a mechanism is actually the concept of an adaptation as adopted from the field of biology; thus, disorders are dysfunctional adaptations that are harmful to the individual. Medical disorders are failures of or reduced functioning in physical adaptations (such as organ systems), and mental disorders represent failures of or diminution in psychological functions (such as intelligence, memory, thinking/reasoning, visual-spatial abilities, language) or psychosocial functions (e.g., mobility, self-care, self-sufficiency/independence, social exchange/reciprocity, mating/pair bonding, child rearing, and receptiveness to pedagogy/education). Adaptations are functional mechanisms that serve a purpose (solve a problem in the adaptive niche of that organism). Evolved adaptations are not trivial features or characteristics of an organism. They are biologically costly for the organism to develop and maintain and so must serve some useful purpose—that is, the benefits of the adaptation must outweigh the costs to that individual for possessing that mechanism. The loss of, failure in, or reduction in functional effectiveness of an adaptation therefore often results

in serious consequences (harm) for the individual: a reduced or lack of ability to continue to effectively address the adaptive problem(s) that mechanism evolved to solve. When the mechanism can no longer effectively solve the problems it evolved to address, the adaptive problems return, and the environment reacts with adverse consequences for that organism. Those consequences constitute the harm that may arise in response to such functional ineffectiveness. And that effectiveness and its attendant harms are what is meant here by the term “impairment.”

As discussed previously (Barkley, 2011b), the terms “impairment,” “deficiency,” “symptoms,” “disability,” and “disorder” are often used interchangeably both in everyday conversation and in the medical, psychiatric, and psychological literatures. It is important not to confuse them. The concepts of disorder, symptoms, and impairment can be thought of as separate components in the triadic sequence of events in reality—from the disorder to its symptoms (manifestations) to the functional impairment that ensues (ineffective performance that results in harm). That symptoms of psychiatric disorders, for instance, are to be thought of as being distinct from impairment is obvious in DSM-IV-TR (American Psychiatric Association, 2000), which makes the requirement of impairment in major psychosocial activities a separate criterion for establishing the presence of a psychiatric disorder apart from establishing the presence of symptoms that result from or constitute that disorder. In short, impairment and symptoms are not identical, either in their conceptualization or in reality. The severity of symptoms is only partially coupled to or correlated with the degree of impairment, sharing less than 50%—often less than 25%—of its variance (Barkley, 2011b; Gordon et al., 2006; Lewandowski, Lovett, & Gordon, 2009). The severity of symptoms therefore does not show a perfect or direct relationship to the severity of impairment. Other factors obviously must contribute to the eventual level of psychosocial impairment an individual may experience beyond just symptoms alone. In short, psychosocial symptoms are behaviors or cognitions, whereas impairments are consequences. To be inattentive often during classwork in school is a symptom; to turn in an incomplete worksheet and so receive a failing grade on the assignment is a consequence.

Impairment therefore represents both functional ineffectiveness—the inability to perform effectively in major domains of human life (adaptive problems)—and the harmful consequences that may result. When an individual no longer functions effectively in addressing the everyday major adaptive problems of human life, the environment kicks back in ways that are costly or harmful to the individual. Functional ineffectiveness in major life activities (adaptive problem domains) resulting in adverse consequences is therefore at the heart of the concept of impairment. A reduction in functional effectiveness that leads to no harm whatsoever in the absence of any accommodations, treatment, or habilitation is a trivial if not nonexistent form of impairment. In short, “no harm, no foul” (no disorder).

But what sorts of harm can be viewed as reflecting impairment? “Harm” in Wakefield’s definition typically refers to (1) increased risk of death, (2) increased morbidity (physical injury), or (3) a significant decline in functioning in a particular *major* human life activity that itself can result in greater morbidity, mortality, or suffering. Such major life activities are self-care, self-protection, and personal safety; self-sufficiency; peer and family relationships; education or receptiveness to pedagogy; and many others. A “major life activity” in this perspective refers to those

important adaptive domains that are largely or entirely universal to all humans of that age and are necessary to their ability to sustain their survival and see to their welfare and hence their long-term happiness (freedom from want or dissatisfaction). When the degree of dysfunction in an adaptation reaches a certain level, the individual may not be able to perform a major activity of daily life as well as the average, typical, or normal human—he/she has become significantly less effective. This ineffectiveness begins to have adverse consequences for the individual. Harm begins to accrue. As noted, both the reduction in functional effectiveness and the attendant consequences or harms that are coupled to it can be regarded as the essence of the concept of impairment. Those consequences can even serve as a gauge to the degree of functional ineffectiveness—the degree of one's impairment.

