The Autism Spectrum Disorders (ASD) Assessment Guidelines for Behavior Analysts

CASP The Council of Autism Service Providers

apba | ASSOCIATION OF PROFESSIONAL BEHAVIOR ANALYSTS

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CHAPTER 1

Introduction to The *Autism Spectrum Disorders Assessment Guidelines for Behavior Analysts*

The *Autism Spectrum Disorders Assessment Guidelines for Behavior Analysts* (hereafter the *ASD Assessment Guidelines*) serve as a tool to help practitioners identify and assess the diverse needs of clients with autism spectrum disorders (ASD) in an ethical and effective manner. These guidelines can be applied by Applied Behavior Analysis (ABA) practitioners to conduct assessments in autism services across clinical, educational, and residential settings.

These guidelines are designed to support ABA practitioners in assessing individuals whose primary diagnosis is ASD, while acknowledging that many autistic individuals may have co-occurring behavioral or medical conditions that require additional assessment considerations (Hughes et al., 2023; Micai et al., 2023). Grounded in extensive reviews of scientific research, subject matter expert (SME) recommendations, and other cited sources, they reflect the most reliable scientific evidence and expert clinical opinions available at the time of publication. As with any ABA assessment or intervention, the application of these guidelines must be tailored to each client.

> While these guidelines focus on assessment for individuals with ASD, the recommended practices are not limited to ASD alone. The practices outlined are likely relevant for practitioners working with people with intellectual disabilities or related disorders who exhibit similar needs and for whom ABA is recommended.

> The *ASD Assessment Guidelines* assist practitioners in applying the BACB® *Ethics Code for Behavior Analysts'* Core Principles: **Benefit Others; Treating Others with Compassion, Dignity, and Respect; Behave with Integrity; and Ensure Their Competence**. (BACB®, 2020).

ABA practitioners are responsible for selecting and conducting effective, scientifically sound assessments that form the foundation for treatment planning and projected outcomes for treatment. Conducting multimodal assessments, as described in these guidelines, provide critical information about a client's past and present behavioral profile and are the foundations for designing and implementing treatment. To do this effectively, practitioners must be well-informed on how to select, design, and administer appropriate assessment tools. They are also ethically obligated to maximize client benefits and minimize potential harm, and consider the unique needs, circumstances, and available resources of both clients and stakeholders (BACB®, 2020).

Since most ABA graduate school programs do not provide explicit training in the use of standardized assessments, the *ASD Assessment Guidelines* act as an educational resource and serve as a bridge to close the gap between theory and clinical practice. These guidelines also serve as an aid for faculty and supervisors when training ABA practitioners in selecting tailored assessments. Understanding how to effectively tailor assessments is especially crucial for practitioners and allows them to prioritize socially meaningful client outcomes while minimizing risks.

In addition, the *ASD Assessment Guidelines* help practitioners, mentors, facilitators, and credentialing organizations evaluate ethical concerns that may arise during assessments. These guidelines provide direction to practitioners to ensure that their assessments minimize risk and do not cause unnecessary harm or distress to clients. Similarly, these guidelines emphasize that assessments should maximize the benefits to the client (the individual directly receiving services, i.e., patients, students, consumers) and other stakeholders, such as parents, caregivers, relatives, or teachers (BACB®, 2020).

The Core Focus of the Guidelines

The *ASD Assessment Guidelines* provide a comprehensive review of assessment types and tools and includes an in-depth examination of both standardized and non-standardized assessment instruments. A thorough and critical review, these guidelines discuss assessment tools in detail, revealing their characteristics, measurement properties, psychometric strengths and limitations, and appropriate applications in practice. These guidelines review the characteristics of norm-referenced and criterion-referenced assessments, while underscoring direct observation and measurement, a cornerstone of ABA. To further support effective assessment and treatment planning, the guidelines also organize commonly used tools into four key domain areas that reflect the core needs and characteristics of individuals with ASD.

In short, the *ASD Assessment Guidelines* encompass four assessment domains:

1. Core symptoms and characteristics of autism spectrum disorders
2. Adaptive functioning
3. Well-being/quality of life
4. Co-occurring conditions and their associated features

The *ASD Assessment Guidelines* are broad and complement rather than act as a substitute for formal training in specific assessment types, mentorship in ABA assessment practices, or any other regulatory requirements or recommendations. These guidelines augment the Council on Autism Service Providers' (CASP), *Applied Behavior Analysis Practice Guidelines for the Treatment of Autism Spectrum Disorder: Guidance for Healthcare Funders, Regulatory Bodies, Service Providers, and Consumers*, 3rd Edition (2024), which includes education in the assessment and development of medically necessary treatment. Additionally, the *ASD Assessment Guidelines* may aid behavior analysts practicing in subspecialty areas where they must adhere to the regulations and recommendations for those specialties.

> The **Centers for Medicare and Medicaid (CMS)** require that service planning for participants in **Medicaid Home and Community Based Services (HCBS)** be developed through a **person-centered planning process**. These programs must address health and long-term services and support needs in a manner that reflects individual preferences and goals. (U.S. Centers for Medicare & Medicaid Services, 2022).

> ABA practitioners **must be aware of all federal and state statutes that pertain to their practice (e.g., clinical, educational, residential).** The **Individuals with Disabilities Education Act (IDEA)** is a federal law that makes public special education services free for children up to twenty-one years old. **The act requires parental consent for the initial assessment and for any subsequent reevaluations of a child** (in most circumstances). Evaluations (assessments) include a consideration of the child's history, interviews with the parents, and a review of medical or other relevant records. The IDEA Act also states that practitioners must use multiple methods for assessment. Such assessments must include observing the child and employing a variety of assessment tools and strategies (U.S. Department of Education, IDEA, Subchapter 2 (Part B), 1414).

Contributors and Collaboration

The *ASD Assessment Guidelines* are the product of a collaboration between the Council of Autism Service Providers (CASP), a trade association for providers offering services to individuals diagnosed with ASD, and the Association of Professional Behavior Analysts (APBA), a professional association for practitioners of applied behavior analysis. At the time of this publication, several resource documents on assessment are available from other organizations (e.g., Behavior Health Center of Excellence® (BHCOE)®, CASP, and the International Consortium for Health Outcomes Measurement [ICHOM]). Resources from these entities provide guidance for a variety of stakeholders, such as healthcare funders, regulatory bodies, and service provider organizations, whereas the present guidelines primarily support ABA practitioners, including Board Certified Behavior Analysts® (BCBA®) and Licensed Behavior Analysts (LBA), across treatment settings.

CHAPTER 2

Ethics and Regulations

Ethical and Regulatory Considerations in ASD Assessment

ABA practitioners conduct assessments for individuals with ASD across a wide range of service settings and conditions, including homes, schools, and community environments such as residential or supportive living and day treatment centers. Assessment requirements vary depending upon the relevant funding source or regulatory body. In every circumstance, practitioners must be prepared to select and administer assessments in a manner that is legally, ethically, and clinically sound (BACB®, 2020, Ethics Standard 1.02).

Figure 2.1. Ethical Practice and ASD Assessments

Ethical Practices and ASD Assessment

Regulations, Requirements, and Competence
Conform to regulations and funder policies and operate within one's scope of competence

Cultural and Service Setting Responsiveness
Conduct services for individuals across a diverse range of settings and service conditions

Responsibility to Clients
Act in the client's best interest, maximize benefits and minimize potential harm to clients, and advocate for appropriate services

Prior to conducting assessments, it is imperative to obtain informed consent and collaborate with individual clients and their stakeholders to establish treatment goals that are socially significant. Practitioners need to evaluate what is most meaningful to their clients and identify assessments that will effectively evaluate their clients' progress over time. Practitioners commonly use a multimodal approach to accomplish this, such as direct assessments, indirect measures (e.g., questionnaires, interviews), and observation of the client in one or more environments.

Whereas ABA practitioners may receive some assessment training during their graduate coursework, many enter the field without formal instruction in the selection, administration, or evaluation of assessments or in understanding the psychometric properties of assessments. Building these skills is essential not only for ethical clinical practice but also for designing

interventions that reflect clients' and their caregivers' unique circumstances and reasons for seeking services (BACB®, 2020, Ethics Standards 1.05, 1.07, & 2.13).

It is essential to ensure that there is sufficient rationale to support the selection and use of any tool or type of assessment. In clinical settings, for example, every component of a treatment plan—including goals, teaching protocols, reinforcement schedules, and data collection procedures—is typically tied to assessment results. Practitioners must ensure that the assessments they administer yield valid results, and these results must reflect their clients' true strengths and challenges. In addition, assessment items, tasks, and prompts must carefully match the behaviors or responses the practitioner is evaluating. Ultimately, the quality and effectiveness of an intervention depend on the integrity of the assessment process. When the foundation is strong, the treatment plan is more likely to lead to meaningful, measurable outcomes (Padilla et al., 2023, p. 280).

Figure 2.2. Assessment to Treatment Progression
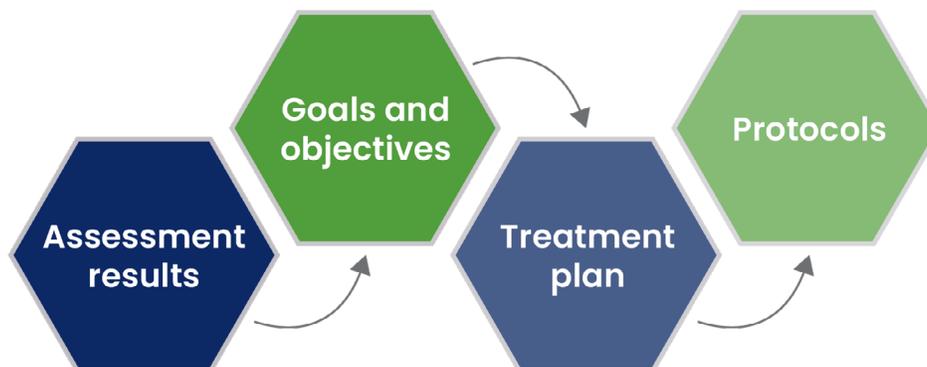
Moreover, the scientific rigor of assessments available to ABA practitioners varies widely. Chapter 3 Introduction to Assessments emphasizes the importance of using assessments with established validity and reliability and that the tools are appropriate for the intended purpose and population. Chapter 4 The Reliability and Procedural Fidelity of Assessment Delivery introduces key measurement properties essential for evaluating the accuracy and reliability of assessment results (BACB®, 2020, Ethics Standard 2.13). The information is intended as a starting point, not a comprehensive guide.

Applying *The Behavior Analyst Certification Board® Ethics Code for Behavior Analysts* in Assessment

The *Behavior Analyst Certification Board® Ethics Code for Behavior Analysts* (2020) provides ABA practitioners with an ethical framework to guide their practice. The *Ethics Code* highlights four foundational principles: (1) Benefiting Others; (2) Treating Others with Compassion, Dignity, and Respect; (3) Behaving with Integrity; and (4) Ensuring Their Competence.

The *ASD Assessment Guidelines* connect relevant BACB® ethical principles with practical advice for practitioners when selecting, conducting, and interpreting assessments. For additional guidance, please refer to the *BACB® Ethics Code for Behavior Analysts* (2020).

Regulations, Requirements, and Competence

Conform with Legal and Professional Requirements

1.02   Conforming with Legal and Professional Requirements

Behavior analysts must follow all governing bodies and relevant laws. They must select and implement ASD assessments in a manner that is both legally and ethically sound.

Conform with Service and Financial Agreements

3.04   Service Agreements

Before any assessment begins, behavior analysts must secure a signed service agreement from the client and relevant stakeholders to ensure the parties have a mutual understanding regarding the assessment process, components, and responsibilities. Additionally, the assessment may not be conducted prior to obtaining informed consent. For individuals receiving ABA services, there may be multiple assessment periods (e.g., every 6 months, annually) depending upon the funding source and any ongoing treatment and assessment requirements. Should any changes in assessment scope, methods, or external regulations (e.g., funder requirements, licensure changes) occur an updated service agreement must be provided and signed by relevant parties.

Figure 2.3. Regulations, Requirements, and Competence

3.05 Financial Agreements

Prior to conducting any assessments, behavior analysts should ensure the relevant parties understand how the assessment services will be billed and compensated. These parameters should be secured in writing in a service agreement to avoid misunderstandings.

3.07 Third-Party Contracts for Services

When assessments are requested by a third party, such as schools, agencies, or insurance, behavior analysts should define the professional relationship with each party involved. Begin by evaluating for potential conflicts of interest that may compromise the client's care or the objectivity of the assessment. A referral should be made if any conflicts cannot be resolved. Behavior analysts should ensure the service contract reflects the responsibilities of all parties involved, the scope of the assessment, how assessment data will be used, with whom results will be shared, and the behavior analyst's obligations under the *BACB® Ethics Code*. These requirements enhance transparency and establish accountability to prevent potential misunderstandings related to sharing results, the purpose of assessment, and ethical responsibilities.

3.08 Responsibility to the Client with Third-Party Contracts for Services

Assessment requirements may vary significantly based on the funding source. For example, healthcare funded ABA services may have specific assessment requirements imposed by payers. These requirements may include requiring clinicians to use certain standardized assessments and not authorizing other instruments. In contrast, school-funded assessment services may limit behavior analysts' role in conducting functional behavior assessment or analyses and rely on other members of the Individualized Education Program (IEP) team, such as a school psychologist or speech-language pathologist, to conduct educational or language assessments. In residential settings, payers may use a whole other set of assessments. Privately funded ABA assessments (e.g., family paying out of pocket) that are conducted prior to service delivery are determined by behavior analysts in collaboration with the stakeholders.

