

CHAPTER 15

Caregiver Report Measures of Early Childhood Social–Emotional Functioning

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Advances in our understanding of young child psychopathology are paralleled by an increase in reliable, valid, developmentally sensitive measures for assessing early childhood mental health, many of which rely on caregiver reports. In this chapter, we use the term “caregiver” to refer to the person who assumes responsibility for meeting the child’s physical and emotional needs. Thus, “caregiver” can refer to biological, adoptive or foster parents, or guardians, or extended family members who care for the child on a regular basis. Typically, the person who brings a child to an evaluation serves in this role. Others who function as caregivers also may have valuable information to share and should therefore be invited to participate in the evaluation process.

The major strength of caregiver reports is the extent of information that caregivers can provide. Caregivers often have developmental, contextual, and historical knowledge of their child. They have intimate knowledge of their child’s temperament, daily routines, and behaviors across settings, including behaviors that occur infrequently and/or are rarely observed in office or laboratory settings. Additionally, caregiver expectations, attributions, and interpretations of child behavior shape caregiver practices and influence children’s self-evaluations and self-understanding, impacting children’s behavior (Snyder, Cramer, Afrank, & Patterson, 2005).

Thus, in addition to informing the evaluator’s understanding of the child’s behavior, caregiver reports provide data on the caregiver’s perceptions and allow for assessment of whether the caregiver has overly negative views or unrealistic expectations that may be a useful target for intervention (e.g., Bugental et al., 2002).

Despite the benefits of caregiver reports, limitations also exist, several of which are unique to or require greater consideration when assessing young children. First, infants and young children have limited verbal abilities and meta-cognitive capacities, making it difficult, if not impossible, to elicit their thoughts and feelings about presenting complaints. Thus, when self-report is not possible, caregiver reports may be the only source of historical information, in contrast to assessments of older children, in which caregiver perspectives are often considered together with child self-report. Second, young children’s behavior is highly sensitive to contextual and relational influences (Dirks, De Los Reyes, Briggs-Gowan, Cella, & Wakschlag, 2012; Gray et al., 2012) due to their dependence on others for their basic needs, relatively limited exposure to varied settings (e.g., schools) and people (e.g., peers), and their limited emotion regulation skills. This sensitivity to contextual influences means that it is particularly important to assess the impact of the context on the young child’s behaviors. Third, and relatedly,

the impact of sociocultural factors, which affect caregivers' perceptions of and reactions to the child's behaviors, may be even greater in early childhood given the high reliance on caregivers during this period.

In summary, caregivers are valuable reporters because they know the most about their child's development and can report on their child's behavior in a differentiated manner that is sensitive to historical, developmental, and contextual influences. At the same time, some caregivers (as well as other informants) have biases and may be poor historians. Additionally, there is variability across caregiver informants with respect to one another in the capacity to understand and explain child behaviors, thus posing difficulties for interpretation of caregiver reports. Caregiver report measures should therefore be interpreted in relation to several factors, including knowledge about the child's relational, familial, and cultural contexts, and his or her developmental functioning. Moreover, while caregiver reports should play a central role in early childhood assessment, they should not be the sole source of information. To understand the *whole child*, other information-gathering strategies should be used, such as behavioral observations and/or reports from other adult informants (e.g., child care providers). Additionally, the proliferation of technological approaches that directly assess young children and are increasingly becoming available for clinical application, such as eye-tracking and computer tasks, may contribute to an understanding of a child's profile of strengths and needs when used in combination with caregiver reports.

In this chapter, we review several common assessment tools and domains, including psychometric considerations. Next, we discuss key issues relevant to evaluating and integrating information from several caregivers. We then focus on considerations for selecting appropriate caregiver report assessments of social-emotional functioning. Last, we highlight key points and future directions.

Types of Assessment Tools

Several types of tools can be used to systematically gather information from caregivers, including brief screening checklists, more comprehensive checklists, and diagnostic interviews. These tools vary in their purpose,

format, and the level of information that they provide. Being well informed about different types of tools can assist in deciding which tools will be most appropriate given the information required, as well as any practical considerations and constraints.

Screening Tools

Screening tools, designed as brief measures for detecting children who *may* be experiencing problems, are most appropriate when the goal is to quickly and efficiently identify such children from a larger population. Screening tools can typically be completed in under 15 minutes and tend to be easy to administer and score. Children identified through screening as *at-risk* within a particular domain may benefit from additional follow-up, such as more in-depth assessment and/or referral. Some screening tools are designed to detect a narrowly defined problem (e.g., the Modified Checklist for Autism—Revised [Robins et al., 2014] to screen for autism spectrum disorder [ASD]), whereas others are designed to detect a broader range of problems (e.g., the Brief Infant–Toddler Social and Emotional Assessment to assess for social-emotional/behavioral problems). However, screening tools do not provide in-depth information about strengths, weaknesses, or diagnoses.

Comprehensive Checklists

When the goal of the assessment is to gather comprehensive information about the specific areas in which a child is experiencing difficulty, longer and more detailed assessments are appropriate. Comprehensive checklists tend to take 15–30 minutes to complete. They typically require minimal training to administer, but slightly more training to interpret. Many of these checklists provide detailed profiles of children's strengths and weaknesses relative to children of a similar age, encompassing a broad range of social-emotional concerns such as depression, anxiety, impulsivity, aggression, and social competencies. Measures include instruments such as the Infant–Toddler Social and Emotional Assessment (ITSEA; Carter & Briggs-Gowan, 2006) and the Child Behavior Checklist (CBCL/1.5–5; Achenbach & Rescorla, 2000), both of which yield subscale scores (e.g., ITSEA Sleep Problems subscale) and domain scores (e.g., ITSEA Dysregulation

Domain—calculated using items or subscale scores in that area). The Conners Early Childhood (Conners EC) is another comprehensive checklist in which parents or teachers report on social, emotional, and behavioral problems for children 2 to 6 years old, yielding norm-referenced subscale scores (e.g., Defiant/Aggressive). This scale also provides a Developmental Milestones section assessing constructs such as adaptive functioning and play (Conners, 2009). Employing such measures ensures that caregivers provide input about a broad array of problem behaviors, which is important given that caregivers might underestimate the problematic or concerning nature of their child’s behavior or attribute problems in one area (e.g., inattention) compared to another (e.g., being willful or stubborn). While checklist tools can be helpful for treatment planning and documenting change over time, they are not appropriate for establishing whether a child meets criteria for a psychiatric disorder.