Especially important to understand in these views of impairment is the stipulation that the “normal” or average person is to serve as the standard against which the degree of functional ineffectiveness and attendant harm is to be judged (Gordon & Keiser, 1998). This is implied, if not explicitly stated, in the foregoing definitions of the terms “disorder” and “impairment.” It has been made explicit in the U.S. government's definition of the term “disability”; a term often used synonymously with “impairment.” For instance, the Americans with Disabilities Act (ADA) states that a disability is “an inability to function normally, physically or mentally.” It is an “inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to last or has lasted for a continuous period of not less than 12 months.” Under the ADA, the term “disability” means, with respect to an individual, “a physical or mental impairment that substantially limits one or more of the major life activities of [an] individual, a record of such an impairment, or being regarded as having such an impairment” (Americans with Disabilities Act, 1990). This definition was further clarified in the Equal Employment Opportunity Commission (EEOC) regulations regarding the ADA: “An individual is not substantially limited in a major life activity if the limitation does not amount to a significant restriction when *compared with the abilities of the average person*” (emphasis added). Impairment or disability is therefore “the inability to function in the normal or usual manner” (*Mosby's Medical Dictionary*, 2009). The normal or typical human (average person in the general population), not some highly intelligent, highly functioning, highly specialized, or highly educated peer group, is the standard against which impairment is judged.

In this manual, “impairment” means a loss or diminution in the functional effectiveness of human physical or mental adaptations. It views such functional ineffectiveness as typically being dimensional, not categorical, in nature. There can be degrees of diminution in the functioning of most physical or mental adaptations as opposed to all-or-none effectiveness. When the ineffective functioning reaches such a magnitude that it begins to result in an inability to adapt to (solve) the problems that arise in any major domain of human life for the individual, adverse consequences arise for that individual (harm ensues). At that point or threshold, the person may be said to be impaired.

Impairment is often construed in a trilevel hierarchical arrangement: (1) physical impairment (as when an organ system fails to function and leads to increased morbidity, as in diabetes); (2) cognitive-behavioral impairment, as when a delay in

intellectual or general cognitive ability becomes so delayed or deficient that it leads to deficient self-care and hence an increased risk for personal suffering, morbidity, or even mortality; and (3) psychosocial impairment, as when an individual's symptoms of a psychiatric disorder result in the loss of friendships, personal suffering, or increased morbidity (such as accidental injuries) or mortality (as in suicide). This manual concerns itself with the last or upper level of this hierarchy—the psychosocial arena of functional effectiveness. Its principal focus is on evaluating impairment in the context of psychiatric disorders or psychological problems, although the scales contained herein may also be of use in evaluating psychosocial impairment related to medical disorders. These major domains of human psychosocial life are likely to encompass the adaptive problems that some physical organs (the human brain) and most cognitive-behavioral adaptations evolved to address. It is likely to be at this level of adaptive problem solving that evolution (natural selection) has acted in the history of the species to create these lower-level cognitive-behavioral and even neurological adaptations.

This manual also adopts the criterion of the ADA that the normal, average, or typical human of that age is to serve as the standard for judging functional ineffectiveness and its harmful consequences. To make such a determination, there must be information on the normal or general population—the average person—with which the reports of the individual can be compared to assist with this judgment of impairment. One purpose of this manual is to provide normative information on the degree of functional ineffectiveness experienced by the general population of children and adolescents (ages 6–17) in their performance in a wide range of psychosocial domains of major life activities as reported by their parents.

## **Guidelines for Assessing Impairment or Disability**

This manual is not intended to set forth detailed guidelines for the clinical evaluation of disorders and impairment. The American Academy of Child and Adolescent Psychiatry and the American Academy of Pediatrics, among others, have published detailed practice standards that should be consulted for such information, and many textbooks on assessment also contain such information (e.g., Mash & Barkley, 2003). Here I merely summarize the essential or basic structure of such an evaluation as might be recommended by several advisory or governing bodies or laws in the United States.