Practice within Scope of Competence

1.05 Practicing within Scope of Competence

Behavior analysts must conduct assessments for which they have received proper training in administration, scoring, and interpretation. When a behavior analyst is licensed, they must ensure assessment practices are aligned with and remain within the scope defined by the governing licensing board's regulations.

Practice within One's Defined Role

1.04 Practicing within a Defined Role

Behavior analysts must obtain training and oversight in the assessments they plan to deliver and/or interpret prior to entering into an agreement to conduct such services. They must define their role in the assessment process and ensure it's documented. When permitted, behavior analysts who oversee technicians assisting with assessment

administration must ensure that technicians are properly trained and receive adequate supervision.

Document Professional Activity

3.11   Documenting Professional Activity

Behavior analysts must create and maintain thorough records of their assessments and intervention recommendations. This documentation plays a critical role in supporting effective service delivery, coordinating care with other professionals, and meeting regulatory, contractual, and organizational requirements. Well-maintained records also promote transparency, enable clear communication, and help ensure continuity and quality of care when clients transition between providers.

Cultural and Service Setting Responsiveness

Be Culturally Responsive

1.07   Cultural Responsiveness

As part of ongoing professional development activities, behavior analysts should build their knowledge and skills to promote culturally affirming assessment procedures. When selecting assessment tools, they must select tools that are appropriate to the client's cultural and linguistic background. When third-party contractual agreements require certain assessment measures that are not culturally sensitive to a client, practitioners must communicate the limitations regarding the validity of the assessment findings and consider selecting alternatives to reflect their client's needs. Additionally, behavior analysts must evaluate their own biases, which may influence their assessment planning and engagement with the client and their caregivers. They must then self-assess if they can effectively address any biases to ensure their assessment results are objective.

2.13   Selecting, Designing, and Implementing Assessments

To best support individualized client goals, contexts, and available resources, behavior analysts must select, design, and implement assessments that reflect the unique needs and priorities of each client and their stakeholders. Behavior analysts' assessment choices should be guided by the intended outcomes that are most meaningful to the client and their support system. Key factors to consider when selecting assessments include:

- Measurable domains (e.g., communication, adaptive skills, social functioning)
- Appropriateness (e.g., age, gender, symptom profile)
- Cultural inclusiveness
- Socially meaningful outcomes

Provide Effective Treatment

2.01   Providing Effective Treatment

Behavior analysts are responsible for delivering effective services that lead to meaningful outcomes for clients and their stakeholders. This process begins with a thorough assessment, where the findings directly inform the development of individualized goals and programs. When done well, the connection between assessment and intervention supports socially significant outcomes that matter in the client's everyday life.

Figure 2.4. Cultural and Service Setting Responsiveness

Involve Clients and Stakeholders

2.09   Involving Clients and Stakeholders

When identifying the client and the caregiver's visions for treatment outcomes, behavior analysts should use this information to guide assessment selection. Tools chosen should be sensitive to the goals and priorities identified by the family or stakeholders. For example, if a family's primary goal is for their child to independently perform activities of daily living (ADLs), the assessment package should include tools that specifically measure ADL skill domains.

Collaborate with Colleagues and Other Providers

2.10   Collaborating with Colleagues

When conducting assessments for clients with other service providers, collaboration is encouraged. Not only does this foster coordination of care across interdisciplinary practices, but it also allows the behavior analyst to gather a wealth of information including the progress and treatment approaches to date.

3.06   Consulting with Other Providers

Assessment results may indicate the need for additional services beyond the behavior analyst's scope of competency. The behavior analyst may refer clients to other providers to support the needs identified in the assessment. Before doing so, they must ensure that other providers have appropriate informed consent and are in compliance with applicable requirements (e.g., laws, regulations, contracts, organizations, and funders' policies). Behavior analysts must ensure that other providers have appropriate informed consent and are in compliance with applicable requirements (e.g., laws, regulations, contracts, organizations, and funders' policies).

3.13   Referrals

Throughout ABA assessment and treatment, situations may arise where behavior analysts may need consultation and support from another behavior analyst. They may also need to consider whether referral to or collaboration with professionals from other disciplines may be indicated. ABA practitioners must collaborate with other specialists— such as medical doctors, psychologists, and educators—when their expertise is required to assess and address client needs beyond the scope of competence or practice of the practitioner. Consultation should only be conducted with the client's or their legal representative's informed consent and in accordance with relevant legal and policy requirements.

In such cases, ABA practitioners must prioritize their client's needs by making appropriate referrals or pursuing additional training and supervision to improve their own scope of practice when a referral is not possible. When working with other professionals, ABA practitioners must ensure confidentiality and only disclose client-specific information with the client or their legal representative's authorization.

Responsibility to Clients

Maximize Benefits and Minimize Potential Harm to Clients

3.01   Responsibility to Clients

Behavior analysts must select assessments that are designed to maximize benefits while minimizing potential harm. They are expected to carry out the assessment process with ethical diligence—protecting client welfare, adhering to legal and regulatory requirements, and operating within the boundaries of any signed contractual agreements related to assessment services.

Address Conditions Interfering with Service Delivery

2.19   Addressing Conditions Interfering with Service Delivery

Behavior analysts must proactively identify and address environmental conditions that could interfere with accurate and effective assessment delivery—such as frequent interruptions by caregivers or an overly stimulating environment. To maintain the integrity of the assessment process, practitioners should take reasonable steps to reduce or eliminate these disruptions whenever feasible. Any environmental factors that may influence the assessment results should be clearly documented.

Consider Medical Needs

2.12   Considering Medical Needs

Behavior analysts should be aware of and plan for any medical issues before conducting assessments (e.g., seizure disorder, anaphylaxis, diabetes). Before making recommendations based on assessment findings, ABA practitioners must first determine whether the client's behavior may be influenced by medical or biological factors. If such factors are suspected, the practitioner should refer the client to an appropriate medical professional for further evaluation, document the referral, and confirm that any medical concerns have been addressed prior to implementing behavior interventions.

Select, Design, and Implement Assessments

2.13   Selecting, Designing, and Implementing Assessments

When assessing individuals with ASD, behavior analysts should choose assessment tools that are well-supported by research and appropriately matched to the client's unique needs, context, and available resources. Selected assessments should be capable of capturing present levels of performance and tracking meaningful progress over time. In cases where an assessment meets client needs but lacks strong research support, practitioners must clearly communicate the intended purpose of the tool and any limitations in interpreting its results. For example, if a non–norm-referenced assessment was conducted, it should not be used to compare a client's progress against same-aged peers.

Figure 2.5. Responsibility to Clients: Maximize Benefits and Minimize Potential Harm to Clients
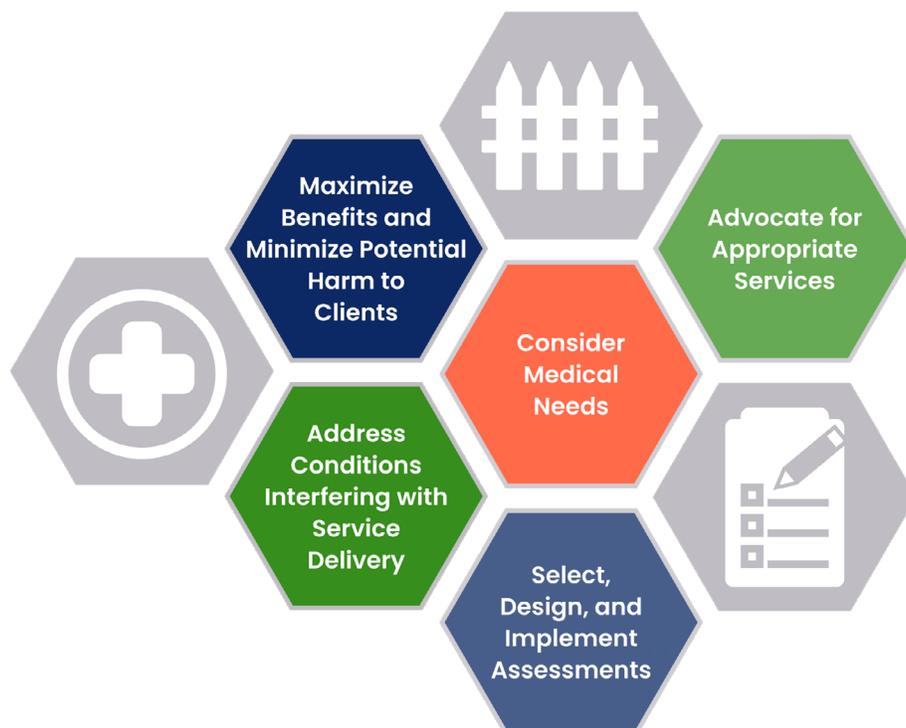
Advocate for Appropriate Services

3.12   Advocating for Appropriate Services

Behavior analysts have a responsibility to support informed choices and to educate clients and stakeholders about effective, research-supported assessments that address each individual's unique needs. In addition, they must advocate for the appropriate type and intensity of behavioral services, as well as the level of clinical oversight necessary to support progress toward client-specific goals.

Key Points

Behavior analysts must follow ethical guidelines when conducting assessments for individuals with ASD, ensuring that the process is responsible, respectful, and effective. Informed consent, including assent from the client being assessed, must be obtained, with all stakeholders clearly understanding the purpose, procedures, and potential risks of the assessment.

Competence in assessment practices is essential. Behavior analysts must be trained in administering, scoring, and interpreting assessments, and they must seek consultation or supervision when necessary. Tools and procedures should be grounded in scientifically validated methods that promote the client's well-being, while respecting cultural and individual differences. Funding sources may also require specific assessment tools that may not effectively capture a client's areas of needs. It is important that behavior analysts communicate the potential limitations of their results, and provide an explanation of these concerns and the justification for selecting alternative measures that more appropriately reflect the client's circumstances.

Assessment goals should be designed to support outcomes that lead to socially meaningful and beneficial behavior change for the client. In addition to selecting appropriate goals, behavior analysts must maintain confidentiality of all assessment data. By adhering to the *BACB®'s Ethics Code* throughout the assessment process, practitioners protect client rights, uphold professional standards, and ensure ethical, client-centered care.

For further guidance on the evaluation of ethical practices in the assessment of ASD, refer to Appendix A and the *BACB®'s Ethics Code* for Behavior Analysts (2020).

CHAPTER 3

Introduction to Assessments

Behavior analysts are responsible for providing individualized assessments and treatment that address each client's unique needs and circumstances (BACB®, 2020, Ethics Standard 2.13). They collaborate with the individual receiving services and their stakeholders to establish the goals of treatment most meaningful to them. Prior to treatment, behavior analysts conduct a multimodal assessment to identify the baseline levels of skills and behaviors that relate to the client's needs. This chapter aims to educate behavior analysts on types of assessment, their characteristics, and some of their strengths and limitations. A review of common psychometric properties of assessments is also included to give behavior analysts a basic understanding of how assessment results are generated and what level of confidence can be placed in the results as treatment outcomes are evaluated. The chapter ends with an overview of social validity in applied behavior analysis (ABA).

In this chapter, we make distinctions among common terms used in assessment and psychometrics; however, these terms are not absolute. Different fields of study may characterize these assessment modes differently. Our goal is to provide terminology consistent with ABA practice. For example, ABA practitioners should be aware that other related professions use different direct and indirect assessments and for different purposes. This chapter clarifies terminology relevant to ABA practice, acknowledging that other fields may use similar terms with varying interpretations and purposes.

Assessment Types and Characteristics

Direct vs. Indirect Assessments

In ABA, **direct** assessments generally refer to tools that gather data by observing a client (e.g., natural home environment or a contrived teaching setting) or arranging antecedents and consequences and recording a client's response under those conditions. This might include a practitioner conducting a functional analysis to identify the function of a target behavior or implementing a standardized assessment to compare an individual's social skills to peers of the same age. **Indirect** assessments generally refer to information gathered from a 3rd party without directly involving the client. Indirect assessments may include interviewing a child's primary caregiver to identify the scope and priorities for the assessment process, asking a teacher to complete ratings across scales on a standardized assessment, or interviewing a paraprofessional at the child's school about their behavior at recess.

When identifying assessment modalities, the distinction between indirect and direct assessment is crucial. The key feature that defines an assessment mode as indirect is that a third party is typically providing the data rather than the client directly contributing to the data. In other words, tests administered directly to the client are usually considered direct assessments, whether they are standardized, non-standardized, norm-referenced, or criterion-referenced. Understanding each of these modes is crucial for effective evaluation and treatment planning. Together, these assessment modalities are considered when developing an assessment plan for each client.

Standardized vs. Non-standardized Assessments

Direct and indirect assessments may be classified as a **standardized** or **non-standardized** assessment. Both types of assessments are designed to evaluate a client's strengths, abilities, and challenges.

A **standardized** assessment instrument is one that is administered, scored, and interpreted in a systematic manner so that the assessment items, materials, timings, administration procedures, scoring procedures, and criteria are consistent across assessment administrations. For example, the Vineland-3 is a commonly used standardized assessment of adaptive behavior. It involves a skilled assessor interviewing a caregiver or teacher to learn about the client's communication, daily living, social, and motor behaviors. During the process, caregivers and teachers may also complete a questionnaire. Vineland-3 is *standardized*—it has a structured, formal approach to administration. It is also *indirect* since it does not require observation of the client. Standardized and indirect describe its procedural aspects. Since it is standardized, it also has psychometric properties (e.g., reliability, validity) analyzed from multiple rounds of testing and sampling; these are discussed later in this chapter. In **non-standardized** assessments, assessors follow established guidelines to administer and score it, but it does not have the same scientific rigor to be classified as a standardized assessment.