Diagnostic Interviews

Structured and semistructured diagnostic interviews gather detailed, comprehensive information, with the goal of assigning diagnoses. They tend to take 1–2 hours at minimum to complete and require a higher level of training than do screening or comprehensive checklist measures to administer and interpret. Most notable in this category is the Preschool Age Psychiatric Assessment (PAPA; Egger & Angold, 2004), a semistructured interview appropriate for children between ages 2 and 5 years. The PAPA includes all DSM-5 (American Psychiatric Association, 2013) criteria that are relevant to children in this age range, all of the items in the DC:0–5 (Zero to Three, 2016a), and additional, potentially relevant behaviors and symptoms that may be experienced by preschoolers and their families that are not currently in either of these two diagnostic systems. Probes include information about the onset, duration, frequency, and intensity of the behaviors, as well as impairment they may cause, as this information is often critical to determining a diagnosis. Diagnostic interviews have the benefit of gathering a wide and in-depth range of information that can be contextualized. For example, whereas a screening tool or comprehensive checklist may obtain information about the frequency of a behavior (e.g., *never/not at all true, somewhat/sometimes true, often/very true*), a diagnostic

interview typically provides information about when the behavior started, how intense it is, how long it lasts, and what factors exacerbate or ameliorate the behavior.

Assessment Domains

Assessing young children’s social–emotional functioning and other domains are often needed to understand the whole child.

Social–Emotional Functioning

Mental health in early childhood has been defined as “the developing capacity of the child . . . to form close and secure adult and peer relationships; experience, manage, and express a full range of emotions; and explore the environment and learn—all in the context of family, community, and culture” (Zero to Three, 2016b). When children do not have the biological, relational, and environmental supports to develop foundational emotion regulation and interpersonal skills, they are at risk for social–emotional difficulties. Among young children, these social–emotional difficulties can manifest through a variety of symptoms, broadly categorized as either mood regulation/anxiety symptoms (e.g., withdrawal from social interactions; avoidance of normative experiences) or disruptive symptoms (e.g., yelling, screaming, physically aggressive behavior). Assessment of social–emotional functioning in young children requires knowledge of the range of typical behavior for a child at a given developmental stage. For example, occasional hitting, kicking, and screaming in a typically developing 2-year-old need not, in the absence of other signs of distress, be interpreted as evidence of any particular problem with social–emotional functioning. In contrast, the same behaviors in a typically developing 6-year-old would be reasonable cause for concern and further assessment. Moreover, frequent hitting that results in injuries would be cause for concern even in a 2-year-old. The use of validated, normed assessment measures for young children facilitates developmentally sensitive assessment of social–emotional functioning.

Disruptive Behaviors

Assessments of disruptive behavior generally include ratings of a child’s activity level (with

particular emphasis on hyperactivity); use of physically and verbally aggressive behavior (ideally with separate ratings of aggression toward parents, nonparental caregivers, siblings, and peers); and negative, angry, emotional reactivity (e.g., “temper tantrums”). Disruptive behavior problems can be reliably assessed in children as young as 12–24 months of age (Carter, Briggs-Gowan, & Davis, 2004) using parent-report measures such as the ITSEA (Carter, Briggs-Gowan, Jones, & Little, 2003) and the CBCL (Achenbach & Rescorla, 2000). Furthermore, empirical evidence demonstrates that clinical disorders characterized by high levels of disruptive behavior problems are reliably diagnosed in children as young as 2 years of age (Egger et al., 2006; Keenan & Wakschlag, 2000). Disruptive behavior problems in toddlerhood are associated with continuing behavior problems later in childhood (Baillargeon et al., 2007; Briggs-Gowan, Carter, Bosson-Heenan, Guyer, & Horwitz, 2006; Mesman, Bongers, & Koot, 2001). Beyond their importance as a predictor of later functioning, early disruptive behaviors are distressing for parents and children at the time they occur.

Mood Dysregulation and Anxious Behaviors

Assessments of mood dysregulation and anxious behavior generally include ratings of the degree to which a child is behaviorally inhibited or shows signs of anxiety or fear; the degree to which a child is withdrawn, depressed, or sad; and the degree to which the child demonstrates problems with sleeping and eating. Anxiety problems are the most *common* mental health presentation in early childhood (Egger & Angold, 2006), and research has shown that anxiety symptoms tend to be relatively stable over time and predictive of later emotional problems if left untreated (Bittner et al., 2007; Mian, Wainwright, Briggs-Gowan, & Carter, 2011). Despite this, parents of young children tend to be more likely to seek help for disruptive problems than for anxiety (Brown, Wissow, & Riley, 2007; Pavuluri, Luk, & McGee, 1996). Because parents may be less likely to identify anxiety or other mood symptoms as a problem for their child (even when distressing or impairing symptom levels are present; Mian, Godoy, Eisenhower, Heberle, & Carter, 2016), and because mood, anxiety, and disruptive behavior symptoms frequently co-occur (Briggs-Gowan et al., 2013), assessment of mood and anxiety is

generally warranted when a child presents with disruptive behavior problems and when mood or anxiety is itself the presenting concern.

Social–Emotional Competencies

Assessments of social–emotional competence include consideration of the degree to which a child engages in prosocial behavior, is aware of his or her emotions, is compliant with authority figures, regulates his or her attention, expresses positive emotion, and empathizes with others. Assessment of social–emotional competencies can be used to identify areas of strength on which a child can draw during treatment. In addition, it provides important data for conceptualization and diagnosis, and can provide clarity regarding whether a child’s difficulties are relatively specific and domain-limited (e.g., as in the case of many specific phobias) or more general.

Trauma and Stress

There is growing recognition in the field of early childhood mental health of the prevalence and consequences of potentially traumatic experiences for young children. Epidemiological research has shown that by age 3 years, nearly one-fourth of children have been exposed to potentially traumatic events or family violence (Briggs-Gowan, Ford, Fraleigh, McCarthy, & Carter, 2010). While potentially traumatic experiences (PTEs) in general are predictive of social–emotional problems, witnessing violence and being victimized by violence (in contrast to other types of PTEs) are particularly potent risk factors for the development of psychiatric disorders in young children (Briggs-Gowan, Carter, et al., 2010). Additionally, cumulative exposures across the lifespan appear to precipitate higher risk for psychopathology (Breslau, Chilcoat, Kessler, & Davis, 1999; Putnam, Harris, & Putnam, 2013). Documenting a child’s exposure to traumatic events is critical to inform treatment and guide any planning for safety that may be necessary (e.g., for a child exposed to domestic violence that is ongoing). In addition to the life-threatening or potentially life-threatening events recognized in DSM-5 (American Psychiatric Association, 2013), developmental scientists have recognized the impact of a broader spectrum of events on young children, whose close reliance on caregivers and limited comprehension of stressful

experiences makes them vulnerable to events that might not be traumatic for older children or adults (e.g., sudden or prolonged separation from a caregiver). Assessments of exposure to potential traumas in young children must be developmentally sensitive.