## **Guidelines of the American Medical Association**

The American Medical Association (AMA; 2008) guidelines for evaluating impairment in adult mental disorders specify six areas of functional impairment for review in the evaluation of adults, many of which would apply to children and adolescents: (1) self-care and personal hygiene; (2) social and recreational activities; (3) the capacity for travel, including driving and using public transportation; (4) interpersonal relationships; (5) the capacity for concentration, persistence, and pace; and (6) employability. Five of these are psychosocial and one, interestingly, is cognitive-

behavioral (concentration, persistence, and pace). In determining the presence of impairment in an adult, the evaluator is encouraged to review information from other reliable sources, such as records from inpatient hospitalizations, outpatient treatment, day treatment programs, occupational therapy, work evaluations, and disability assessments. The patient's self-report of symptoms, their impact on these six functional areas, and the information gathered from other sources, as well as the findings from the objective clinical examination, are to be analyzed by the examiner in making a judgment of impairment or disability. The existence of any widely disparate or incongruent findings between patient self-reports and the other sources of information, including the clinical evaluation, should be scrutinized to determine the reasons for this disparity. (For a more detailed discussion of the AMA guidelines, see Leclair, Leclair, & Brigham, 2009.) Obviously, these requirements cannot be extrapolated to children as written. Self-reports of impairment in children or even teens may not be especially reliable and should be amended with the reports of parents and others who know the child well, such as teachers. Also, school (and education generally) is among the major domains of life activities of a child or teenager and would be substituted in the preceding AMA guidelines for the occupational domain of adults. The domain of travel might also be omitted for a child, at least until he/she is of an age as an adolescent to be permitted to drive a motor vehicle or take public transportation unsupervised.

Also noteworthy is the fact that nowhere in the AMA guidelines is there any consideration given to comparing the patient's self-reports with those of a general population sample to determine the extent to which the patient's reports are normal, typical, or deviant (abnormal). This raises the question of just to what extent typical, average, or normal people consider themselves to be functioning effectively or ineffectively (impaired) in these psychosocial domains. This problem is only somewhat less difficult in the evaluation of impairment in children and teenagers, for which very few instruments are available for parent-reports with norms from a representative sample of the child or adolescent population. It is typically left to the clinician to make the determination of impairment based on his/her experience and training.

But on what is the clinician relying in doing so? Besides their training and experience, most clinicians likely rely on the reports of the parents and teachers and, to some degree, that of the child or teen patient. However, a few clinicians rely on more structured methods for evaluating impairment, such as the GAF Scale, for which there is no normative information on the general population. And fewer still rely on the very limited number of standardized methods commercially available that have normative information for determining psychosocial impairment.

### **Guidelines of the Social Security Administration**

The Social Security Administration (SSA) guidelines ([www.ssa.gov/disability/professionals/bluebook/112.00-MentalDisorders-Childhood.htm](http://www.ssa.gov/disability/professionals/bluebook/112.00-MentalDisorders-Childhood.htm)) that are provided for the determination of a disability in children closely follow the guidelines for adults, especially in requiring the establishment of the presence of a recognized medical or mental disorder. Those guidelines also stipulate that medical and psychological evidence of that disorder must be documented by the clinician and that evidence of

impairment be documented for up to five functional domains (depending on age). These include “motor function; cognitive/communicative function; social function; personal function; and concentration, persistence, or pace. In most functional areas, there are two alternative methods suggested for documenting the required level of severity: (1) Use of standardized tests alone, where appropriate test instruments are available, and (2) use of other medical findings.”

Consistent with other definitions of impairment and the “average” or “normal” person standard for its determination, impairment in the SSA guidelines is determined relative to the chronological age of the child in most cases. Degree of impairment is also specified as mild, moderate, marked, or extreme. The guidelines further state that

a marked limitation may arise when several activities or functions are impaired, or even when only one is impaired, as long as the degree of limitation is such as to interfere seriously with the ability to function (based upon age-appropriate expectations) independently, appropriately, effectively, and on a sustained basis. When standardized tests are used as the measure of functional parameters, a valid score that is two standard deviations below the norm for the test will be considered a marked restriction.