Norm-Referenced vs. Criterion-Referenced Assessments

Norm- and criterion-referenced assessments are commercially (paid) or freely available to practitioners. **Norm-referenced** assessments allow for a client's scores to be compared to individuals of the same age. **Criterion-referenced** assessments allow a comparison of a client's performance to a set of established criteria, but not against other individuals similar in age. Norm-referenced and criterion-referenced assessments may be direct or indirect and standardized or non-standardized. Very few assessments commonly used with individuals with ASD are classified as both norm-referenced and criterion-referenced given the diversity of needs across the spectrum and the need for the participant to meet certain requirements for eligibility in the assessment.

Social Validity

The primary goal of ABA is to produce socially meaningful outcomes that benefit the recipient of services. To achieve this objective, practitioners should prioritize social validity from initial assessment to

> **Methods for Collecting Social Validity Data**
> 1. **Likert type rating scales**
>   - The most commonly used formats; participants rate agreement with statements about their intervention goals, procedures, or outcomes on scales (e.g., 5-point or 7-point scale)
> 2. **Non Likert-type questionnaires**
>   - Other structured self-report tools, such as yes/no items, ranking scales (e.g., strongly disagree to strongly agree), or open-ended questions
> 3. **Intervention choice/preference arrangements**
>   - Interventions chosen by participants
> 4. **Other methods**
>   - Interviews, behavioral observations, focus groups, or open-ended feedback forms.
>
> (Leif et al., 2024)

discharge of services. Social validity encompasses the extent to which the goals, procedures, and outcomes of an intervention are viewed as acceptable and significant to all individuals involved (Taylor et al., 2023, Wolf, 1978). Goals should be aligned with client and other stakeholder priorities. Behavior change procedures must be acceptable to the recipient, individuals supporting the treatment process, and others in the environment (e.g., school, community). There are multiple modalities for collecting social validity data. See Leif et al. (2023) for more information. Whereas a detailed review of social validity measures is beyond the scope of these *ASD Assessment Guidelines*, several tools have been developed to evaluate social validity in ABA practice (e.g., Huntington et al., 2023; Kelley et al., 1989; Miltenberger, 1990; Park & Blair, 2019).

ABA treatment is intended to be effective, and selecting appropriate assessment tools is essential to showing whether behavior analysts are achieving the treatment goals and outcomes identified by clients and stakeholders. That stated, there are circumstances in which optimal outcomes are not achieved due to a variety of factors. Baer et al. (1987) noted that it is rare to find a treatment program that yields no benefit at all; however, weak treatment outcomes are more likely to occur where social validity measures were omitted from assessment and treatment practices. Social validity measures offer critical insight into whether treatment goals and procedures, and, in turn, treatment outcomes, are meaningful to the client, their stakeholders and their community. Measurements of social validity can directly inform and strengthen treatment effectiveness.

Multimodal Assessment Process

ABA practitioners build each client's treatment plan using information from a battery of assessments. *The Comprehensive Autism Care Demonstration: Solutions for Military Families*, a recent expert consensus from the National Academies of Sciences, Engineering, and Medicine (NASEM), emphasized that no single assessment tool or fixed set of instruments can provide all of the information needed to develop an effective treatment plan or evaluate progress for every autistic individual (NASEM, 2025). Treatment protocols are initially developed based on the results of a multimodal assessment and then modified as frequent direct observation, measurement, and analysis of treatment data occurs (ABACC, 2022). To inform treatment planning and program development, a multimodal assessment approach is taken, incorporating various methods for gathering clinical information to ensure the creation of individualized and effective treatment plans (Ridout & Eldevik, 2023; Ross et al., 2020).

Multimodal assessments might involve the use of direct observations, interviews, and record review, and formal and informal assessments, including standardized and non-standardized assessments. This gives a practitioner a thorough understanding of client behavior (Alberto & Troutman, 2013; Horner & O'Neill, 1997). Each mode of assessment has its strengths and weaknesses; the multimodal approach allows practitioners to lean on the strengths of one assessment and resolve its deficits through another assessment tool. A multimodal approach is used for comprehensive assessments (e.g., an evaluation for early intensive behavioral services that examine communication, social skills, and adaptive behaviors) or

focused assessments (e.g., assessing the social skills of a teenager being placed in a social skills group).

Before reviewing the components of a multimodal assessment, it is important to emphasize that practitioners should prioritize the use of direct observation and measurement—the heart of ABA. This may involve conducting a functional analysis of an interfering behavior to hypothesize the function. Indirect measures supplement direct measures by providing valuable information for identifying client, caregiver, and stakeholder priorities and gaining insights that inform whether stakeholders see the progress demonstrated in other measures.

The following sections provide a review of the components of multimodal assessments.

Record Review

One of the first steps in the multimodal assessment process is a record review. Records may include information about the client's experience with previous interventions, treatments, or medications, comorbid diagnoses and other health information, quantitative and qualitative information on the presence or absence of skills, the client's strengths or weaknesses, learning preferences, and information on how the client may compare to their peers. Records may include information and evaluations conducted by educational, medical, and psychological professionals. A review of relevant records provides an opportunity for the behavior analyst to gain a preliminary "picture" or understanding of the client. This information can help structure a clinical interview with the client, their parents, and caregivers, and inform which assessments are selected.

The client's diagnostic evaluation is one record that practitioners should know how to read and should prioritize reviewing. Typically, this evaluation includes standardized cognitive, adaptive, language, achievement, and/or developmental measures. The evaluation report may include information on areas of relative or significant strength, which can help drive selection of skills to target for acquisition and strategies to support their development. For example, a diagnostic report may indicate that an individual exhibits significant delays in processing speed or working memory and strengths in block design. This indicates that the client may benefit from strategies incorporating visual cues.

When reviewing diagnostic assessment results, it is crucial to understand the context for which each assessment was designed. Autism diagnostic tools are primarily intended to identify behaviors relevant for diagnosis, which may not always align with appropriate treatment targets. Additionally, these tools are not designed to measure clinically significant change, as an autism diagnosis is generally considered stable over time. Consequently, these assessments are built for stability rather than sensitivity to change. Recognizing these distinctions helps practitioners prioritize and interpret information effectively when selecting and designing assessments in the multimodal assessment process (Bishop & Lord, 2023).

Behavior analysts may not have formal training in interpreting the results of diagnostic measures. In that case, they should reach out to the original assessor with questions, when possible, or consult a licensed clinician trained in diagnostic evaluation. When contacting another professional, ABA practitioners must ensure that all client protected health information (PHI) has been properly redacted before sharing any documentation or data. Spending time reviewing formal evaluations, as well as teacher-written narratives in

Individual Education Plans (IEPs) or report cards, gives insight into how the client has excelled or struggled academically or socially.

A thorough record review enables the ABA practitioner to prepare for clinical interviews by drafting specific questions that will help obtain a fuller picture of how the client's behavior or skills vary across settings. After all assessments are completed, the behavior analyst generates a report providing the results from their observations and assessments. Information derived from the record review may then be compared or contrasted with present assessment findings. This may provide stakeholders with an understanding of how a client's behavior and skill level have remained stable or changed over time.

Interview

An initial interview with the client or stakeholder is one of the first steps for developing a multimodal assessment. How a practitioner conducts an interview is important, as it can lead to improved or diminished engagement. Scheduling sufficient time during interviews to establish rapport and trust is crucial. When the time for an assessment is limited and there is much to discuss, the practitioner may rush the interview or behave in a way that could compromise the assessment process and impede treatment. Scheduling interviews with ample time facilitates building a relationship and gathering thorough, accurate information.

During interviews, it is important for the practitioner to actively listen and demonstrate empathy. A behavior analyst's listening skills are important across assessment and intervention, but during the initial interview they can critically make or break the therapeutic relationship between professionals and families (Taylor et al., 2019). When a therapeutic relationship is established, interviewees feel comfortable sharing information about their child, even when the content is difficult to talk about. Skills for developing a therapeutic relationship include using empathic statements, reflective listening, and affirmations (Plattner & Anderson, 2023).

Many of the topics discussed in an interview are sensitive for caregivers. As such, some caregivers may not immediately trust the assessor which can prevent them from freely providing the most transparent description of what is occurring at home. For example, a parent may know that their own limited coping skills interfere with their ability to respond to their child, which is negatively impacting their child's progress. However, if the parent does not feel safe during the interview, they may omit those details. Sometimes, holding several interviews and assessment sessions will lead to stronger, more accurate information.

As practitioners complete interviews, it's important to adopt a circumstantial view. That is, not attributing the source of a client, caregiver, or stakeholder's behavior to them as a person, but to the environmental variables that surround their behavior (Friman, 2021). Furthermore, "one should assume that the other person's circumstances are not fully known, but that their behavior is understandable and predictable when seen from their perspective, in the context of their immediate controlling variables" (LeBlanc et al., 2020, p. 173). Private, confidential follow up sessions during assessment and treatment continue to build rapport and allow opportunities for caregivers to offer valuable information. In all cases, it's important to remember that "... in interpersonal situations, being right should never be the goal: Being effective should be the goal." (LeBlanc et al., 2020, p. 175).

Direct Observation and Measurement

Direct observation and measurement of behavior is a foundational practice in applied behavior analysis. Whereas interviews and record reviews may uncover valuable information, they should be used to guide what the practitioner observes directly—especially behaviors that are meaningful to the client and their family.

Observation allows practitioners to see how target behaviors occur across different environments (e.g., home, school, community) and under naturally occurring conditions. Observations may include informal, anecdotal notes or structured data collection using methods such as frequency, duration, or intensity recording. They may also involve administering tasks from norm-referenced or criterion-referenced assessments.

One major strength of direct observation is its flexibility. Unlike standardized assessments, which require strict adherence to protocols to maintain comparability to normative samples, direct observation can be tailored to the client's actual environment and individualized needs. This makes direct observation more sensitive to the nuances of behavior and more responsive to the questions stakeholders care about most.

It is common for a direct observation by a trained behavior analyst to reveal important possible functions and ecobehavioral variables that were not obvious or known to the informant (i.e., interviewee.) For example, a caregiver may report that their child engages in aggressive behavior toward their siblings while at home but plays well with their peers at daycare. However, when the behavior analyst observes the child in the home and at daycare, they find different information. This is an example of when behavioral contrast could affect the differences in their child's behavior across environments (Boyle, Hoffmann, & Lambert, 2018). For this reason, information from unstructured direct observations of behavior during the assessment may prove valuable in identifying client strengths and potential behaviors/skills for consideration in the treatment plan.

Direct observation also offers greater accuracy than informant reports. Whereas caregivers and other stakeholders can provide useful context about what is happening at home or school, they are not trained to identify the environmental variables maintaining behavior. As a result, informant data may sometimes be inaccurate or incomplete. Still, these conversations must be approached with care and respect. For instance, a caregiver might report that the child calmly relinquishes the iPad before non-preferred tasks, while the practitioner consistently observes screaming and crying. This discrepancy may reflect differences in environmental variables or in perception ("He's not screaming; that's just how he plays"). In such cases, it would be helpful to ask clarifying questions like, "Can you tell me how you know when your child is calm?"

Direct observations may be structured—using operational definitions and specific measurement procedures—or unstructured. They can help identify both skill strengths and interfering behaviors, and often serve as baseline measures for future treatment targets. When repeated over time, direct observations provide a clear record of client progress and responsiveness to intervention.

Functional Assessment

Behavior analysts conduct assessments to understand the function (reason) and the form of the behavior. The function refers to why the behavior is occurring or what it is communicating. Form refers to the topography of the behavior or what it looks like. By assessing the function and form of a behavior, the behavior analyst can then select function-based treatments, or those that will address the root problem of the target behavior of interest. The following section describes two assessments that provide such information.

Functional Behavior Assessment (FBA)

Behavior analysts often conduct a functional behavior assessment (FBA) to develop a hypothesis (i.e., an informed guess) about the function of an interfering behavior that was identified as an important behavior target to change.

First, the behavior analyst interviews the client's primary caregivers and other stakeholders who regularly interact with them. This may be done through open or closed-ended questionnaires or checklists to gain information about potential maintaining variables for the target behavior. Examples of closed-ended interviews include the *Questions About Behavioral Function* (QABF, Matson et al., 1996) and the *Functional Assessment Screening Tool* (FAST, Iwata et al., 2013). Using these tools, and others like them, are a good first step. However, they should be followed by direct observation and not be used in isolation or in lieu of direct observation.

Next, the behavior analyst observes the client and collects data on the target behavior to identify patterns of antecedents which may occasion target behavior and consequences that may maintain it. Data may be collected through traditional paper-and-pencil methods or via secure, HIPAA-compliant digital systems. Through repeated observations, the practitioner forms a hypothesis about the function of behavior. For example, the practitioner may observe particular daily living tasks (e.g., getting dressed, cleaning room) where the task is removed or significantly delayed when a tantrum behavior occurs. Based on their observations and the data collected, they hypothesize that the tantrum behavior is maintained by the removal of demands (i.e., escape). Once a targeted behavior's hypothesized function is identified, the practitioner may develop treatment to replace the interfering behavior and identify other skills to support a successful treatment plan.