Beyond trauma, other sources of stress within the ecological system may be important to assess in order to understand and address a child's symptoms. For example, neighborhood disadvantage (e.g., living in neighborhoods with higher levels of poverty and unemployment) has been found to predict toddlers' externalizing symptoms (Heberle, Thomas, Wagmiller, Briggs-Gowan, & Carter, 2014). Other environmental predictors of social–emotional difficulties include poor quality or unsafe housing, exposure to polluted air and water, and exposure to poor quality child care—all correlates of poverty (Evans, 2004). Assessing for exposure to environmental risk is critical to understand the sources and potential intervention targets for a child exhibiting social–emotional difficulties. Exposure to adverse childhood experiences—including abuse, ruptured family relationships, and substance abuse or mental illness in the household—predicts lifespan health outcomes, including substance abuse, cardiac conditions, cancers, and other chronic and life-threatening conditions (Felitti et al., 1998). Probability of adverse outcomes is linearly related to the number of adverse experiences.

Cognitive and Language Delays

In early childhood, elevated reciprocal risk across psychopathology and other developmental domains is almost always observed, demonstrated by the increased rates of psychopathology among children with intellectual and developmental disabilities (Einfeld et al., 2006; Emerson, 2003), language delays and specific language disorders (Henrichs et al., 2013; Ross & Weinberg, 2006), learning disabilities (Morgan, Farkas, Tufis, & Sperling, 2008; Yu, Buka, McCormick, Fitzmaurice, & Indurkha, 2006), and sensory processing disorders (Ben-Sasson, Carter, & Briggs-Gowan, 2009; Ben-Sasson, Soto, Heberle, Carter, & Briggs-Gowan, 2017). Importantly, the nature of these intersections varies from one condition to another, so knowledge of neurocognitive and linguistic profiles of identified intellectual and developmental disabilities can inform which aspects of psychopathology are assessed in greater depth (e.g., anxi-

ety in the case of autism or disruptive behaviors in the case of ADHD).

If informants do not have the knowledge to report on the child's functioning across all relevant developmental domains we strongly encourage the use of direct, norm-referenced assessments of cognitive and linguistic functioning to inform interpretations of social–emotional assessments, some of which assume normative competencies in other developmental domains. Single-informant screeners of developmental functioning are not adequate for this purpose. For example, an assessment of attention may include a question about the child's ability to follow multistep instructions. Positive endorsement of a problem following directions may be better explained by a receptive language deficit than inattention. Similarly, a young child with an intellectual disability may not be engaging in pretend play, but this may reflect a general cognitive delay or deficit rather than a specific delay or deficit in the social–emotional domain. In general, we do not expect gains in social–emotional development to exceed those in observed in language or cognitive domains, and two developmental domains are particularly crucial for contextualizing findings in the social–emotional domain.

Caregiver Concerns

Assessing whether a caregiver is concerned about the child's behavior can clarify the caregiver's perception of the child's current difficulties and his or her motivation to seek help (Ellingson, Briggs-Gowan, Carter, & Horwitz, 2004; Godoy & Carter, 2013; Godoy, Mian, Eisenhower, & Carter, 2014). Furthermore, the nature of caregiver concerns (e.g., viewing the child as disruptive or anxious) may influence buy-in with specific treatment recommendations (Mian et al., 2016). However, although it is an extremely sensitive predictor among school-age children and adolescents, caregiver concern is not a strong indicator of young children's current or future behavior problems (Briggs-Gowan & Carter, 2007; Glascoe, 2003). Caregivers of young children are less likely than caregivers of older children to be concerned about and to seek help when their children evidence behavior problems (Godoy, Carter, Silver, Dickstein, & Seifer, 2014). Indeed, a large number of caregivers are *not worried* about their young children's behavior, despite the fact that they report clinically

significant levels of problem behaviors. In a sample of 269 caregivers who rated their children in the 90th percentile in at least one of the problem domains on the ITSEA, 62% reported that they were not worried about their child's social-emotional behavior (Ellingson et al., 2004). Caregivers of young children are more likely to be worried about and seek help for lags in social-emotional competence (i.e., when their children are not doing what they should be) than for behavior problems (Ellingson et al., 2004). Thus, assessments that focus on both symptom presentation and caregiver concern are critical to identifying children with mental health needs and facilitating discussions with families that can motivate participation in further assessment or treatment.

Impairment

As with older children and adults, it is important to evaluate "impairment"—the extent to which symptoms of psychopathology are interfering with the child's developmental progress or participation in age-appropriate activities—in the functioning of the young child. For young children, child and/or *family* indicators of impairment are criteria for disorder status (Zero to Three, 2016a). Specifically, because young children's functioning is dependent on caregiver support, impairment may be evident in the degree or number of accommodations that caregivers make to facilitate their child's developmental progress or participation in age-appropriate activities. For example, although a caregiver may not be able to offer examples of child impairment, impairment may be evident in caregiver distress, low efficacy about the caregiver-child relationship, or the caregiver's difficulty maintaining family routines (e.g., eating dinner together), household activities (e.g., making phone calls), or employment (e.g., changing work settings because of difficulty obtaining appropriate child care; Carter et al., 2004). It is not unusual for caregivers to avoid situations that would trigger their child's problem behavior (e.g., going to the store) and to minimize demands that would illuminate the child's impairment (e.g., no longer asking the child to pick up toys). As noted earlier, it is crucial to consider the child's developmental capacities to avoid misattributing impairment in one domain (i.e., psychopathology) that is better explained by a developmental disability or delay.

Summary

Screening measures typically address a limited and specific area of problems for the purpose of efficiently triggering further evaluation or referral, without the comprehensive assessment that is needed to guide treatment decisions and planning. Comprehensive evaluation of a child's social-emotional functioning usually requires multimethod assessment of multiple domains of social-emotional problems and competencies, as well as environmental risk and protective factors, cognitive and language abilities, caregiving relationships and risk, and protective factors within these relationships, caregiver concern, and impairment. Assessment across multiple domains allows for determining whether a child is experiencing global versus specific impairments and for examining hypotheses about the functional relationship between a child's strengths and weaknesses across domains. In addition, assessment of environmental factors, including exposures to potentially traumatic events or family stressors, provides critical data about the etiology of a child's social-emotional challenges, as well as ongoing barriers and supports to intervention. While many of these areas can be assessed through direct caregiver report, it is optimal to include multiple caregivers' reports, as well as observations of the child and caregiver-child interactions in order to reduce the effects of individual caregiver bias on the overall evaluation. In addition, direct, norm-referenced assessment is an essential add-on to caregiver reports when such tools are available—particularly in the areas of cognitive and language functioning.