Apart from the use of standardized tests for assessing the degree of motor and cognitive impairment in a child or teen, the judgment of impairment in the remaining domains (social, daily self-care) is largely determined by the clinician. Again, no emphasis is given to comparing the parent ratings of impairment with those provided by parents in a general population sample, something that would seem to be a necessary piece of the overall determination of impairment and disability.

This is not to say that some structured methods for evaluating psychosocial impairment in children have not been developed previously in the research literature on the subject. Several certainly have; however, just a few of them were given to a large sample of the U.S. population of parents for reports about their children or teenagers to determine the extent to which those parents reported various degrees of functional impairment in specific psychosocial domains. Furthermore, those methods cover a very limited number of domains of daily life activities. A few methods for evaluating impairment in children are considered here to illustrate their differences from the BFIS-CA.

## **Methods for Evaluating Psychosocial Impairment**

### ***Clinician Ratings***

One of the most commonly used clinician ratings for determining the presence of psychosocial impairment in children is the CGAS (Shaffer et al., 1983). It is essentially the downward extension of the GAF Scale for adults as set forth in the current version of the DSM (as of this writing, DSM-IV-TR; American Psychiatric Association, 2000, p. 32). The GAF Scale is to be completed by a clinician using a single dimension on a single scale from 1 to 100 concerning the person’s overall general functioning. For adults, the clinician is to “consider psychological, social, and occu-

pational functioning on a hypothetical continuum of mental health–illness” but is not to include “impairment that is due to physical (or environmental) limitations.” The CGAS specifies a somewhat different range of domains: psychological, social, and school functioning (home, school, and peer relations). The developers of the CGAS indicate that

raters are expected to synthesize their knowledge about the child’s social and symptomatic functioning and condense this information into a score. For example, a score of 61–70 indicates that the child has some difficulty in a single area but is generally functioning pretty well. Scores above 70 are considered to be in the normal range, whereas scores on the lower end of the continuum (below 60) indicate greater impairment. For instance, the lowest ratings refer to a need for constant supervision (1–10) or considerable supervision (11–20).

To illustrate this hypothetical continuum, consider the lowest rating of 1–10 for the CGAS: “Needs constant supervision (24-hour care) due to severely aggressive or self-destructive behavior or gross impairment in reality testing, communication, cognition, affect or personal hygiene.” Now contrast this with the highest rating of 91–100: “Superior functioning in all areas (at home, at school and with peers); involved in a wide range of activities and has many interests (e.g., has hobbies or participates in extracurricular activities or belongs to an organized group such as Scouts, etc.); likeable, confident; ‘everyday’ worries never get out of hand; doing well in school; no symptoms.”

Several problems exist with such a simple global judgment, especially as applied to children or teens. Interjudge (clinician) reliability of the scale is reported to range from .83 to .90 in research settings in which training on the rating system with clinical cases, videotaped vignettes, or test reports is likely to have been received (Bird, Canino, Rubio-Stipec, & Ribera, 1987). However, reliability is only moderate or lower in more routine clinical settings (.66 or less). The scale has been used widely in a number of research studies (at least 69 studies as of 2004; see Schorre & Vandvik, 2004) for various child psychiatric disorders. It thus has some evidence of validity for indicating degree of childhood competence or functional effectiveness, as well as in response to various interventions. Another disadvantage is that the scale does not distinguish among various major domains of psychosocial functioning. Instead, it involves simply a global summary rating that incorporates principally three domains (home, school, and peer relations) that are to be considered in the single summary judgment of the clinician. It is therefore unclear as to just what the specific nature of the impairment is or, more precisely, in what domains of life the impairment is occurring. Lower ratings appear to represent not just more severe but more pervasive impairment across multiple domains. Again, the nature of these domains is unclear. Just as important is the lack of any information on just how the general population of either adults or children would be rated on such a scale, information that would serve as a critical benchmark in determining what is normal or average for people in the United States. If the clinician has no information on how the general population would rate on such a scale, especially relative to a specific age group, then the reliability (and hence validity) of such judgments surely has to be limited. Finally, because clinicians are determining the ratings of

impairment on this scale, this approach becomes costly and cumbersome, requiring a clinical evaluation by a professional. Such a measure could not be employed effectively as a screening tool for detecting impairment in various settings that did not involve a trained professional.