Functional Analysis (FA)

The information gathered in an FBA can inform a functional analysis (FA), which provides a more rigorous evaluation of the function of behavior. In an FA, the practitioner arranges conditions where certain antecedents and consequences are carefully manipulated with the goal of observing whether those environmental variables evoke the target behavior. An FA is often preferred to an FBA, especially for behaviors that pose risks to the health and safety of the individual (CASP, 2024). FAs help identify the functional relation between the environment and interfering or dangerous behaviors (Beavers et al., 2013; Hanley et al., 2003; Iwata & Worsdell, 2005). Furthermore, an FA is often used when the results of an FBA are unclear or treatment based on an FBA does not result in marked improvements in targeted behavior.

Prior to beginning an FA, the behavior analyst should observe the interfering behavior of concern in the natural environment and interview primary caregivers and other stakeholders who regularly interact with the client. Closed-ended measures, which offer respondents a fixed set of response options to choose from (e.g., interviews, questionnaires), such as those previously mentioned, may support the development of hypotheses to evaluate in the FA. While closed-ended and open-ended interview measures are used often, these tools have low to moderate interrater reliability and poor concurrent validity compared to functional analyses, and practitioners should exercise great caution about relying heavily on open-ended interviews to inform treatment for problem behaviors (Saini et al., 2020). In addition to previously discussed tools, there are questionnaires specific to restricted and repetitive behaviors that may be used to determine the degree or impact of a behavior, such as the *Repetitive Behavior Scale-Revised* (RBS, Bodfish et al., 2000), the *Repetitive Behavior Scale for Early Childhood* (RBS-EC, Wolff et al., 2016), and the *Autism Impact Measure* (Silkey et al., 2023). Results from these measures should not be relied upon in lieu of an FA.

Conducting an FA involves the implementer systematically presenting and removing environmental factors contingent on a response and comparing the occurrence of the response across conditions (Iwata et al., 1982/1994). FAs vary in type and should only be implemented with proper training and supervision. The behavior analyst should select the best type of FA (i.e., Analog FA, Automatic Screening FA, Brief FA, Interview-Informed Synthesized Contingency Analysis, Latency FA, Low-Rate FA, Precursor FA, Transition FA, Trial-Based FA, etc.) using information about the client, their behavior, and the environment to minimize risk to the client and others involved (Deochand et al., 2020). If staff or caregivers are used to support the implementation of an FA with the oversight of a behavior analyst skilled in this type of assessment, they must first be trained.

Regardless of the type of functional assessment used, multiple sources of information should be included, such as caregiver interviews, structured rating scales, and an evaluation of medical conditions that could influence behavior (CASP, 2024). This ensures that the information gathered provides as complete of a picture as possible of the behaviors of concern. The results may identify the function or functions of behavior and, thus, better inform the development of function-based interventions.

Indirect Assessment Instruments

Indirect assessments involve collecting information about a client's behavior from someone who knows them well, rather than through direct observation. These informants may include the client themselves, caregivers, parents, teachers, or other individuals familiar with the client's behavior. Indirect assessments are often used alongside direct observation to provide a more complete picture.

Various domains of interest (e.g., communication, adaptive skills, challenging behavior) can be assessed through indirect methods, which may be referred to as tests, measures, scales, batteries, checklists, questionnaires, inventories, indexes, or profiles. Each assessment has specific instructions for recording responses, scoring, and interpreting results.

Most indirect assessments include the following components:

- **Manual:** Describes the purpose of the tool, target population, required qualifications for administration, administration procedures, and guidelines for scoring and interpretation
- **Materials:** Forms or instructions for the informant, which may be printed or electronic
- **Response Recording Form:** A structured format for presenting items and recording responses

For more details on whether an indirect assessment is standardized or non-standardized—and what that means for its use—refer to the relevant sections later in this chapter.

Commercially Published and Publicly Available Assessments

A wide range of assessments are available for purchase or free download through publisher websites, online platforms, and developer-promoted sources. Some are accessible to the general public or individual practitioners, whereas others may only be purchased by organizations or professionals with specific credentials. Many commonly used ASD assessment tools fall into this category and are widely used in clinical and school-based settings.

The type and quality of information provided can vary significantly across publishers. Practitioners must review this information carefully and ensure they meet the qualification requirements to administer and interpret the tool. If specific training or oversight is required, it is the practitioner's responsibility to obtain it prior to use. If an assessment instrument is only available through purchase, it is important that practitioners follow copyright requirements and not duplicate or share protected documents.

Standardized Assessment Instruments

As noted earlier, many ABA practitioners do not receive formal training in standardized assessment procedures. Although ABA practitioners may at times be required to implement standardized assessments as part of service delivery, such assessments should only be used when they fall within the practitioner's scope of competence. Furthermore, even when an assessment tool is within an individual practitioner's scope, it is important to adhere to publisher guidance regarding the appropriate frequency of administration and avoid implementing diagnostic tools more often than recommended, as this could represent an inappropriate use of the tool. A comprehensive overview of standardized assessments is beyond the scope of these guidelines, and readers are directed to existing resources for more information (Johnston et al., 2020; Padilla et al., 2023). This section aims to begin to bridge the knowledge and skill gap that ABA practitioners may experience for several reasons:

1. An increasing number of health plans and funding sources for ABA services require standardized assessments for initial—and sometimes, ongoing—authorizations of services, as well as to evaluate the effectiveness (i.e., value) of the services;

2. ABA treatment planning for individuals with additional comorbid diagnoses or any developmental disability can be improved by integrating information from standardized assessments;

3. Standardized assessments are objective (i.e., administered in a standard manner) and undergo rigorous research to ensure the results are comparative and interpretable across age-matched peers;

4. Professionals in other disciplines frequently rely on standardized assessments, which makes collaboration easier;

5. Researchers reviewing the literature on ASD interventions have called for appropriate use of standardized instruments to evaluate treatment effects (Bolte & Diehl, 2013; Grzadzinski et al., 2020; McConachie et al., 2015; Ridout & Eldevik, 2024).

Standardized assessments, including tests, scales, and inventories, are developed in accordance with the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 2014). In contrast, many non-standardized tools are also available (some for purchase, others freely accessible) but lack scientific rigor. Practitioners should understand the key features and measurement properties of the tools they use so they can make informed decisions. The type of assessment selected influences both the strength of the conclusions that can be drawn and how those results can be used in treatment planning.

Characteristics

A standardized assessment instrument is administered, scored, and interpreted in a uniform manner across examiners, participants, and circumstances, following the procedures outlined in the specific assessment's manual. The features of these assessments include standardized items, materials, timings, administration procedures, and scoring criteria. Some tools permit minor deviations; however, the core expectation is uniformity in implementation and scoring. If any part of the administration departs from the standard protocol, the assessor should document that variation in their report.

The table below outlines key differences between standardized vs. non-standardized assessments.

Table 3.1 Assessment Characteristic Comparison

Standardized and non-standardized assessment characteristic comparison		
Assessment characteristic	**Standardized assessment**	**Non-standardized assessment**
Assessment items	Phrasing of the questions remain consistent	Phrasing of the questions can vary
Materials	Materials used for the questions or activities are always the same or prescribed	Materials used can vary
Timing	Allotted time for the questions or activities are always the same	Timing can vary
Administrative procedures	Sequence of activities or questions, and the number and type of prompts permitted, are always the same	Procedures can vary
Reliability and validity	More likely to have established reliability and validity, thereby providing information that is more consistent and accurate for what they aim to assess	Rigorous psychometeric evaluation is lacking, which limits the generalizability of the results (It is important to augment these assessments with IOA data)
Scoring and interpretation	The responses or behaviors are scored and interpreted consistently	The responses or behaviors are not scored or interpreted uniformly
Most common assessment types	Most commonly norm-referenced, which allow for a population comparison (although some criterion-referenced assessments are standardized)	Most commonly criterion-referenced, where the analyst compares the results against a specific set of criteria or objectives

Standardization is critical because it allows assessment results to be meaningfully compared across individuals of the same age or demographic group. However, the populations in which tools were standardized must first be known to determine if the standardization sample is appropriate for the client being evaluated. People with developmental disabilities and complex medical and developmental profiles are often under-represented in standardization samples, underscoring the importance of understanding the standardization and validation samples of any given tool before interpreting results of an assessment. Once the practitioner has identified the population for which a tool has been standardized and determined the appropriateness for a given client, they must also ensure administration is consistent (using the same items, wording, timing, and prompts), leading to results which can help identify relative strengths and weaknesses in the individual's repertoires.

Without proper standardization, the results reflect only the subjective impressions of a single examiner or informant at a single moment in time. Such results should not be used to make

significant decisions about an individual, nor should they be compared across different assessors, participants, or conditions (AERA et al., 2014; Grzadzinski et al., 2020; Johnston et al., 2020; Padilla et al., 2023).

Reliability is "the consistency of measurement, specifically, the extent to which repeated measurement of the same event yields the same value" (Cooper, Heron, & Heward, 2020, p. 102)

Validity refers to when a measurement "yields data directly relevant to the phenomenon measured and to the reason(s) for measuring it." (Cooper, Heron, & Heward, 2020, p. 102)

Measurement Properties

To determine how much confidence to place in the results of the properly administered assessment, evaluators should examine the measurement properties, also known as psychometrics, as detailed in the assessment's technical manual. These properties typically include reliability and validity, as well as other indicators of measurement quality. While reliability, validity, and other indicators of measurement quality are important, their values are always dependent on the validation sample. Many tests were not specifically validated for certain populations, and, therefore, the scores may not generalize across groups. In addition to manuals, information about an assessment's standardization procedures, administration protocols, scoring criteria, and psychometrics may also appear in peer-reviewed journal articles. The definitions and evaluations of these properties vary across disciplines. For example, behavior analysis, as a natural science, may have different criteria than psychology, education, or other social sciences.

Administration Qualifications

Most test publishers specify clear qualifications for who may purchase, administer, and interpret their assessment instruments. These requirements typically include educational background, licensure or certification, and formal training in administration and interpretation. For example, Pearson Assessments bases its qualifications policy on the Standards for Educational and Psychological Testing (AERA et al., 2014). Pearson defines three levels of qualification:

- **Level A:** No special qualifications required
- **Level B:** A master's degree in a related field (e.g., psychology, education, speech-language pathology, occupational therapy, social work, or counseling) and formal training in clinical assessment or a relevant healthcare license
- **Level C:** A doctoral degree plus advanced training and licensure or certification in an appropriate field

Western Psychological Services (WPS) defines four levels (A, B, C, and N), ranging from no degree required (Level A) to a doctoral degree in psychology or a related field, or a master's degree plus specialized training in neuropsychological assessment (Level N).

Practitioners such as licensed behavior analysts (LBAs) and BCBA®s may meet the publisher's minimum criteria for administering some standardized assessments. For example, Pearson's Level B allows professionals with a master's degree in a related field, formal assessment training, or a relevant healthcare license to administer certain tools. However, publisher

requirements are only part of the equation. Practitioners must also consider their professional ethics codes and applicable state and federal regulations. According to the BACB® Ethics Code Standard 1.02: Conforming with Legal and Professional Requirements, behavior analysts are responsible for ensuring they operate within their scope of practice. Licensure laws in some states may prohibit LBAs from administering specific types of assessments—even if publishers permit it—while other licensed professionals may be explicitly authorized to do so. The same caution applies to diagnosis: administering a diagnostic tool is not the same as conducting a diagnostic evaluation. Accurate diagnosis requires extensive training, clinical judgment, and knowledge that goes beyond test administration (see Bishop & Lord, 2023), and is likely beyond the scope of competence of many behavior analysts.

Before administering a diagnostic tool or any assessment of a psychological nature, ABA practitioners must confirm that doing so falls within their scope of competence. This includes reviewing the publisher's or developer's stated qualifications and any relevant state licensure laws or regulations. Overstepping these boundaries can amount to malpractice and may result in being reported to state licensing boards or the BACB®.

If a practitioner intends to administer, score, or interpret a standardized assessment, they must:

- Verify that use of the instrument complies with all applicable laws and regulations;
- Ensure the assessment falls within their scope of practice;
- Consult with colleagues or supervisors with relevant expertise;
- Receive formal training in administration, scoring, and interpretation;
- Ensure competency in use of the instrument is achieved before administration; and
- Carefully document the rationale for use and how the assessment was conducted in the evaluation report in accordance with payer and regulatory requirements.

Selection of Standardized Assessment Instruments

A wide range of standardized assessments are available, and those listed in the *ASD Assessment Repository* represent commonly used tools in autism research with acceptable psychometric properties, unless otherwise noted as not rated. While it may be tempting to select an assessment based solely on the domain of interest identified during the intake process, practitioners must ensure that the tool is normed on a population comparable to the individual being assessed. This is critical for producing valid results and for tracking change over time.

Using an assessment that was not normed on a similar population can reduce the validity of the results. For instance, assessments may be less accurate when administered to clients who differ significantly from the standardization sample, such as individuals with limited language fluency, those who have recently immigrated, or people with medical or physical disabilities such as hearing or visual impairments or major motor impairments.

Practitioners should also be cautious about routinely administering the same battery of assessments across all clients, particularly for individuals with profound autism. Many standardized instruments lack the sensitivity needed to detect meaningful change in this population. For example, a test standardized on children aged six and older with phrase speech would not yield valid results if used with a child who does not meet those criteria.

Uses and Limitations

As discussed earlier, standardized assessments with strong measurement properties are essential when comparing results across individuals, whether by age, examiner, informant, setting, or time. Many of the domains assessed are directly relevant to individuals receiving ABA services and their caregivers. In some assessments, items are sequenced by developmental progression or by complexity, which allows practitioners to identify a client's relative strengths and areas for growth. These results can guide collaborative conversations with caregivers and clients, helping define meaningful short- and long-term treatment goals. Practitioners should always prioritize goals that are socially significant and relevant to the client's context.