Psychometric Considerations

In addition to finding measures that cover the applicable domains, it is also necessary to select measures with strong psychometric properties to ensure the accuracy of interpretation. The issues most relevant to young children's assessment include reliability, validity, sensitivity/specificity, positive and negative predictive value, norming, and cultural adaptations of measures. Though relevant to assessment of individuals at any age, these issues are challenging in young children because rapid developmental changes and sensitivity to context affects the design and selection of measures. Clinicians and researchers faced with the task

of selecting early childhood assessment tools must think critically about the appropriateness of the tool for the populations with whom they work, given the white, Western, Eurocentric lens through which much child mental health research has been conducted. While culture has been considered a “nuisance variable” in past research, there is growing recognition that culture provides the lens through which individuals view the world, and the context in which children are raised. Hence, the role of culture in caregiver reports of child behavior should not be understated.

Reliability

Reliability refers broadly to the consistency or stability of a measure. These attributes can be assessed in a number of ways, the most common of which are internal consistency, test–retest reliability, and interrater reliability. *Internal consistency*, which refers to how well the items in a scale “hang together” and can therefore be interpreted as measuring the same construct, is assessed with Cronbach’s alpha (Cronbach, 1951). Values of .70 to 1.0 are considered acceptable, .60 to .69 are marginal, and below .60 is unacceptable (Cicchetti & Sparrow, 1981; Nunnally, 1978). However, in some cases, a measure with low internal consistency can still be clinically informative. For example, the ITSEA Maladaptive Index has low internal consistency in normative samples but includes behaviors such as head banging or running away in public that may be important red flags for further evaluation and/or child safety measures (Carter & Briggs-Gowan, 2006).

Test–retest reliability indicates how consistently the tool provides the same results when administered repeatedly. Often, test–retest reliability is assessed by administering the same measure twice in a relatively short period of time and comparing the results using intraclass correlation coefficients. Coefficients from .75 to 1.0 are considered excellent, .60 to .74 are good, .40 to .59 are fair, and <.40 is poor (Cicchetti, 1994; Cicchetti & Sparrow, 1981). High test–retest reliability suggests that respondents tend to understand and rate items in a similar way over time, and that the construct being assessed tends to be fairly stable over the retest time interval. With young children, lower test–retest reliability may occur if behavior has changed due to development and/or contextual factors, such as recent changes

in a child’s routines that might affect his or her behavior.

Finally, *interrater reliability* refers to how consistently the tool provides the same results when rated by different individuals. Examples are agreement between parents’ and teachers’ ratings on checklist measures and between two different coders observing children’s behavior. Interrater reliability is especially important when a tool involves judgment by the user, such as when coding whether a symptom is present in a diagnostic interview or when making behavioral ratings in an observational system. This type of reliability is typically assessed with one of two statistics depending on whether data are continuous (intraclass correlation) or dichotomous or ordinal (kappa statistic). Intraclass correlation criteria are provided above, and kappa statistics are evaluated as follows: below .40 is unacceptable, .40 to .59 is fair, .60 to .74 is good, and .75 and above is excellent (Cicchetti, 1994).

Validity

Validity refers to how well a measure actually assesses what it is intended to measure. Strong validity helps to ensure that information obtained from an assessment provides good insight into a child’s functioning. *Content validity*, or *face validity*, refers to whether the individual items and scales that make up a measure indeed appear to experts to capture the underlying construct they are intended to measure. *Construct validity* refers to how well a measure actually assesses the specific construct it is intended to measure. This can be assessed by comparing scores on one measure with scores on a validated measure of the same problem. *Convergent validity* refers to whether a measure is positively associated with other measures of similar constructs. *Discriminant validity* may assess a measure’s ability to differentiate—for example, an anxiety measure should distinguish between children diagnosed with anxiety disorders and healthy controls. Finally, *predictive validity* may be used to assess how well the measure predicts the same problem over time. For young children, this type of validity can help to demonstrate that a tool is capturing a meaningful aspect of early functioning that is not simply a transient perturbation in functioning that wanes with development.

Aspects of validity may be particularly influenced by culture given that the construct being

measured and the meaning of individual items may vary across contexts (Nikapota, 2009). Differing beliefs about child development and mental health across cultures (e.g., whether a particular behavior is atypical or problematic) may impact parents' patterns of responding (Mandell & Novak, 2005). For example, when an adult in the United States reports that a child is inhibited, there is a more negative connotation than there would be for the same concept in collectivist cultures such as China (Chen et al., 2014; Rubin, 1998). Also, the ITSEA item, "Runs away in public spaces," was rated as normative in a sample of caregivers from Finland, while this same behavior is considered atypical and alarming in the United States. Even with an accurate translation, child behaviors may have different meanings and interpretations across cultures and contexts. When a measure is used with a population for which it was not designed, it is important to know whether it measures what it was intended to measure.

Evaluation should include a discussion with caregivers to determine the cultural validity of a particular measure or item (Nikapota, 2009). Individual items can be reviewed (1) to understand the threshold that caregivers employ when answering the questions, (2) to obtain examples of the behavior to ensure that the item was interpreted as intended, and (3) to ask about the possible cultural meaning or relevance of their responses. Furthermore, assessors should consider not only the accuracy of the information obtained but also whether there are domains of assessment missing from the measure that would be culturally meaningful. All of these lines of inquiry help to generate a shared understanding of the information obtained. This level of assessment can lead to treatment plans that acknowledge and incorporate caregivers' beliefs, concerns, and preferences, and therefore help to improve engagement.

For young children, a tool's ability to accurately classify individuals as having a problem or not is especially important, particularly if the question is whether further action, such as evaluation or referral, is warranted. *Sensitivity* refers to the proportion of children who truly have a particular problem who are successfully classified by the measure as having that problem. For example, 85% sensitivity means that 85 out of 100 children with separation anxiety are identified as having separation anxiety. As sensitivity goes up, false negatives go down. *Specificity* refers to the proportion of children

who do not have a particular problem who are correctly classified as not having that problem. Thus, 90% specificity would mean that 90 out of 100 children without separation anxiety would be classified as negative. As specificity goes up, false positives go down. *Positive predictive value (PPV)* is the proportion of children flagged by the measure as positive who truly have that problem according to another criterion. If PPV is 50%, then 50 out of 100 children identified actually have the problem. *Negative predictive value (NPV)* refers to the percentage of children who are considered not to have a particular problem who are truly negative according to another criterion.

A rule of thumb for these statistics is that measures used for early identification should have minimum sensitivity and specificity of 70% and false-positive rates of no greater than 30% of all screened (American Academy of Pediatrics, 2001; Cicchetti et al., 1995). However, different criteria may be appropriate, depending on the purpose of the assessment and the risk of harm associated with failure to detect a problem. For example, low PPV can be tolerated when failure to detect the problem is associated with a very poor outcome.