Two other clinician rating systems have been used with children in various research studies, including the GAF Scale without modification, as published in the DSM, and the Global Assessment of Psychosocial Disability in the 10th edition of the *International Classification of Diseases* (ICD-10; World Health Organization, 2001; Schorre & Vandvik, 2004). Both utilize the 1–100 single-dimensional rating method similar to the CGAS. They vary in their guidelines, their anchor-point descriptions for the numerical codes, and their psychometric properties. Both also suffer from many of the same problems discussed for the CGAS. Though employed in numerous research studies, these scales are rarely utilized in clinical practice. This is most likely owing to both lack of training and lack of normative information from which to draw valid conclusions about an individual's actual level of functioning relative to the population. An alternative to the CGAS used in some studies of children is the Child and Adolescent Functional Assessment Scale (Hodges & Kim, 2000; Hodges & Wong, 1996), which requires clinicians to rate a child for his/her impairment in eight domains (and to rate the caregiver in two domains). Although it provides a much broader range of domains of potential impairment, this scale suffers from the same limitations as the other clinician ratings. These include the requirement that a trained clinician provide the score and the absence of norms on a general population sample to assist with the interpretation and even validity of the ratings, among others.

### **Parent Ratings**

Several parent-completed rating scales exist for the evaluation of psychosocial impairment. Two of these include normative information for the United States and other nations and provide scores reflecting impairment in several different domains. One such scale is the first page of the Child Behavior Checklist (CBCL; Achenbach, 2001) for parents. Parents are asked to rate their children's proficiency in seven areas (sports, hobbies, organizations and clubs, chores, number of friendships, quality of social relationships, and academic performance in various subjects). Each of these items is rated on a 3-point scale (below average, average, above average) of proficiency. The first two domains are also rated for both engaged time and proficiency. Three other questions also ask about school: receipt of special educational services at school, grade repetition, and academic or other problems in school. The item responses are then converted to a numerical score and scores summed to obtain a total domain score. Three domains of impairment are computed: activities, social engagement, and school. The CBCL has been employed in numerous research studies, is widely used in clinical practice, and has satisfactory evidence for its reliability and validity. Drawbacks to the impairment portion of this scale might include its limited range of scores for each item (3-point ratings) and the small range of domain scores (three domains). But clearly the CBCL covers a broader range of domains than do the CGAS or GAF Scale clinician ratings.

A similar rating scale to the CBCL that is well normed and contains some items reflecting impairment is the Behavior Assessment System for Children–2 (BASC-2; Reynolds & Kamphaus, 2004). Items on the scale that reflect impairment are combined to form ratings in two domains: activities of daily living and social skills. The psychometric properties (reliability, validity) of the scale are considered sound or satisfactory (Flanagan, 1995; Gladman & Lancaster, 2003; Reynolds & Kamphaus, 2004). Versions are available for ages 2–5, 6–11, and 12–21 years. Limitations of this scale are probably the same as those for the CBCL—a limited scoring range for the impairment items (4-point scale) and a limited range of domains of impairment (daily living, social engagement).

A more recently developed scale designed specifically to assess impairment in children and adolescents in several domains of major life activities is the Impairment Rating Scale (IRS; Fabiano et al., 2006). The parent version of the scale evaluates six domains: peer relationships, sibling relationships, relationships with parents, academic progress, self-esteem, and influence on family functioning. An overall impairment score is also calculated. The parent describes the nature of the impairments in each domain in his/her own words (not scored) and then places an “X” along a line approximately 7.25 inches in length to indicate the child’s degree of impairment in this domain ranging from “*no problem/definitely does not need treatment or special services*” to “*extreme problem/definitely needs treatment or special services*” (Fabiano et al., 2006, p. 371, original emphasis). The mark is converted to a score by subdividing the line into seven equal segments (of 1 inch) and giving a numerical score of 0 (“no problem”) to 6 (“extreme problem”), depending on which segment the “X” is placed on. This is a rather cumbersome scoring system made all the more problematic by the fact that there are no descriptors of any anchor points between the lowest and highest (beginning and end) endpoints of the line. The rating scale has some evidence for satisfactory reliability and validity from four separate studies reported by the authors (Fabiano et al., 2006). Besides the scoring system, another problem with this scale is the lack of nationally representative norms for children and teens to permit clinicians to use the scale to determine how the parent rates the child relative to a sample of children of the same age and sex. Although two of the studies reported by the authors used large samples, they were limited mainly to the western New York state area (mainly a single school district) in one study and to Halifax, Nova Scotia, schools in the other study. Such samples are not representative of all U.S. (or Canadian) children and so limit what normative information is available for clinical use. As of this writing, the IRS and the New York State normative information could be obtained for free from [www.wings.buffalo.edu/adhd](http://www.wings.buffalo.edu/adhd).