When administered over time, standardized norm-referenced assessments can help evaluate whether treatment is influencing the client's developmental trajectory. However, it is important to recognize the limitations of this approach. Norm-referenced tests are developed around a normal distribution, but the specific scoring metrics vary by test. For example, some instruments use standard scores with a mean of 100 and a standard deviation of 15, whereas others use T scores (mean of 50, SD of 10) or scaled scores (mean of 10, SD of 3). Although the numbers differ, each of these metrics is standardized and norm-referenced. Generally the norm-referenced score comes from comparing the child to a sample of children who are the same age as the child. So a child who is six-years-old is compared to a group of other six-year-olds. The average standard score would be a 100. One year later, the same child is now seven-years-old and is now compared to a group of other seven-year-olds. The average standard score for the seven-year-olds is still 100. So for a child to achieve the same standard score one year later, they would have to gain one year of development as measured by the test. In the case of autism, a child who was scoring below the mean at intake, and is now showing one year of gain *by achieving the same standard score* one year later, has improved their developmental trajectory. That by itself is meaningful progress. If the child were to increase their standard score even higher to above 85, that would mean that they have recovered their developmental trajectory. According to the Centers for Disease Control and Prevention (CDC), 36% of children with autism already achieve a standard score above 85 at intake. For those who do, their meaningful goal is simply to maintain their score, because their score suggests that they share the same successful levels of development as 84.12% of the population, all of whom already score above an 85 and would not be judged to need intervention based solely on that test score (Shaw et al., 2025). Note: 84.12% is the accepted statistical percentage of the population in the normal distribution (Mood, 1950).

The standardized test might also report a percentile rank for the client. The concept for showing progress is similar. The percentile score indicates what percent of the sample scored lower than the child. For example, a child who achieves a percentile rank of 40 scored higher than 40% of the children in the sample. So the child who then achieves a percentile rank of 40 one year later has made one year of progress in comparison to their peers. That, again, is already meaningful progress. If they were to further increase their percentile rank to 50, then they have recovered their developmental trajectory.

There are a number of reasons to interpret standard scores cautiously when evaluating progress in clients with developmental disabilities. As discussed above, when the child is retested on a standardized norm-referenced test, they are now being compared to a sample

who have made normal developmental progress. So if the child's score decreases, it does not mean that their baseline skills have declined, but only that they are now being compared to a sample of children who have been gaining even more advanced skills. Further, as the child ages, the test items themselves become more sophisticated to reflect the capabilities of the older peers. Therefore, the child's scores may fall as an artifact of no longer being tested with the same tasks. In effect the standardized test items become less and less relevant to the child's actual capabilities. The older test is age-appropriate, but the child's strengths are no longer relevant to the test. This may occur even when the child continues to acquire developmental skills, but the difficulty of the test items is accelerating at an even higher rate. One study found a misleading decline in standard scores in 40% of the population (Bishop et al., 2015). For these reasons it is critical to determine the age and developmental appropriateness of the test that is being used for the specific person.

It is also critical to be aware of the reliability of the test being used for that age and skill. No standardized test will yield the same exact score every time for every child. Each test manual reports the standard error of measurement, which will often vary from 3 to 8 for different tests. A difference of less than the standard error is meaningless. For example, if the standard error of measurement for the test is 5, then a child who scores 72 in one year and 68 in the second year has not meaningfully changed their score because the change is likely due to chance. Particularly with the autism population, the child's responsiveness to the assessment may vary extremely from day to day, due to the functions of their behavior, the frequent incidence of health complications, and the context of the testing environment.

Standardized scores can be especially problematic for children with developmental disabilities because the normative reference samples are based on neurotypical peers, which may limit the accuracy and interpretability of test results (Kaat et al., 2021). Growth scale values are another scoring metric used in some standardized assessments. They are used as an alternative to norm-referenced scores and are designed to measure growth and change over time; however, these values do not indicate whether that growth is typical or adequate (Farmer, et al., 2023). Overall, no single score metric provides a complete picture of progress in children with developmental disabilities, highlighting the need for cautious interpretation and the importance of multiple sources of information. For these reasons, it is important to utilize a multimodal battery of assessments which also include criterion-referenced assessments, person-centered objectives, and meaningful measures of behavior.

When significant changes in test scores are observed, practitioners should critically evaluate why. For example, a child's initial performance may be suppressed by interfering behaviors, limited engagement, or unfamiliarity with the testing environment. Later improvements may reflect greater participation, maturation, or practice effects, rather than fundamental changes in intellectual ability. It may be more meaningful to many caregivers to assess whether a child is making progress in areas like access, agency, and autonomy. These goals are often better evaluated using criterion-referenced assessments, which measure success in adapting to one's environment, regardless of age or comparison to peers. Each of these domains contributes directly to the client's overall independence.

Repeated administrations of criterion-referenced assessments can support benchmarking. That is, determining whether treatment helps the client progress toward specific, functional standards. These standards often include practical skills such as communication, self-care,

or vocational abilities. For clients of any age, including adolescents and young adults, this type of data can inform treatment planning, transitions to lower levels of care, and discharge readiness.

That said, standardized assessments—both norm- and criterion-referenced—have limitations. They represent only a sample of the full range of possible skills or content in a domain. The accuracy of any assessment depends on how the items were selected and sequenced, as well as how administration and scoring procedures were designed and tested. Even well-designed tools face the challenge of balancing comprehensive coverage with time constraints. Understanding what specific tasks or test items were used is critical when interpreting overall scores. For example, a test may disproportionately emphasize memory or auditory language skills, which may skew results or obscure other areas of strength.

Children from culturally or linguistically diverse backgrounds may be unfairly evaluated if the content of a standardized test doesn't reflect their lived experience. In many cases, the test items were developed based on a normative sample that didn't include children with similar backgrounds. Recreating a standardized instrument for a different language or culture is expensive, and alternate norm references may not exist. Simply adding an interpreter is not sufficient and is unlikely to match the conditions under which the original test was standardized.

Another limitation is that many standardized instruments are not sensitive enough to detect behavior changes that occur over short timeframes (e.g., less than one year). Most publishers recommend administering the test no more than once per year to avoid practice or recall effects. Some payers require standardized assessments to be administered more frequently than publisher recommendations. Some provide alternate forms to allow for more frequent testing, but practitioners must follow these guidelines closely. Administering the same test too often can seriously compromise the validity of the results. When payer-mandated assessment frequency diverges from publisher recommendations, this should be documented in the assessment report, specifying that the increased frequency may limit interpretability of scores. In addition to noting this limitation, ABA practitioners should attempt to professionally communicate their concerns with payers. Such practice reflects their ethical responsibility to preserve and prioritize client welfare while resolving conflicts between ethical obligations and third-party requirements (BACB®, 2020, Ethics Standards 1.01, 1.04, 3.07, and 3.08).

Some criterion-referenced tools—and a few norm-referenced ones—are specifically designed to detect change over shorter intervals. Examples include the *PDD Behavior Inventory™* ([PDDBI™] Cohen & Sudhalter, 2005) and the *Autism Symptom Dimensions Questionnaire* (Frazier et al., 2023). However, not all outputs from these assessments are equally sensitive. For example, the PDDBI's subtest profiles are designed to detect change; however, its composite score is not, and there is limited published data to date demonstrating its effectiveness with measuring change over time. These limits underscore the lack of existing measures with detecting incremental changes in individuals with autism, who may gain skills but still lag substantially behind same-aged peers (Bishop et al., 2019). As always, careful review of the assessment manual and proper training in administration, scoring, and interpretation are essential. When funding sources require assessments more frequently than recommended by the publisher, the behavior analyst should indicate that the results may not accurately reflect progress, given it may be too early to reflect meaningful gains.

Indirect assessments completed by caregivers or other third-party informants can offer valuable insight into the perceived importance of treatment targets and the acceptability of procedures. However, they should not serve as the primary basis for clinical decision-making. For instance, while the *Vineland Adaptive Behavior Scales, Third Edition* (Sparrow, Cicchetti, & Saulnier, 2016) was designed to assess adaptive behavior via caregiver report, research has shown it is not especially sensitive to change over time. Informant reports may also be influenced by parental stress, perceptions of treatment effectiveness, or other biases (Grzadzinski et al., 2020; Operto et al., 2021; Postorino et al., 2019; Brei et al., 2015).

It is important to gather information from multiple sources and across contexts to create a more complete picture of functioning during assessment (Hayden-Evans et al., 2022). No single assessment captures all domains. Each comes with limitations in scope, administration, and interpretation. Therefore, indirect assessments should be combined with direct observation and measurement of client behavior.

Ultimately, decisions should never be based on a single assessment instrument. A multi-method, multi-informant approach is essential to obtaining valid, reliable, and useful clinical information.

Norm-Referenced vs. Criterion-Referenced Assessments

Many off-the-shelf assessment tools are classified as either norm-referenced or criterion-referenced. These tools can help practitioners identify client strengths and needs, inform discussions with caregivers and stakeholders, guide treatment planning, and track progress over time. In a multimodal evaluation, they serve as valuable supplements to direct behavioral assessment. To select the right tool for each client, it is essential for practitioners to understand the key differences between these two types of assessments.

Norm-Referenced Assessments

Norm-referenced assessments interpret an individual's performance in comparison to a large, representative sample—typically matched on age, diagnosis, or other demographic characteristics. The usefulness of the results comes from how the client performs relative to this normative group. Many widely used assessments in areas such as cognition, communication, and socialization fall into this category.

Criterion-Referenced Assessments

Criterion-referenced assessments evaluate an individual's performance against a predefined standard or set of criteria, rather than comparing it to others. These tools are designed to measure mastery of specific skills and help determine whether a client has reached a particular level of competence.

Some standardized assessments include both norm-referenced and criterion-referenced components or versions. The figure below provides a summary of the key distinctions.

Figure 3.1. A Visual Comparison of Norm- and Criterion-Referenced Assessments

Norm-referenced
Assessments compare an individual's performance to what would be expected of others within a relevant population.

Criterion-referenced
Assessments compare an individual's performance to a predetermined level of mastery of certain sets of skills.

Interpreting Assessments

Examples
Vineland-3, CFQL-2, SRS-2, PSI-4, & PDD-BI

Examples
VB-MAPP, ABLLS-R, EFL, AFLS, & Individually Designed

Benefits
- Allows for a comparison between an individual's current functioning and same-aged peers
- Provides information regarding overall development level
- Helpful when prioritizing interventions

Benefits
- Provides an objective evaluation of specific skills
- Allows for tailored interventions & targeted support

Limitations
- Calculates an individual's score in relation to same-aged peers without considering the individual's circumstances
- Measures an individual's performance level with specific skills, which limits its usefulness in regards to treatment planning

Limitations
- Potential risk of teaching to the test
- May require knowledge of specific skills & criteria to properly interpret results

Non-Standardized and Informal Assessments

Some assessment tools, whether commercially published or freely available, may resemble formal standardized assessments but lack features like established measurement properties or standardized administration protocols. These tools might include a fixed set of items targeting specific skill domains and offer some administration or scoring guidance, but they do not meet the criteria for being standardized.

In some cases, tools are labeled as "standardized" but provide insufficient evidence in the publisher's manual to evaluate reliability, validity, or other psychometric properties (AERA et al., 2014; Boateng et al., 2018). For example, Padilla et al. (2023) critically reviewed six commonly used skill assessment tools in ABA practice and found limited empirical support for their measurement quality. The authors advised practitioners to interpret results from these assessments with caution. Despite these limitations, the six assessments they reviewed are frequently used in practice and are included in the ASD Assessment Repository due to their widespread role in guiding treatment goal development.

Informal assessments are created by practitioners to evaluate specific aspects of a client's behavior or skillset. Examples include procedures used by speech-language pathologists to collect language samples, or direct observations of on-task behavior and social interactions. These tools are tailored, flexible, and often embedded in real-life activities.

This underscores the importance of a multimodal evaluation approach, where the limitations of one tool are offset by strengths in others. A selection of relevant *Standards for Educational and Psychological Testing* by AERA (2014) can be found in Appendix A on page 72.

Skills-Based Assessments

Skills-based assessments are administered using a structured protocol to support treatment planning and evaluate progress. Some are commercially published, others are shared by developers, and many are created by practitioners based on direct observation of behavior in natural environments. From these observations, a practitioner may develop a protocol—often including a task analysis—to identify skill gaps and guide intervention.

Direct observation and measurement can occur across a range of settings (e.g., home, school, clinic, community) and help establish baseline levels for behaviors linked to client success. Skills-based assessments may be structured or unstructured, and both formats have value. For instance, a practitioner might conduct a structured session using age-appropriate materials and deliver one-step, two-step, and three-step directions to assess instruction following. Unstructured assessments may take place in naturalistic contexts, such as observing a client at recess using interval recording to track social engagement with peers. These assessments are highly individualized and serve as a critical foundation for developing client-centered goals.

Role and Limitations of Non-Standardized Assessments

Non-standardized and informal assessments can reveal important information that standardized tests may miss, especially in natural environments and dynamic contexts. They are essential for individualized treatment planning and progress monitoring in ABA service delivery. However, when these tools are used without attention to their measurement properties, the results may reflect subjective impressions rather than objective data.

To ensure accuracy and utility, practitioners should follow best practices in direct observation and behavior measurement, including procedures outlined in Cooper et al. (2020) and Johnston et al. (2020). Properly implemented informal assessments can and should produce data that are believable, reliable, and actionable.

Ecobehavioral Analysis

Ecobehavioral analysis examines the environmental strengths and barriers that influence a client's behavior (Krantz & Risley, 1977). Practitioners can gather this information through direct observation, caregiver interviews, and assessments that evaluate quality of life. A central component of this analysis includes Social Determinants of Health (SDOH)—the non-medical factors that impact health outcomes (WHO, 2024).