Norm-Referenced Assessments

Norms, which are available for many measures, enable interpretation of test scores relative to children who are of a similar age. This information is especially important in early childhood because children's behavior often changes rapidly as they develop and mature. For example, robust age-related increases in competence are evident between the ages of 12 and 36 months (Carter et al., 2003). Because boys and girls develop social competencies at different ages, sex norms also are valuable.

Cultural Adaptations

Although guidelines for cultural adaptations of existing measures are scarce, there are steps that often are recommended to adapt a measure for another cultural group. These steps, outlined in this section, represent the goals of the field rather than the reality. There are few adaptations to date that implement all recommended protocols, likely because multiple studies requiring considerable time and resources are required for each adaptation (van Widenfelt, Treffers, de Beurs, Siebelink, & Koudijs, 2005).

These measures may still be used prior to full cultural adaptation, yet researchers and clinicians must note that confidence in the findings should align with the extent of the empirical support for its validity with that group.

Often, the first step of cultural adaptation is translation. Most measures are first developed in English, but researchers and clinicians commonly work with families that are not native English speakers. Offering caregivers an opportunity to describe their young child in their own language may enhance the quality of information gathered. Lengthy procedures involving many participants are necessary to properly translate a scale for use in research and clinical work. The steps include contacting the original author; creating a team of bilingual, bicultural individuals; obtaining independent translations; collaborating to resolve discrepancies; back-translating; piloting the measure; interviewing respondents; and testing the psychometric properties with a sample from the target population (van Widenfelt et al., 2005). While this is an extensive process, simply translating and back-translating does not ensure the equivalence of individual items or of the overall construct being assessed. To elaborate on this point, many instruments initially developed in English have been translated to Spanish, and some have undergone the content validity research necessary to establish their validity within specific Spanish-speaking cultural groups. However, there is tremendous linguistic and cultural variability within Spanish-speaking cultures, and it cannot be assumed that a measure found to be valid for one ethnic or geographic group will be valid for another.

Even when a scale has been translated into a different language, it cannot be assumed that it will accurately capture the construct of interest, or that it will have similar reliability estimates, factor structure, and norms. Thus, when measures are translated and/or adapted, new psychometric data should be gathered. Specifically, the measure should be pilot-tested in the target population to evaluate its reliability, validity, and factor structure. Researchers are encouraged to report this basic psychometric information with the population under investigation. It is also helpful to determine whether a test functions in the same manner across groups at a broad level (e.g., has the same sensitivity and specificity, and measurement equivalence; Sattler, 2001) and at a narrower, individual-item level (e.g., differential item functioning;

Huaqing Qi & Marley, 2009). Researchers and test developers are encouraged to gather large samples to permit cross-group validation and to analyze within-samples differences. These statistical procedures will inform and refine cultural adaptations of measures to improve their accuracy for research and clinical work.

Without proper adaptation, the psychometric properties of a measure are unknown; when measures are used with a population different from the one for which they were created and normed, it is possible for results to be inaccurate or even harmful (e.g., D'Aprano, Carapetis, & Andrews, 2011). However, when selecting measures of social–emotional functioning for a client or participant from an ethnic/minority group, it is not always feasible to use only measures that have been validated for his or her cultural group. In these cases, we recommend selection of measures that have made progress toward as many of the steps in this section as possible. Assessors must recognize the complexities of measure selection and seek to identify assessment procedures that will yield valid and clinically useful insights about young children.

Evaluating and Integrating Information

It is optimal to gather information about the young child's behavior in multiple settings and across different types of interactions (e.g., play, snacktime, bedtime) because young children's behavior is highly sensitive to contextual and relational influences (Clark, Tluczek, & Gallagher, 2004; De Los Reyes, Henry, Tolan, & Wakschlag, 2009; Tronick, 1989) and may therefore be more variable across settings than older children's behavior. As observations of multiple settings are often impractical, gathering data from informants who interact with the child in different contexts can be valuable. Given that these multiple informants observe the child in different tasks or situations, they likely have different experiences of the child (Achenbach, 2011) and unique contributions and limitations in their knowledge, beliefs, and attributions about the child (Hunsley & Mash, 2007). Additionally, reports from multiple caregivers can be supplemented with alternative assessment methods, such as behavioral observations or cognitive testing. Using a variety of approaches may address some inherent limitations of caregiver report (e.g., biased responding). Thus, a

multimethod and/or multi-informant approach typically provides a fuller picture of the child.

Despite the benefits of multiple informants and methods, these approaches present challenges. In a seminal meta-analytic article, Achenbach, McConaughy, and Howell (1987) reported low to moderate correspondence between multiple informants' (e.g., parent and parent; parent and teacher) ratings of the same child's emotional/behavioral issues. For example, the mean correlation between parents' and teachers' reports was $R = .27$. Correspondence between informants was higher among individuals who interacted with the child in the same setting than among individuals from different settings. Considerable research in the intervening decades has replicated and extended this finding (De Los Reyes, 2011, 2013). For example, in developing the ITSEA (Carter & Briggs-Gowan, 2006), there was stronger agreement between mothers and fathers (Carter et al., 2003) than between parents and early educators across multiple domains (Moye, Briggs-Gowan, & Carter, 2000). While it is clear that gathering assessment data from multiple parties across different settings provides a more comprehensive and valid picture of that child's functioning, guidelines for interpreting and synthesizing conflicting information across informants are scarce and there is no consensus (Kraemer et al., 2003). Such guidelines are also missing for integrating information across assessment methods. This is problematic given the central role of assessment in establishing a child's diagnosis, psychosocial risk, and need for intervention (De Los Reyes, 2011).

Although researchers have identified several potential correlates of informant discrepancies, in their review, De Los Reyes and Kazdin (2005) concluded that there were no consistent or clinically useful correlates of informant discrepancy across different measurements and populations. Rather, De Los Reyes (2013) proposed that it is useful to attempt to parse three factors that may impact the magnitude of discrepancies: true differences in cross-situational behavior, reporter biases, and/or measurement error. Because young children's behavior is highly situation-specific, an unknown proportion of the discrepancy represents valid and clinically useful information about how the child presents in different settings (Petitclerc et al., 2015). However, discrepancies in caregiver reports also unavoidably reflect the influence of the respondent's mind-set, attributions, and

recall (Achenbach, 2011). For example, some respondents may be more prone to attribute child behavior to contextual factors while others may be more likely to attribute the behavior to the child's disposition (i.e., internal, inflexible characteristics), leading to differences in how behaviors are perceived and weighted, and thereby impacting severity ratings (De Los Reyes & Kazdin, 2005). Additionally, respondents' personal experiences may impact their perspectives on child behaviors. Finally, even reliable and valid measures have error, and in the absence of "gold standard" metrics of measurement validity, it is difficult to parse the extent to which discrepancy is based on measurement error (De Los Reyes, 2011).