It is certainly the case that rating scales assessing quality of life (QOL) in children (see Riley et al., 2006, for an example) may overlap in their domain content with rating scales of impairment (such as in school, recreation, social relationships, family, and other domains). But the former scales are not evaluating the degree of functional ineffectiveness (impairment) being reported in these areas, which is the meaning of “impairment.” Instead, QOL scales evaluate the extent of satisfaction, happiness, or sense of personal well-being of an individual within these domains of life. Degree of happiness or satisfaction in any domain may be low, but that does not mean the individual can be considered to be functioning ineffectively or to be

impaired or disabled in them. For instance, factor analysis of the scale used in the Riley and colleagues (2006) study revealed five dimensions labeled as satisfaction (with health and self), comfort (physical, emotional, restricted activity), resilience, risk avoidance, and achievement (peer relations, academic performance). Except for the latter, most of the remaining dimensions would not be considered to reflect domains of impairment.

Some of the same problems that afflicted clinician ratings of psychosocial impairment also plague these and other parent rating scales. Although the range of major domains of life activities appears to be broader on many of these scales, especially the six-item IRS, even that scale appears to miss some important domains of children's lives, such as self-care, participation in community activities (clubs, sports, etc.), interactions with classmates, performing chores at home, and so forth; some of these were covered by the CBCL and BASC. These scales may also cluster some domains into global categories, such as social functioning, rather than distinguishing among relations with parents, with siblings, with friends, with classmates, and with strangers or acquaintances, for instance. The range of item ratings for many of these scales is also restricted, thus creating artificially low relationships with other measures of impairment in those domains.

For the CBCL and IRS, some evidence is available on just how valid the individual domain ratings are in capturing actual impairment in that domain as judged by other methods or sources for evaluating that domain. For instance, if a child is rated as impaired in school, other evidence exists for such impairment that correlates with this domain rating. More such evidence would be useful, however. Showing that ratings of impairment are distinct from ratings of symptoms of psychopathology is fine as one source of evidence for validity of impairment as a distinct construct from psychopathology, as many of these scales have done, but it is not sufficient evidence of construct, discriminative, or criterion validity. Furthermore, scales such as the IRS and the clinician rating methods lack normative information on a nationally representative sample of parents that would permit some determination of the position of these ratings within the larger distribution of parent-rated impairment in a general population sample of children and adolescents. For this reason, scales such as the IRS cannot be used in clinical practice or other settings for the evaluation of impairment in patients or others in which the issue of psychosocial impairment relative to the average person is exceptionally important.

## **Suggestions for Assessing Psychosocial Impairment**

As evident in the foregoing discussions of AMA and SSA guidelines, the clinical assessment of psychosocial impairment in children should typically include:

- An initial interview to determine *both* the presence of disorder(s) and the nature of the impairments. The clinician seeks to establish the major life domains in which impairment may be occurring and their respective severities, as well as the symptoms and the disorders that may be giving rise to those impairments.
- A carefully taken history of the child's symptoms, other concerns, medically

relevant information, and prior evaluations of and treatments received for these same complaints.