These influences matter. Understanding the broader context of a client's life yields insights that are critical to shaping effective, culturally responsive, and compassionate treatment. For instance, a child who is chronically absent from school may not benefit from a center-based intervention unless those attendance barriers are addressed. Research suggests that SDOH accounts for 30–55% of health outcomes (WHO, 2024). In the context of ABA services for autistic individuals, environmental stressors such as strained family relationships, high levels of expressed emotion, and limited educational access have been linked to increased caregiver stress (Derguy et al., 2016). These stressors can significantly affect treatment participation and success.

Figure 3.2 Ecobehavioral Analysis and Social Determinants of Health Influence on Behavior

- Antecedent Variables
- Consequent Variables
- Ecological Context
- Social Determinants
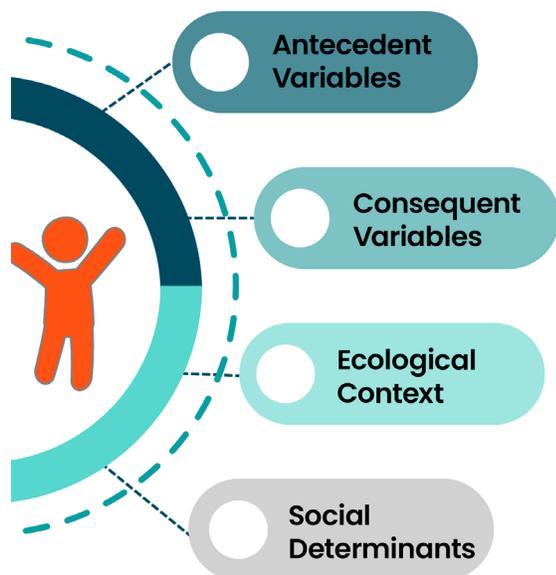
Cultural context is equally important. Children from cultural minority groups are often diagnosed later and experience more delayed access to treatment than white children (La Roche et al., 2018). Families in economically disadvantaged communities or experiencing financial insecurities face additional systemic barriers. Practitioners should not assume cultural values based on racial or ethnic background alone. Instead, they must reflect on their own biases, seek to understand what matters most to each family, and critically evaluate whether the assessments used are appropriate and validated for the client's cultural or linguistic group.

Language access is another essential consideration. If an assessment is not standardized in the child's primary language, or if the evaluator is not fluent in that language, the results may not be accurate or valid. In such cases, administration of the tool as designed may not be feasible, and alternative assessment methods are needed to obtain a valid estimate of the client's skills. Employing a multimodal assessment process helps ensure that conclusions about a client's abilities are supported by multiple sources of data rather than by a single, potentially invalid, assessment outcome.

A thorough evaluation of ecological factors allows practitioners to develop more responsive, person-centered treatment plans. These plans are more likely to be accepted by the family, implemented consistently, and lead to meaningful outcomes.

Appendix B provides additional guidance on conducting an ecobehavioral analysis, by integrating the influence of antecedent and consequent variables, the ecological context, social determinants of health, highlighting key applications, protective and risk factors, and their impact on behavior.

Risk Assessment

A risk assessment is a critical component of clinical decision-making, especially because practitioners must evaluate treatment options that aim to improve outcomes while minimizing potential harm. It involves identifying current or potential risks related to a client's behavior and environment, along with the possible consequences if those risks are not addressed (Pascarella et al., 2021).

A structured risk-benefit analysis helps practitioners weigh the potential benefits of treatment against the risks of action and inaction (Plavnick et al., 2021). Practitioners may consider using the following systematic process for this analysis (Bailey and Burch, 2016):

1. Assess general risk factors
2. Evaluate the expected benefits of treatment
3. Examine risks associated with specific procedures
4. Reconcile risks with the perspectives and values of all parties involved

This framework can guide collaborative discussions with clients and caregivers. It can help clarify the risks of forgoing treatment, compare intervention options, and identify strategies to mitigate potential harm.

For additional guidance on how risk assessment applies to common ABA procedures in ASD services, see chapter 5.

Key Points

Selecting and administering assessments requires careful consideration of multiple factors, including individual clinical competence, publisher qualifications, regulatory scope of practice, and payer requirements. Behavior analysts must ensure they are appropriately trained and legally permitted to use each assessment and, when involving technicians, where permitted, provide sufficient training and oversight. In situations where required assessments are not well suited to the client's needs or fail to capture meaningful progress, alternative or supplemental measures should be considered. Clear documentation of assessment limitations and clinical rationale is essential to ensure ethical, transparent, and individualized assessment practices that best support treatment planning and decision-making. See chapter 6 for a comprehensive review of assessment selection and administration considerations.

In the next chapter, we explore how to ensure the reliability and integrity of assessment delivery and the critical components that influence the quality and accuracy of clinical decision-making. This includes a detailed review of Interobserver Agreement (IOA) practices, methods for collecting and analyzing IOA data, and strategies for refining data collection procedures. We also discuss how to evaluate the procedural fidelity of assessment implementation using simple yet effective tools, such as checklists and fidelity scoring systems. These practices help ensure that assessment data are both accurate and trustworthy, ultimately supporting more effective and individualized treatment planning.

CHAPTER 4

The Reliability and Procedural Fidelity of Assessment Delivery

At the core of ABA is the systematic observation and direct measurement of behavior. Whereas reliability of data collection and procedural fidelity are often emphasized during intervention, these same principles apply during the assessment phase. Although evaluating the reliability of assessment data and the integrity of assessment procedures may seem impractical, these practices are essential, particularly during assessor training. Assessors should take steps to ensure that data collected through direct observation are accurate and that the assessment procedures are implemented as intended. This matters because the quality of assessment data directly affects treatment decisions and the ability to monitor client progress over time, and how the assessment is implemented can also impact the data.

Interobserver Agreement in Assessments

Measuring Interobserver agreement (IOA) is a way to evaluate the reliability of data collection. IOA measurement starts by having two or more observers independently collect data on the same dimension of a behavior. After the observation, the observers compare their results, calculate the level of agreement, and typically convert it to a percentage.

Collecting data and calculating IOA helps provide information about the objectivity and believability of these data used for decision making and evaluation. IOA results also may help detect potential observer drift (i.e., unintentional changes in how an observer records data on the target behavior) or if certain behavioral definitions or recording procedures need further clarification (Green, 2024). When discrepancies arise, practitioners should evaluate the appropriate steps needed to improve consistency across data collectors. Some common strategies to improve IOA include additional training for data collectors and revising the definitions or recording procedures.

Various strategies may also be used to improve IOA data quality. Some of these strategies include targeting low-rate, high-concern behaviors (i.e., allocating time to collect data for the purposes of calculating IOA during times or contexts when infrequent but clinically significant behaviors are most likely to occur), choosing proportional vs. exact agreement, having the primary observer report summary data (e.g., total number of occurrences) rather than collecting data in real time, and a secondary observer, such as a supervisor, can record continuous data for agreement, and collecting a sample of IOA data, and determining if agreement is reached or if more IOA data should be collected.

Measuring IOA is a best practice and expected in research. Funding sources and workplace issues may present challenges (e.g., personnel constraints, scheduling complexities) to regularly doing so in applied service settings. Practitioners may be able to address some of those challenges by leveraging technologies such as software/automation, video recordings, remote monitoring, and a more recent developing technology—artificial intelligence-enabled scoring (Dufour et al., 2020; Knott, 2024)

Procedural Fidelity in Assessments

Just as practitioners measure the treatment fidelity of ABA-based services, they should also measure and evaluate the procedural fidelity of assessment implementation. Doing so allows practitioners to ensure that the assessment procedures are being implemented as indicated and identify inconsistencies or errors in implementation. A simple behavioral checklist can be used to evaluate whether each step of the assessment protocol was followed accurately. Observers can score each step as "Yes" (implemented correctly) or "No" (implemented incorrectly), yielding a percentage score for adherence. This kind of tool serves multiple purposes: (a) self-monitoring and feedback for clinicians, (b) supervision and competency tracking, and (c) validation of the data being collected. The goal is full adherence to assessment protocols—especially when using standardized tools where procedural fidelity directly affects the validity of results. If inaccuracies in implementation are detected, practitioners can address them accordingly (e.g., training, modifying the procedures, providing support resources to the implementers).

Key Points

Ensuring the reliability and accuracy of assessment data requires effective use of IOA and procedural fidelity measures. IOA results can reveal the need to refine operational definitions and improve consistency among observers. Selecting the most appropriate IOA methods, adapting data collection for low-frequency or high-impact behaviors, and using sampling or interval-based strategies can help reduce burden while maintaining data quality. Monitoring the integrity of assessment implementation ensures that results remain valid and support informed, data-driven clinical decisions.

Accurate and meaningful assessment is central to effective ABA treatment. Because each individual presents with a unique combination of characteristics, needs, and priorities, it is essential to use assessment tools that align with both clinical objectives and the client's desired outcomes. This next chapter introduces commonly used assessments relevant to ASD, organized into four recommended domains. These tools—both standardized and non-standardized—help practitioners gather comprehensive, individualized data to guide ethical, evidence-based treatment.
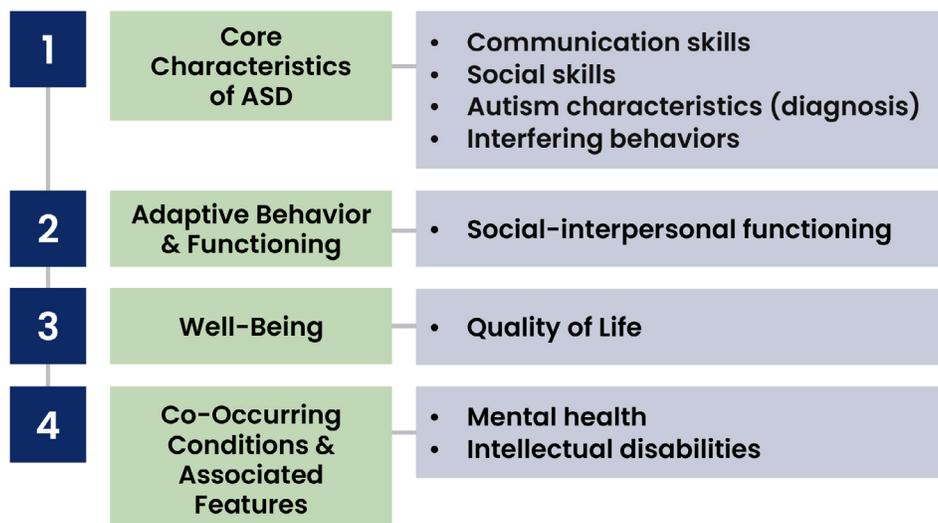
CHAPTER 5

Autism Spectrum Disorders: ABA Domains and Assessments

As ABA services and assessments evolve, new instruments and approaches will emerge through research and practice. Currently, funding sources and regulatory bodies provide only preliminary practice guidelines for some of these instruments. This chapter includes a list of commonly used assessments that are commercially and freely available.

The ASD Assessment Repository is an interactive online index developed by the Council of Autism Service Providers (CASP) and the Association of Professional Behavior Analysts (APBA). Please visit the CASP website for access to the repository. These guidelines and the repository are not meant to be exhaustive, nor do they replace the need for formal training and supervised experience in the administration and the interpretation of assessments. Rather they guide practitioners in selecting assessment instruments that meet legal and professional requirements. These resources offer information about assessments that accommodate diverse individual needs while aligning with client-specific desired outcomes (BACB®, 2020, Ethics Standard 2.13).

Figure 5.1. Autism Spectrum Disorders Assessment Domains and Subdomains

1	Core Characteristics of ASD	• Communication skills • Social skills • Autism characteristics (diagnosis) • Interfering behaviors
2	Adaptive Behavior & Functioning	• Social-interpersonal functioning
3	Well-Being	• Quality of Life
4	Co-Occurring Conditions & Associated Features	• Mental health • Intellectual disabilities

ASD Assessment Domain Framework

Assessing individuals diagnosed with ASD is complex. Currently, governing bodies, certification boards, funding sources, and other leaders in the ABA field have not come to a consensus on how to standardize the process of grouping outcomes into ASD assessment domains. Taking this into account, the following four domains are recommended: (a) core characteristics of ASD (linked to functional impairments), (b) adaptive behavior and functioning (including social-interpersonal functioning), (c) well-being/quality of life, and (d) co-occurring conditions and associated features. These domains correspond with how several published guidelines conceptualize grouping outcomes, including the *Autism Spectrum Disorder Standard Set* (ASDSS) published by the International Consortium of Health Outcome Measures (ICHOM, 2024; Joseph et al., 2024), and *Selecting Appropriate Assessment Instruments to Measure Treatment Outcomes for Individuals with Autism Spectrum Disorder: Guidelines for Clinicians, Payers, Patients, and Other Stakeholders*

(Behavioral Health Center of Excellence [BHCOE], 2021) and the Council of Autism Service Providers', *Applied Behavior Analysis Practice Guidelines for the Treatment of Autism Spectrum Disorder: Guidance for Healthcare Funders, Regulatory Bodies, Service Providers, and Consumers,* 3rd edition (CASP, 2024).

The domains discussed in this chapter help practitioners prioritize which assessments to conduct and which areas to focus on. First, the practitioner must prioritize the client's best interest by focusing on their rights and needs and maximizing benefits while minimizing harm. This can be done by selecting tools that are sensitive to the client's individual symptoms, characteristics, and cultural context and that help them accomplish their desired outcomes. For example, outcomes that allow clients to adapt to social situations and improve their well-being and quality of life.