With many factors increasing the likelihood of informant discrepancies, it is not realistic to approach assessment with the goal of identifying a single or "true" picture of the child's current functioning. Additionally, multiple methods of assessment (e.g., behavioral observation at school and parent report) may yield inconsistent or even contradictory information about the child. Hence, it is more helpful to consider each information source as an important piece of the puzzle requisite to understanding the whole child (Carter et al., 2004; De Los Reyes & Kazdin, 2006; Kerr, Lunkenheimer, & Olson, 2007).

Reviewing assessment data should include an analysis of the contexts in which a child is reported to have difficulties, which may assist clinicians in determining the magnitude of behavior problems. When a child's difficulties occur and are impairing across multiple contexts, they are likely to be more severe than if the difficulties are limited to one context (Campbell, 1995; Petitclerc et al., 2015; Wakschlag et al., 2007). Furthermore, the contextual factors associated with the behaviors may provide clues for intervention strategies to recommend for the child (e.g., creating consistency between home and day care with respect to the child's nap schedule). Where the reports of different caregivers diverge, the discrepancy should be viewed not as evidence of error on the part of one reporter, but rather as evidence of contextual, cultural, interpersonal, or other influences that contribute to the child's presentation.

Approaches to Integrating Information

With these issues in mind, we highlight several suggested approaches to integrating informa-

tion across caregivers and methods when completing assessments in clinical and research settings.

Clinical Suggestions

Large discrepancies in assessment data about young children in clinical settings could impede establishing a therapeutic alliance and forming shared treatment goals. If discrepancies (particularly between caregivers) are not addressed, this may leave one or more parties feeling that their perspective was not heard or respected (De Los Reyes & Kazdin, 2005).

De Los Reyes and colleagues have identified common clinical approaches to resolving this issue, as well as recommended practices. When confronted with discrepant data, one option for clinicians is to simply choose to use the results from one rater or method that is believed to provide the most valid data. These decisions are subjective assessments of the strengths and limitations of different methods and perceptions of informants' suitability and access to pertinent information (Dirks et al., 2012). For example, a teacher's report of peer interactions may be considered more valid than a parent's. Although a common practice, this single-source approach is generally not recommended because it eliminates the nuances of the data that can be used to inform treatment, and may alienate informants whose perspectives are not considered.

Another approach to discrepant information may be to present the results to families, explaining the major areas of disagreement among respondents. The clinician can then engage the parties in a problem-solving approach to consider why assessment results may vary, and what can be learned about the child from these differences. For example, a clinician could explain to the caregivers that one of them rated their child's anxiety higher than the other, perhaps initiating a productive conversation in which they explore the potential impact of one caregiver's own anxiety, or cultural perceptions of anxiety, on their reporting. Caregivers may feel empowered by this approach, potentially enhancing the therapeutic alliance. It is also likely to be a culturally responsive approach in which caregivers' interpretations of behaviors are directly sought, which can be enlightening if other informants do not have the same cultural background or if the measure is not normed for that cultural group.

Another approach would involve collecting greater collateral information that may inform relative reliance on each respondent's data. For example, it may be helpful to learn whether a caregiver has exposure to other children his or her child's age, to ask how many hours a day the teacher works with the child, or to determine whether the caregiver believes that the assessment score impacts the child's eligibility for mental health services (De Los Reyes, 2011). With this approach, however, clinicians risk being dismissive or, in extreme cases, discriminatory against some adults who care for young children. Furthermore, even biased data may be informative. For example, while the depression-distortion hypothesis posits that depressed parents may provide overly negative accounts of child behavior, parental depression is strongly associated with young children's behavior and self-regulation, and as such should not be viewed as a nuisance variable (De Los Reyes & Kazdin, 2005). In the case of alternative assessment methods, information about the child's attention to and motivation for a computer task, or whether his or her behavior observed in the classroom is typical, could determine the credence that clinicians give to those data.

Research Suggestions

Researchers also must struggle with integrating discrepant assessment data about a child. Like clinicians, they may opt to select one method or one informant's account of the child, or may take the average score across multiple respondents (De Los Reyes, 2013). However, these practices reduce variability in the data, which limits statistical power and may obscure patterns in the results. To better integrate disparate data, researchers can alter their selection of measures or their approaches to statistical analysis. With regard to measurement selection, researchers may explore whether the measure has informant-specific norms and give preference to those that have such norms. In other words, they may choose a measure that has norms for not only features of the child (e.g., age, gender, race/ethnicity) but also the type of informant (e.g., parent vs. teacher; Achenbach, 2011). Researchers may also alter assessment measures to ask respondents to report not only the frequency and intensity of the behavior but also any observed variability across contexts (De Los Reyes, 2011). Using statistical approaches from behavioral genetics research, which parse

shared and nonshared variance to isolate genetic and environmental influences on phenotypes, statistical modeling can parse discrepant data based on the informant or the method, the setting in which they observe or measure the child, and the concordance across respondents and measures (Achenbach, 2011).

In summary, it is common for several caregivers to provide discrepant information about a child, and for different types of assessments to be inconsistent. For both researchers and clinicians, it is unclear how best to analyze these data when they do not tell a single, unitary story. Yet the differences may shed light on important features of the child's functioning across settings, and may provide clues to the etiology of the challenging behavior and possible intervention routes.

Decision Guide: Selecting a Caregiver-Report Measure

Table 15.1 outlines a number of factors that should be considered when selecting tools to assess social-emotional functioning in young children and notes information that is particularly salient. As a first step in identifying and selecting a measure, it can be useful to review the literature (Briggs-Gowan, Godoy, Heberle, & Carter, 2016) and available compendia that summarize a range of instruments (e.g., National Child Traumatic Stress Network: www.nctsn.org; Birth to 5: Watch Me Thrive: www.acf.hhs.gov/ecd/child-health-development/watch-me-thrive#compendium; Buros Center for Testing: <http://buros.org>). We recommend using these guides, particularly online resources that can be updated frequently, as a starting point in identifying potential tools. However, we strongly advocate for more stringent review of individual tools, including exploration of the available norms, reliability, and validity data.