- A determination of the developmental inappropriateness of the symptoms of the disorder(s) relative to others in the general population (using, e.g., behavior rating scales such as the CBCL or BASC-2).
- Establishing the age of onset and course of the relevant disorders and their impairments to date.
- A physical exam of the child or teen if functional impairment is thought to have arisen from a medical disorder.
- Psychological testing if general cognitive ability, academic achievement, or specific neuropsychological abilities are believed to be deficient and are contributing to impairment in psychosocial functioning.
- Ruling in or ruling out other treatable medical and psychiatric disorders that may be contributing to the child's or teen's clinical presentation, symptoms, and impairments.
- A review of the available archival records related to particular domains of psychosocial impairment that may be of key importance to the purpose of the evaluation, such as school-related records, official driving records (for teens), official juvenile criminal records, educational transcripts or report cards, prior medical records related to disability determinations, and prior medical, psychiatric, psychological, or educational evaluations and treatment records.
- *A determination of the degree of statistical deviance (abnormality) of the child's parent-reported impairment relative to the reports of parents in the general population for children of the same age and sex.*

This latter source of information is not included in most guidelines for the evaluation of impairment or disability, but it is essential to establishing the position of the individual relative to the normal, average, or typical child or teen (the average of the general population). After all, if impairment is to be judged relative to the average person, as recommended by the SSA and ADA and as implied or explicit in various definitions of the term, then some means of comparing the parents' complaints about children's psychosocial functioning with those given by the general population of parents is indispensable to the determination of child or adolescent impairment.

An essential method for assessing most of these issues remains the clinical interview. As noted, behavior rating scales of psychiatric symptoms are also highly useful both for the initial screening for risk for disorders and for establishing the degree of developmental deviance (age-inappropriateness) of the patient's symptoms where mental disorders are believed to be the source of the functional impairment. Psychological testing may be useful as well in establishing the extent of cognitive-behavioral deficits as a possible origin of the difficulties in psychosocial functioning. Moreover, as the AMA and SSA guidelines make plain, the physical examination is often essential to establishing the presence of medical disorders that also may be contributing to psychosocial impairment. Until now, only a few well-normed rating scales of functional impairment in major psychosocial domains for children were available to clinicians. But even those, such as the CBCL and BASC-2, cover a

limited range of domains out of the many in which children participate. The BFIS-CA was invented to help correct this problem, as it provides individual ratings of impairment across 15 primary domains of psychosocial functioning. In addition, eight secondary impairment questions focus more specifically on friendships, community activities, sports participation, and academic performance and adjustment. The BFIS-CA is also exceptionally convenient for evaluating change in psychosocial impairment resulting from various interventions, such as medications or efforts at rehabilitation. It can also be used to evaluate possible changes in psychosocial impairment status pre- and postinjury.

### ***The Seven Sources of Information***

As emphasized in the various governmental and professional guidelines for evaluating impairment, no single source of information can serve as the sole or gold standard in making the final determination of the existence and degree of psychosocial impairment. Seven types or sources of information are frequently needed in making such a determination. These are:

1. Patient- and parent-reports of symptoms and impairments.
2. Patient- and parent-reported history of symptoms and impairments.
3. Psychological testing where necessary, including symptom validity tests for detecting malingering (discussed subsequently).
4. Physical (medical) examinations as appropriate.
5. Archival (official) records (the paper trail of impairment).
6. Population norms for comparison with the parent-reported symptoms and impairments.
7. Reports of significant others who know the patient well (i.e., teachers).

These last two sources and types of information are rarely, if ever, mentioned in guidelines for conducting evaluations of disability, yet they can provide valuable information with which the other sources can be compared and against which these additional sources can be judged by comparison. Indeed, the determination of the extent to which parent-reported impairment compares with reports provided by a general population sample would seem to be essential.

### ***The Need for Triangulation among the Sources***

As I have noted elsewhere (Barkley, 2011b), clinicians should then engage in a process of triangulation of these sources of information against each other and comparing them with the clinician's own training and experience in these matters to arrive at this final determination of impairment. A useful metaphor for the evaluation of these different sources of information in arriving at a determination of impairment is the global positioning system (GPS) method. This method triangulates the position of the individual against two or more other sources of information about his/her position to arrive at a reasonably accurate report of the individual's geographical location on the planet. Likewise, clinicians should arrive at the relative position of the patient within the general population concerning his/her degree of impair-

ment by comparing multiple sources of information with each other and the child-, parent-, and teacher-reports about a patient. Truth is an assembled thing, and this holds for impairment determination in clinical practice. Each source of information can be judged against the information provided by two others to gauge the integrity or validity of the initial source. This process is repeated across all seven domains until all possible combinations of three-way comparisons have been achieved. This procedure is more likely to lead the clinician to arrive at the most valid and reasonable approximation of reality—in this case the degree of psychosocial impairment of the individual.