Interpreting Assessment Findings: Key Factors

To accurately and responsibly interpret the results of an assessment, it is important to consider:

- The client's individual context and background
- The behavior analyst's understanding of the assessment tool
- The purpose and setting in which the assessments were conducted and interpreted
- The timing of the client's assessment report and the client's current status
- Potential biases in how results are reported or interpreted
- Limitations of the assessment tool and its interpretation

When conducting an assessment or reviewing the results of another evaluator's assessments as part of a file review or reevaluation, it is important for practitioners to understand that the diagnostic criteria for ASD are not a list of treatment targets to be checked off. The presence of ASD symptoms alone does not imply that intervention is needed, or even wanted, for the purpose of reducing those symptoms. Instead, any treatment decisions should be grounded in a broader conversation about what outcomes the client and their support team have identified as important.

When reviewing assessment findings conducted by other professionals, practitioners may need to consult with those familiar with the tools to acquire a better understanding. For example, if the interpretation of a diagnostic report is unclear, raises questions, or is outside of the practitioner's scope of competence, it is appropriate to reach out to the original evaluator for clarification.
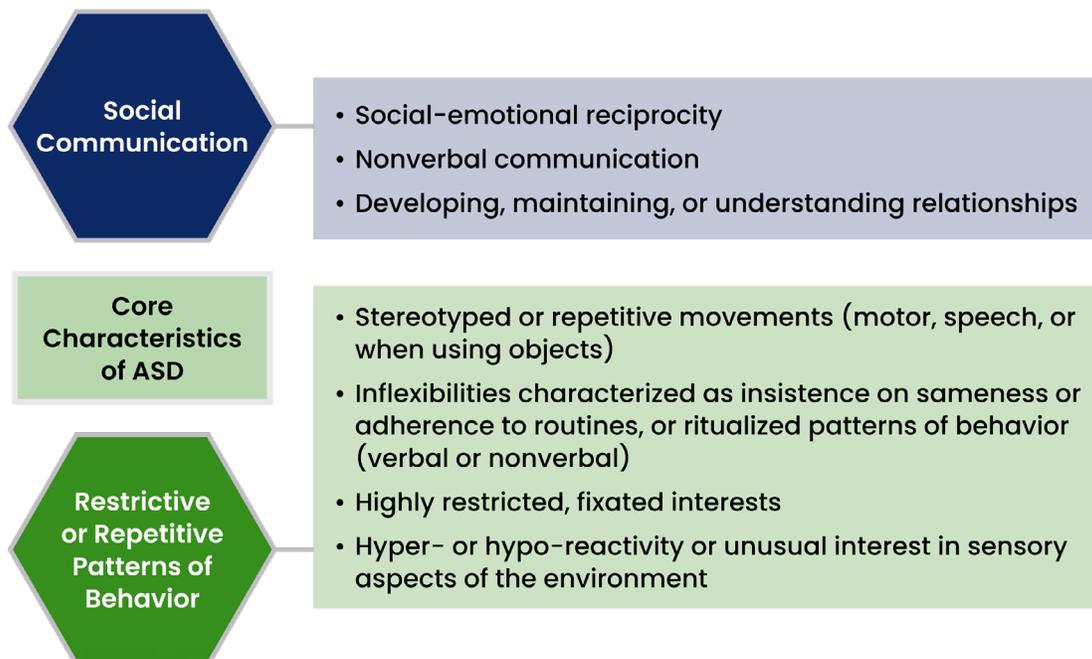
Core Characteristics of ASD

The American Psychiatric Association's *Diagnostic and Statistical Manual* (*DSM-5-TR®*), Fifth Edition

The *DSM-5-TR®* provides a standardized set of criteria to diagnose ASD. These criteria are organized into two sections: social communication and restricted or repetitive behavior. To meet these criteria, an individual must exhibit persistent deficits in all three types of social communication and at least two of the four types of restricted or repetitive behaviors. Additionally, these behavior deficits or excesses must be present during the early developmental period and must cause clinically significant impairments in current functioning. ASD is a spectrum disorder, which means that an individual's presentation of symptoms (features, severity) and the age when these impairments appear varies.

Social Communication

Social communication deficits include: (a) *social-emotional reciprocity*, characterized as impairments with social initiation and response; (b) *nonverbal communication*, characterized as impairments affecting both the display and understanding of feelings and emotions; and (c) *developing, maintaining, or understanding relationships*, characterized as significant impairments in social awareness and insight, and difficulty understanding the broader concept of social relationships.

Figure 5.2. *DSM-5-TR®* Diagnostic Criteria

Social Communication
- Social-emotional reciprocity
- Nonverbal communication
- Developing, maintaining, or understanding relationships

Core Characteristics of ASD

Restrictive or Repetitive Patterns of Behavior
- Stereotyped or repetitive movements (motor, speech, or when using objects)
- Inflexibilities characterized as insistence on sameness or adherence to routines, or ritualized patterns of behavior (verbal or nonverbal)
- Highly restricted, fixated interests
- Hyper- or hypo-reactivity or unusual interest in sensory aspects of the environment

Restricted or Repetitive Behavior Patterns

Restricted or repetitive behaviors that impact functioning are classified into four types: (a) stereotyped or repetitive movements (motor, speech, or in using objects); (b) inflexibilities characterized as insistence on sameness or adherence to routines, or ritualized patterns of behavior (verbal or nonverbal); (c) highly restricted, fixated interests; and (d) hyper- or hypo-reactivity or unusual interest in sensory aspects of the environment.

Considerations with ASD Characteristics

Certain assessment tools are specifically designed to evaluate symptoms and characteristics of ASD and often include targeted domains or subdomains. As practitioners, we have a responsibility to select or—when appropriate—design assessment methods that are both evidence-based and tailored to the individual client's needs, goals, and resources. Current standards of care emphasize the importance of using multiple methods and informants to gain a comprehensive understanding of the client's functioning at intake and over time (CASP, 2024). To support accurate and meaningful assessment, practitioners should gather data from diverse sources and environmental contexts (when possible), attending closely to how the client's demonstrated skills align with the prioritized behavior outcomes for treatment.

> As practitioners, we are responsible for selecting individualized assessment tools that are based on the best available scientific evidence and aligned with each client's unique goals, needs, and available resources.

As previously mentioned, the presence of ASD symptoms does not necessarily indicate a need or desire for treatment; interventions should be guided by their relevance to the client's desired outcomes. While restricted or repetitive behavior patterns are defining features of ASD, only those behaviors that interfere with the client's overall functioning and well-being or personally meaningful goals should be addressed as goals for treatment. Examples of tools that measure ASD-related characteristics are identified below and may be found within the ASD Assessment Repository.

Core Characteristics of ASD Assessment Examples

Several standardized tools are commonly used to evaluate social communication:

- *Childhood Autism Rating Scale* (CARS), Second Edition
- *Pervasive Developmental Disorder Behavior Inventory™* (PDDBI™)
- *The Repetitive Behavior Scale–Revised* (RBS-R)
- *Social Responsiveness Scale™* (SRS™), Second Edition
- *Social Skills Improvement System* (SSIS)- Rating Scales
- *Test of Pragmatic Language,* Second Edition

Adaptive Behavior and Functioning

Adaptive behavior refers to the skills a person uses to navigate everyday life: communicating, getting dressed, following instructions, and staying safe. These skills evolve over a lifetime and help individuals participate in daily routines and fulfill roles in society (Tassé & Kim, 2023). Because adaptive behavior is essential to daily functioning and independence, it is

emphasized in assessments and treatment planning (American Psychological Association [APA], 2023).

Behavior analysts may provide services that target adaptive skill deficits (e.g., instruction-following, communication and social skills, imitation, play and leisure, self-care, daily living, and personal safety skills) or maladaptive behaviors (e.g., repetitive and stereotypic behaviors, and behaviors that pose physical harm to the client, others, and/or property) (American Medical Association [AMA] CPT® Assistant Online, 2019).

Adaptive Behavior and Functioning Assessment Examples

Several standardized tools are commonly used to assess adaptive behavior and functioning. Examples include:

- *Adaptive Behavior Assessment System* (ABAS-3), Third Edition
- *Adaptive Behavior Diagnostic Scale* (ABDS)
- *Vineland Adaptive Behavior Scales* (Vineland-3), Third Edition

Well-Being and Quality of Life

While there is no universal definition of quality of life, the WHO introduced a quality of life assessment tool in 2012 and defined quality of life as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns." (WHO, 2012, p.11).

Figure 5.3. Quality of Life Model

Felce and Perry (1995)

One proposed quality of life model includes five dimensions: (a) physical well-being, (b) material well-being, (c) social well-being, (d) emotional well-being, and (e) development and activity (Felce and Perry, 1995). The physical well-being dimension encompasses health, fitness, mobility, and personal safety. The second dimension, material well-being, consists

of food, housing, transportation, finances, and possessions. Social well-being, the third dimension, encompasses interpersonal relationships and community involvement, whereas emotional well-being includes satisfaction, fulfillment, self-esteem, and happiness. The final dimension, development and activity, is characterized as competence/independence, leisure/hobbies, education, and vocation.

Risk Analysis

Many individuals with ASD engage in behaviors that put themselves and others at risk. These may include dangerous behaviors such as climbing or eloping or actions that result in, or have the potential to result in, physical harm (CASP, 2024). However, systematic guidelines for risk assessment of ASD behavior patterns do not exist at this time. Therefore, ongoing screening and monitoring of risk-related behavior is strongly recommended once a diagnosis has been made (CASP, 2024).

In healthcare, a risk assessment typically covers three stages: risk identification, risk analysis, and risk evaluation (Pascarella et al., 2021). For behavior analysts, this process includes looking beyond whether a behavior interferes with learning, to see how the behavior impacts an individual's quality of life and long-term outcomes (Taylor et al., 2023). Risks may include physical injury, increased isolation, placement in restrictive settings, deterioration in health, disability progression, and even death (CASP, 2024). Taylor and colleagues (2023) proposed a framework of four interrelated risk domains: safety, resource, characteristics, and efficacy. This framework supports individualized, ethical decision-making that is aligned with the values of ABA, placing the client's well-being at the center of services (BACB®, 2020).

Risk assessments should involve examining the topography, intensity, and frequency of behaviors of concern and the settings and conditions associated with them (e.g., health complications, impacts relationships) (Ricciardi & Rothschild, 2017). Risk assessments should also include an analysis of past and current results to help practitioners make well-informed decisions about clinical strategies for mitigating risk. Practitioners should consult and collaborate with other professionals (e.g., medical doctors, psychologists) to effectively mitigate identified risks (Ricciardi & Rothschild, 2017), including but not limited to symptoms targeted by medication and their side effects.

Well-Being and Quality of Life Assessment Examples

Commonly used standardized tools for assessing a client's well-being and quality of life include, but are not limited to:

- *Child Family Quality of Life* (CFQL-2) Second Edition
- *Pediatric Quality of Life Inventory™* (The PedsQL™)
- *The Patient Reported Outcomes Measurement System*
  - (PROMIS; Autism Battery–Lifespan)
- *World Health Organization Quality of Life Instruments* (WHOQOL-BREF)
  - Autism Module
- *Parenting Stress Index* (PSI-4), Fourth Edition

Co-Occurring Conditions and Associated Features

As previously discussed, behavior analysts are responsible for providing assessments individually designed to address the client's unique needs and circumstances, establishing goals of treatment that are most meaningful to the client, significant others, and stakeholders. As part of an assessment, behavior analysts recognize that social validity and social significance are keystones of inquiry, targeting behavior change that is important to the client, their family, and society (Wolf, 1978; Taylor et al., 2023). To understand the client's situation and needs, and to assess socially meaningful goals of treatment, a quality of life assessment tool may be warranted. Quality of life measures are designed to capture the client's or stakeholders' perspectives and offer valuable insights to guide treatment decisions, such as identifying goal areas to promote socially significant change for clients, family and stakeholders, identification of areas of potential need or supports, such as respite care services, support groups, or referral out for other services. Whereas a diagnosis of ASD requires specific diagnostic criteria (e.g., persistent deficits in social communication and social interaction and/or restricted, repetitive patterns of behavior, interests, or activities that are present during early develoment and cause clinically significant impairments in functioning) and designated severity levels for each of these areas, there may also be associated features within an individual's autism diagnosis as well as multiple, co-occurring diagnoses. The *DSM-5-TR®* diagnostic criteria for ASD specify if the autism diagnosis is with or without accompanying intellectual or language impairment, associated with a known medical or genetic condition or environmental factor or another neurodevelopmental, mental, or behavioral problem, or with catatonia (APA, 2022). While distinctions between the levels of severity are described qualitatively, there are currently no quantitative analyses nor practice guidelines for clearly distinguishing one level from another (Hong & Matson, 2021; Weitlauf et al., 2014; Zander et al., 2015). Consequently, research suggests that clinicians may rely on cognitive functioning when determining severity across both the social communication and restricted and repetitive behavior domains (Mazurek et al., 2019). Aside from an autism diagnosis with these associated features, autistic individuals may have co-occurring diagnoses. Reported prevalence rates suggest that over 70% of individuals with autism have at least one co-occurring psychiatric disorder, with more than 41% having two or more co-occurring disorders, and up to 24% having three or more co-occurring disorders (Micai et al., 2019).