Consider pediatricians with a primary care practice, serving mostly English-speaking but some (10%) Spanish-speaking families, who want to select a screening tool that can be used at the 2-year well-child visit to identify children who may be at risk for ASD. They need a tool that will be affordable, quick to score and interpret by pediatricians, and feasible in their busy practice workflow. The practice might select the 20-item Modified Checklist for Autism in Toddlers—Revised (M-CHAT-R; Robins et al., 2014), which can be completed by parents in

less than 10 minutes and the yes–no questions can be scored quickly by providers. Scores can be categorized into three risk categories (low, moderate, high) that can facilitate easy decision making about follow-up (no follow-up needed, further follow-up advised before referring, and follow-up advised). If, on the other hand, an early childhood outpatient mental health clinic is seeking a caregiver-report measure to aid and better standardize diagnostic decision making and inform treatment planning, they might select the PAPA (Egger et al., 2006), a semistructured interview that gathers information about the onset, duration, frequency, and intensity of behaviors, as well as the impairment they may cause. These examples highlight how consideration of the areas highlighted in Table 15.1 can aid in the selection of a caregiver-report measure.

Key Points and Future Directions

Tremendous progress has been made in the area of infant and early childhood mental health assessment in recent decades. The wide availability of reliable, valid measures of young children's social-emotional functioning has been a boon for the current generation of researchers and clinicians. In this section, we highlight key areas for growth in the field, including culture, screening, and the integration of information across caregivers.

Culture

Culture is an especially important aspect of the assessment and treatment process (Betancourt & Lopez, 1993; Lewis-Fernández et al., 2014; Pumariega et al., 2013), and understanding race and ethnicity, and their intersections, is an integral part of conducting a culturally informed assessment. Engaging in assessments that strive to be culturally competent requires that clinicians and researchers first acknowledge their own identities, behaviors, work settings, and the ways in which each of these may be perceived by caregivers and children (American Psychological Association, 2003). A culturally competent assessment is a complex process, requiring adaptability, a commitment to embracing differences, and efforts to develop a deep cultural knowledge base rather than reinforcing stereotypes (Calzada & Suarez-Balcazar, 2014). Today, practitioners working with young

TABLE 15.1. Decision Guide for Selecting an Early Childhood Caregiver Report Instrument

Consideration	Key recommendations and comments
<u>Overarching considerations</u>	
Purpose and goals of assessment	Is the measure being used for clinical or research purposes? Is the goal to clarify diagnoses or screen for concerns in a narrow band (e.g., autism spectrum disorder)?
Integrating information	When collecting assessment data from multiple informants (e.g., parent and early educator), or when using multiple assessment measures (e.g., questionnaire and behavioral observation), formulate a plan for how to integrate information, particularly if it is contradictory.
<u>Setting considerations</u>	
Setting	Has the measure been used in the setting previously, such as primary care, early child care, and general outpatient clinical settings?
Time	Consider time required to administer, score, and interpret the measure, and to discuss results with the family.
Staffing constraints	Determine who is available to administer, score, and interpret results/discuss feedback with families. Determine level of staff training required to administer, score, and interpret results.
<u>Domains</u>	
Social–emotional functioning	Difficulties can manifest as mood dysregulation and anxiety (e.g., withdrawal, avoidance, sleep dysregulation) or disruptive behavior (e.g., yelling, aggression). Consider competencies, such as prosocial behavior/empathy development.
Stress and trauma	Assess a range of potentially traumatic experiences, as young children are more vulnerable to events that may not be traumatic for older children/adults (e.g., separation from parent).
Cognitive and language delays	Include direct, norm-referenced assessment of cognitive and linguistic functioning prior to interpreting the results of social-emotional assessments whenever possible.
Caregiving relationships	When possible, assess child functioning within the context of caregiving relationships to aid in understanding caregiver beliefs, expectations, and attitudes.
Impairment	Make judgments based on child and/or family indicators, such as parental distress or a parent’s difficulty maintaining family routines, household activities, or employment. May be evident in the degree or number of accommodations that parents make.
Parental concerns	Parents of young children may be less likely to have concerns about social–emotional issues even when they are atypical. However, parental worry has relevance to motivation for help seeking.
<u>Type of tool</u>	
Screening tools	Use when the goal is to quickly (5–10 minutes) identify at-risk children from a larger population. Inexpensive and easy to administer to a large number of individuals. Use to determine whether further evaluation is needed, identify treatment needs, and inform treatment planning.

(continued)

TABLE 15.1. (continued)

Consideration	Key recommendations and comments
Comprehensive checklists	Use when the goal is to gather comprehensive information about functioning (strengths and weaknesses) across multiple domains. More training typically required to interpret. Helpful for treatment planning, but not appropriate for establishing whether a child meets criteria for a psychiatric disorder.
Diagnostic interviews	Use when the goal is to clarify diagnoses. Takes 1–2 hours to complete at a minimum. Requires training and typically clinical background. Probe for information about presence, onset, duration, and intensity of symptoms, as well as impairment.
<u>Characteristics of the tool</u>	
Ease of scoring and interpretation	Ease of scoring/interpretation impacts implementation, particularly in clinical settings. Consider scoring information garnered and appropriateness for the setting (e.g., above/below cutoff vs. profile of norm-referenced scores on variety of domains).
Norms	Measures that provide age- and sex-based norms may be most helpful for understanding how a child is functioning relative to typically expected development.
Reading level (parental literacy)	Seek publicly available information about the measure's reading level.
Cost	Include both initial and ongoing costs of using the measure.
Language/translation (parent language)	Translating and back-translating does not ensure the equivalence of individual items or of the overall construct being assessed. When measures are translated, new psychometric data should be gathered when possible.
Cultural appropriateness (parent sociocultural background)	Are the items on the instrument culturally relevant for this caregiver–child dyad? Does the sample on which this instrument was normed represent this caregiver–child dyad? Is the language in which this instrument is written the optimal language in which to assess this caregiver–child dyad? In what ways might cultural or linguistic differences contribute to the information that was gathered? When possible, pilot-test in the target population and evaluate reliability, validity, factor structure, norms, and differential item functioning.
<u>Psychometric properties</u>	
Reliability	<i>Internal consistency reliability</i> (how well items hang together), <i>test–retest reliability</i> (consistency of results over time), and <i>interrater reliability</i> (consistency of results across individuals).
Validity	Note <i>content validity</i> or <i>face validity</i> (whether items and scales appear to be relevant to the construct they are intended to measure), <i>construct validity</i> (how well a measure assesses the construct it is intended to measure), <i>predictive validity</i> (how well a measure predicts the same problem over time or an outcome), <i>sensitivity</i> (proportion of children with a problem who are successfully classified as having that problem), and <i>specificity</i> (proportion of children without a particular problem who are correctly classified as not having that problem). Different criteria may be appropriate depending on purpose of the assessment and the risk of harm associated with failure to detect a problem.

children and families must be knowledgeable about the essential roles of sociocultural factors in shaping development, as well as the expression, diagnosis, management, and treatment of social–emotional and other problems that can emerge in early development.