### ***The Issue of Malingering***

A major problem in determining disability or impairment is the possibility of malingering, defined in DSM-IV-TR as “the intentional production of false or grossly exaggerated physical or psychological symptoms, motivated by external incentives such as avoiding military duty, avoiding work, obtaining financial compensation, evading criminal prosecution, or obtaining drugs” (American Psychiatric Association, 2000, p. 683). This is typically thought of as a problem exclusively with adults. As a result, a substantial literature exists on this issue with adults (see Lovett, Gordon, & Lewandowski, 2009, for a more detailed discussion). Space precludes a detailed review of that literature here. Suffice it to say that even the AMA and SSA guidelines forewarn clinicians to evaluate the possibility that the individual is feigning the severity of his/her symptoms and impairments, usually for some personal gain.

The issue can also arise in the evaluation of disorders and impairment in children, for instance, as in neuropsychological assessments of children (Faust, Hart, & Guilmette, 1988) and adolescents (Faust, Hart, Guilmette, & Arkes, 1988). Children can be intentionally instructed by others, such as parents, to “fake bad” on the neuropsychological tests (Ku & Boone, 2002). In one study, such instructions given by an experimenter resulted in as many as 93% of typical children being diagnosed as abnormal by clinicians, and 87% of those cases were attributed to cortical dysfunction. Moreover, none of the clinicians in that study detected the malingering (Faust, Hart, & Guilmette, 1988). Subsequent studies confirmed that this can be a problem in neuropsychological assessments of children (McKinzey, Prieler, & Raven, 2003), though not on all tests or under all instructional conditions (Nagle, Everhart, Durham, McCammon, & Walker, 2006).

There is no foolproof means of detecting malingering. In the realm of psychological evaluations, one often sees “validity scales” being included in such assessment methods as personality tests. In neuropsychology, “effort tests” may be given to trick the patient into believing that the test being given is evaluating disability when in fact it is being used to detect feigning (Morgan & Sweet, 2008). For instance, the Test of Memory Malingering (Tombaugh, 2004) may be useful in detecting malingering in children (Constantinou & McCaffrey, 2003; Donders, 2005), as may several other symptom validity tests (Blaskewitz, Werten, & Kathmann, 2008). Whenever some obvious or external benefit would be an end result of the determination of impairment, clinicians should be alert to the possibility of malingering (Lovett et al., 2009; Morgan & Sweet, 2008; Walker, 2011). No single method of assessment can necessarily be free of the possibility of feigning or malingering, and so a com-

combination of methods may be the most useful (Slick, Tan, Strauss, & Hultsch, 2004). Probably the best means of detecting the possibility of malingering is the method of triangulation of sources against each other, including symptom validity tests. Each source is compared against two others so that all possible combinations are considered and the clinician can gain a more thorough perspective on the issue of impairment and on the possibility of malingering. This method is effective because it is rarely, if ever, possible for an individual to coordinate the data from all of these sources so that they are consistent with and abet the scheme of misrepresentation.

## Conclusion

This brief introduction to the nature and assessment of psychosocial impairment in children and adolescents has argued for a distinction among the terms “symptom,” “disorder,” and “impairment/disability” so as to avoid confusion in readers’ thinking and in their evaluation of the literature on these topics. A symptom can be considered to be a physical, cognitive, or behavioral manifestation of a disorder. Symptoms often form a pattern or syndrome, as noted in the DSM-IV-TR. Disorders are dysfunctions in physical or psychological (mental) adaptations that result in reducing or diminishing the individual’s functional effectiveness in meeting the demands of daily life. Such ineffectiveness leads to harm. Impairment represents both this functional ineffectiveness in major domains of daily life activities and the harm resulting from it. Impairment is diminished functioning relative to the normal, average, or typical child; it is *abnormal* in its degree and thus must be judged relative to the “normal person” standard. Various guidelines exist for the determination of impairment, and various structured assessment tools have been developed to assist with that determination (clinician ratings, parent ratings). But until now there has been little normative information available on the extent to which parents in the general population view their children as being impaired in the major domains of life activities. Yet comparing a child with this general population would seem to be an indispensable part of the larger process of assessing impairment. The BFIS-CA was developed to address that problem.