Aspects of identity other than cultural affiliation may also impact the validity of a measure for a given individual or group. Personal socioeconomic status or background, religion, immigration history, level of acculturation, educational attainment, and other factors may influence caregivers' perceptions of their children, expectations for their behavior, and beliefs about infant mental health, impacting their responses on an assessment instrument. For many families, caregivers differ from one another in various aspects of identity and culture, and the child's identity and culture may be distinct from either caregiver's. Clinicians need to attend to the intersectional identities of the children and caregivers with whom they work. They also should consult with colleagues and the literature, as well as discuss in depth the family's identity status and values to understand a caregiver's responses on an assessment measure.

As we have noted throughout this chapter, increasing the availability and use of culturally valid measures in clinical practice and research is a key goal for the field. There are multiple steps involved in establishing a measure's validity for a certain culture, and confidence in the findings increases as more of the steps of adaptation are completed. Linguistic congruence (e.g., the translation of measures into the parents' primary language) alone does not establish a measure's cultural validity. Research must also confirm the measure's content validity;

that is, items must be reviewed with cultural ingroup members to ensure that their meaning is the same as the understood meaning in the cultural group for which the measure was initially developed. Even for measures in which a degree of cross-cultural validity has been established, researchers and clinicians endeavor to ensure that the measures used are valid for the *specific* individuals or populations to whom they will be administered given the cultural background of those individuals. Ideally, all measures would be adapted for many cultural and linguistic groups, with solid evidence for their validity. In reality, researchers and clinicians are tasked with selecting the best-validated measure for that group at the time it is needed.

In addition to instrument selection, assessors must also consider cultural factors throughout the process of interviewing caregivers and children, interpreting the overall findings of the assessment (Kleinman, Eisenberg, & Good, 1978), and when offering feedback to families about their children. Table 15.2 lists questions that may be used as a starting point for framing a culturally informed evaluation. Framing of feedback to families should be guided by the answers to these questions.

Stigma about mental health problems, awareness of negative stereotypes that may be applied to one's children, or concerns about judgment of one's caregiving are all factors that may affect the degree to which caregivers feel comfortable reporting openly about a child's problem behaviors. These constraints may be magnified when an institution is seen as being poorly integrated in the community it serves, or when clinicians or researchers are perceived to lack understanding of or empathy for their clients.

TABLE 15.2. Questions to Guide a Culturally Informed Assessment

1. What does the caregiver see as the problem?
2. What are the caregiver's expectations with regard to treatment?
3. How does the problem affect the child, caregivers, and other family members?
4. What does the caregiver see as optimal behavior for this child?
5. What are the caregiver's beliefs about child development? What does the caregiver see as the key tasks of development at this stage in the child's life?
6. How have community members responded to the child and caregiver?
7. What is the predominant attitude regarding help seeking in the caregiver's community? If known, how do community members see the organization with which the assessor is affiliated? Does the caregiver share these beliefs?

Screening

In this chapter, we have discussed the value of screening to facilitate early detection and intervention for emerging psychological and developmental concerns. Recent years have seen an increased emphasis on screening for developmental (including social–emotional) concerns in settings such as primary care pediatric offices and early education classrooms. With respect to policy, professional groups such as the American Academy of Pediatrics Council on Children with Disabilities (2006) advocate routine screening for autism and general behavior problems in pediatric settings. Although a wide range of developmental screening instruments is now available (see Moodie et al., 2014), several concerns exist about implementation: There are limitations in the sensitivity and specificity of these instruments. In addition, many providers are hesitant to implement screening procedures in their offices due to limited availability of referral resources for children who screen positive for problems (Perrin & Stancin, 2002). In our clinical experience, some providers overestimate the diagnostic power of screeners, and make treatment recommendations, including initiation of medication, on the basis of elevated screening results rather than pursuing appropriate follow-up assessment and referrals. There also is concern that with increased focus on screening, parents will be asked to complete the same measures repeatedly in different settings (e.g., at the pediatrician’s office and the child care facility), without sufficient integration or sharing of results.

An additional, infrequently discussed challenge related to screening is that a large proportion of American adults (17%) have very limited literacy skills (Rampey et al., 2016), such that they are unlikely to be able to read and respond to text-based screeners. This presents a significant challenge for universal screening efforts. Solutions should be proactively considered prior to the implementation of any screening program to avoid alienating families or collecting inaccurate data. Validity testing of commonly used screening instruments with individuals who have low literacy (e.g., to determine the reliability and validity of these instruments when administered verbally to this population) is needed.

In the context of screening, assessors may have only limited access to information about a child’s caregiving context, family relationships,

and cultural affiliations. Screening instruments may collect only minimal demographic information about a family and are often administered in contexts in which an assessor has little or no direct contact with caregivers. In these cases, the selection of instruments that are appropriate for the target population is particularly important, as is additional assessment of any problems identified by a screening instrument. Care should be taken to ensure that screening results are delivered in a culturally competent manner, with consideration given to both the linguistic needs of the family receiving feedback and beliefs known to be widely held in the community that may impact caregivers’ understanding of screening results and their actions following delivery of these results.

An important future direction for researchers interested in screening or the use of brief measures will be to develop and validate the use of technology to facilitate administration of these measures. Although several instruments are now available in electronic form, little research has examined whether electronic administration is equivalent to the paper administration used in most validation studies of caregiver report forms.

Integrating Information

As we have noted, integrating data across informants and methods continues to be a significant challenge in both clinical and research settings. When, as commonly happens, there are inconsistencies across data gathered from different informants or via different techniques, the key assessment tasks of identifying strengths and weaknesses, evaluating impairment, and determining diagnostic status become much more challenging. Guidelines for systematic and valid approaches to integrating data would be a major contribution to the field. Recommendations should be based on empirically supported methods for integrating multimethod, multi-informant assessment data within the domain of social–emotional and behavior problems.

Conclusions

The past several decades have seen an increase in awareness of the importance of infant and early childhood mental health, paralleled by an increase in the number of evidence-based tools for detecting concerns. While certain aspects of

assessment are relevant to youth of any age, we have highlighted factors that are particularly relevant for early childhood, including the fact that young children have limited verbal abilities and metacognitive capacities—therefore increasing reliance on caregiver reporting—and the fact that young children’s behavior is highly sensitive to contextual, relational, and sociocultural influences. Successful use of these caregiver-report social–emotional assessment measures for young children requires that the assessment be tailored to the *goals and purpose of the evaluation*; use tools whose *psychometric properties have been rigorously evaluated*; acknowledge *cultural and contextual factors* (e.g., environments, caregiver influences, sociocultural factors); be framed within the context of a child’s *functioning in other developmental domains*, such as language, cognition, and adaptive functioning; and employ an approach to *interpretation* that views the whole child in relation to contextual and developmental factors. As the field continues to make progress, attention to several key areas—including a focus on culture, screening efforts, and the integration of information across multiple informants—will be crucial.

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