ABA practitioners should consult with medical and mental health providers on the effects of known co-occurring conditions, and with prescribing providers when an individual takes medications that are likely to affect ABA treatment (BACB®, 2020; CASP, 2024). Interprofessional collaboration has proven to be effective in improving outcomes for those with co-occurring disorders and should play a role in the overall treatment. Interprofessional collaboration can also help ensure that individuals receive the quality of care they need, not only ABA treatment but also other care services, such as primary care, mental health and psychiatric care, and social services. The benefits of interprofessional collaboration for clients with autism and co-occurring conditions can have a positive impact on clients' overall well-being and desired outcomes. Effective interprofessional collaboration promotes active participation of each discipline in the client's care and improves client rate of satisfaction

and treatment outcomes (The Robert Wood Johnson Foundation [RWJF] 2015; Davidson et al., 2022; Vision Blog, 2018).

Mental Health

Co-occurring mental health conditions are more common among individuals with autism than in the general population (Hossain et al., 2020; Lai et al., 2019; Micai et al., 2023). Therefore, ongoing, careful screening of mental health is an essential component of care for all people on the autism spectrum and should be integrated into clinical practice. For example, it is recommended that behavioral health providers routinely screen for anxiety in children aged 8 to 18 years and for depression and suicide risk in children aged 12 to 18 years and adults aged 19 to 64 years (U.S Preventative Services Task Force, 2022, 2023). ABA practitioners should be aware of specific regulations and requirements related to the mental health screenings they are subject to complete as part of their ABA assessments because such requirements vary by state, funder, and behavioral health treatment setting. Identifying potential mental health concerns may likely be outside the scope of competence for behavior analysts. If a behavior analyst determines that conducting mental health screenings is beyond their scope of competence, they should undertake appropriate related professional development activities.

Intellectual Functioning

Autistic individuals may have intellectual disabilities that might affect their response to ABA treatment. Assessing intellectual functioning can be beneficial for effective treatment planning and goal settings (CASP, 2024). When conducting ABA assessments, practitioners should note any intellectual developmental impairments and review the client's file for reports that have assessed for intellectual functioning. These reports may provide information the practitioner can use as part of ABA assessments, such as an individual's strengths (e.g., stronger visual than auditory skills that can improve overall treatment planning). As with all assessments, if the ABA practitioner does not understand the results, they should consult, if possible, the evaluator who conducted the intellectual functioning assessments (CASP, 2024).

Intellectual Functioning Assessment Examples

The following are some examples of intellectual functioning measurements that may be included in a client's records.

- *Differential Ability Scales*™ (2nd ed., DAS™–II)
- *Wechsler Preschool and Primary Scale of Intelligence*, Fourth Edition
- *Bayley Scales of Infant and Toddler Development*
- *Wechsler Adult Intelligence Scale* (WAIS–IV), Fourth Edition

Language Impairments

Individuals who have been diagnosed with ASD may display speech impairments that qualify for a differential language, speech sound, or childhood-onset fluency disorder (APA, 2022). When conducting ABA assessments, practitioners should review the client's diagnostic evaluations to identify any related language impairment or co-occurring language disorders. To support appropriate treatment planning, practitioners should also examine any reports

that have assessed the client for language functioning. When possible, consult with the evaluator of the client's language assessment to better understand their findings and how it may impact ABA treatment planning.

Language Assessment Examples

A client's file may include several assessments evaluating speech and language skills. These include but are not limited to:

- *Goldman-Fristoe Test of Articulation™ 3* (GFTA™- 3)
- *Clinical Assessment of Articulation and Phonology* (CAAP-2), Second Edition
- *Stuttering Severity Instrument* (SSI-4), Fourth Edition
- *Receptive and/or Expressive One-Word Picture Vocabulary Tests*, Fourth Edition
- *Comprehensive Assessment of Spoken Language,* Second Edition
- *Clinical Evaluation of Language Fundamentals* (CELF-5), Fifth Edition

ASD Assessment Repository

The ASD Assessment Repository features standardized instruments and widely used, skill-based assessments that are relevant to evaluating clients with autism spectrum disorders. For details on how standardized assessments were identified in this repository, please see Appendix A.

A group of subject matter experts identified and validated the assessments listed in the ASD Assessment Repository. These include standardized assessments commonly used as outcome measures in autism research and/or clinical practice. Non-standardized assessments are also included in the repository. The assessments that do not meet standardization requirements at this time are denoted as "not rated". This designation should not be taken as an indication that the assessment lacks practical value or that it is not undergoing research and continued development to meet the requirements to be designated as standardized.

The ASD Assessment Repository contains the following information for each assessment:
- Assessment mode (e.g., direct observation, caregiver interview)
- Assessment type (e.g., norm, criterion-referenced, or not rated)
- Client demographics
- Estimated administration time
- Required qualifications for administration
- Scientific evidence
- Standardization and validation criteria

When selected with care, well-researched, valid, and reliable standardized assessment instruments can offer valuable insights into an individual's strengths and needs. These assessments are crucial for establishing baselines, guiding treatment planning, and evaluating progress (BHCOE, 2021; CASP, 2024).

The next chapter explores how to responsibly select and effectively administer assessments.

Key Points

This chapter presents a comprehensive framework for conducting assessments for autistic individuals, emphasizing ethical, individualized, and evidence-based practice. Four primary assessment domains highlight the most commonly assessed areas in the assessment and treatment of ASD: (a) core characteristics of ASD (including social communication and restricted behaviors), (b) adaptive behavior and functioning, (c) well-being and quality of life, and (d) co-occurring conditions and associated features such as mental health, intellectual impairments, and language disorders. It provides assessment tools—both standardized and non-standardized- to meet client-specific assessment needs. Practitioners are urged to select tools that align with client-centered goals, and to understand the assessments' scope, limitations, and appropriate use within legal and professional guidelines.

This chapter underscores the importance of interpreting assessment findings within the client's unique context, advocating for a multi-method, multi-informant approach to ensure accuracy and cultural relevance. It warns against using diagnostic criteria as checklists for treatment targets and instead promotes aligning interventions with outcomes meaningful to the client and their support system. This chapter also introduces the ASD Assessment Repository, a growing collaborative database by APBA and CASP, which offers an overview of psychometric properties and other important characteristics, including client age, qualifications to administer, administration modality, score type, and estimated time for completion.

Chapter 6, the final chapter provides guidance on how to responsibly select and effectively administer assessments consistent with current industry standards. It highlights the importance of considering the client's unique needs, values, and treatment setting, while also accounting for funding requirements and practitioner scope of competence. Behavior analysts are strongly encouraged to use a multimodal approach, integrating standardized and non-standardized tools appropriate to client-specific needs and priorities for treatment, and to ensure they meet all training and ethical standards before using any assessment. Chapter 6 reinforces the critical role of ongoing assessment in guiding meaningful, individualized treatment planning and measuring progress over time.

CHAPTER 6

Selecting and Administering Assessments

Selecting and administering assessments is a complex process influenced by multiple factors. As emphasized in previous chapters, behavior analysts should only use assessments for which they have appropriate training and credentials, ensuring client safety and adherence to professional standards. In addition to these foundational requirements, several other considerations play critical roles in guiding assessment decisions. These include the client and stakeholder's treatment priorities and the environmental context in which terminal goals are expected to be achieved. A thorough record review can offer valuable background information that may inform assessment selection. ABA practitioners must evaluate their own scope of competence, requirements imposed by funding sources and regulatory bodies, and the appropriateness of the population used for norm-referenced assessments. This chapter explores each of these considerations and concludes with a brief discussion of how they inform treatment planning and development.

Measurement Selection and Administration Considerations

Client and Stakeholders

The values and priorities of the client and stakeholders should serve as the primary framework for identifying relevant assessment domains, as each client is unique. Since the assessment findings are intended to inform the scope and sequence of treatment, gathering information about the client's values, beliefs, needs, and preferences, along with those of their parents, guardians, and other key stakeholders is of utmost importance. This information directly informs the assessment selection, design (where applicable), and the administration of the assessment. By prioritizing client and stakeholder perspectives, the assessment process should align with the desired treatment outcomes.

Environment

While the primary goal of ABA assessment is to gather information to inform meaningful goals and interventions, the environment in which the assessment occurs should also be considered. Although many assessments do not require administration in the natural environment, direct observation to establish baseline levels for target behaviors is crucial. For example, a client referred for disruptive behavior and social skills in the classroom may participate in various direct assessments to evaluate present levels. However, direct observation in the environment where terminal behaviors should occur is key. Evaluating a client's behavior in a quiet, controlled environment is unlikely to yield the information necessary to establish an accurate baseline or reveal the contextual stimuli necessary for effective treatment planning. When appropriate, conducting assessments in the client's natural environment helps identify modifications to promote desired behaviors and aids in identifying naturally occurring reinforcers in the environment to support behavior generalization and maintenance.

Record Review

As discussed in chapter 3, reviewing records related to the client's medical, educational, and developmental history is vital. Gathering prior assessment results and details on the client's progress provides valuable context that can influence the types of assessments selected. This is particularly true when the assessments pertain to the areas deemed most significant by the client, primary caregiver, and other stakeholders. A record review may also reveal a client's history of trauma, which must be taken into account when selecting and administering assessments. If a client has experienced trauma and the behavior analyst does not approach the assessment from a trauma-informed perspective, it could both impact assessment results and subsequent treatment recommendations (Rajaraman et al., 2022). A trauma-informed approach includes an understanding of trauma and an awareness of the impact it can have across settings, services, and populations. It involves viewing trauma through an ecological and cultural lens, recognizing that context plays a significant role in how individuals perceive and process traumatic events, whether acute or chronic (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). This approach is not meant to treat trauma or be the substitute of the delivery of clinical interventions specific to treating trauma, rather, it emphasizes the importance of creating a safe and supportive therapeutic environment. Behavior analysts must work within their scope of practice. When conditions are present that may interfere with or prevent service delivery, behavior analysts remove or minimize these conditions, identify effective modifications to the intervention, and/or consider obtaining or recommending assistance from other professionals (BACB®, 2020, Ethics Standard 2.19). Understanding which assessments have been previously used can help the behavior analyst determine whether readministering an assessment is appropriate for evaluating changes in client's progress over time. It also allows the behavior analyst to identify whether repeating a particular assessment too soon might lead to invalid results due to practice effects. Ultimately, a thorough record review helps ensure that the selective assessments are both relevant and sensitive to the client's unique needs and circumstances.

Publisher Qualifications

Publisher training requirements for administration, scoring, and interpretation of results must be met before using any assessment. These requirements are generally found on the publisher's website in the assessment qualifications. While publisher requirements dictate who is eligible to administer an assessment, the behavior analyst must first evaluate their scope of competence with respect to assessments of interest.

Scope of Competence

Behavior analysts should select and administer assessments within their scope of competence and clinical training, and should actively seek professional development with administering assessments where they lack sufficient competence and training. Behavior analyst practitioners are generally trained to identify and develop direct observation protocols for target behaviors, implement various skill assessment tools, and conduct interviews and functional analyses of challenging behavior (see chapter 3). They are also equipped to develop behavioral objectives and to evaluate their client's mastery of those

objectives. However, many behavior analysts lack training in implementing additional assessments that could be valuable to their practice.

When allowed by contractual agreements, ABA practitioners may incorporate assessment support from technicians. However, as discussed in chapter 3, the behavior analyst must ensure that all individuals supporting assessments meet the necessary publisher defined qualifications and regulatory requirements. This requires the behavior analyst to ensure each technician is properly trained to implement the components of the assessment assigned, with ongoing supervision. As part of this process, the supervisor should establish interobserver agreement (IOA) procedures to ensure data accuracy and procedural fidelity, maintaining the reliability and validity of the assessment results.

In certain situations, behavior analysts may pursue additional training to establish their qualifications to administer a broader range of assessments for clients with ASD. However, there may be instances when behavior analysts need to collaborate with other qualified professionals when the needed assessment falls outside of their scope of competence or practice (e.g., speech and language, occupational therapy, intelligence quotient [IQ]). In such cases, a practitioner must rely on the findings reported by these specialists. Given the critical role that assessment measures play in developing individualized treatment, it is essential for ABA practitioners to remain aware of their own scope of competence and practice. They should actively seek additional training and supervision and make referrals to other professionals as necessary.

Third-Party Payer Policies and Regulatory Requirements

Another important consideration when selecting assessments is the specific requirements set by funding sources. For instance, a health plan (e.g., Medicaid) may stipulate that assessments must demonstrate medical necessity for the client. Consequently, practitioners should choose assessments that evaluate how a client's diagnosis and symptoms impact their daily lives, independence, and overall quality of life. Conversely, when a school district is funding ABA services, practitioners may need to pivot and select assessments that identify behavioral targets and strategies that can be integrated into and support access and benefit from their client's Individualized Education Program (IEP). It is important for behavior analysts to have a clear understanding of the specific requirements tied to each funding source to ensure assessments are aligned with both the client's needs and funding guidelines.

Some funding sources require specific measures to obtain authorization for services, but these measures may not be sensitive enough to detect clinically meaningful change, fail to address a client's unique needs or those of relevant stakeholders (e.g., caregivers), may not be valid with certain clients, and/or use of the instrument in a given context may differ from publisher or author specified requirements (Bishop & Lord, 2023). In these situations, practitioners should advocate for their client by informing funders and justifying their choice of assessments (BACB®, 2020, Ethics Standard 3.12). This justification should incorporate the client's unique needs and desired outcomes, principles of behavior, available scientific evidence for the selected assessments, and any limitations of contractually required assessments. For example, standardized, norm-referenced assessments may not capture meaningful change for some clients while non-standardized, criterion-referenced assessments may better reflect current skill levels in priority treatment areas and more

accurately measure progress over time. In these circumstances, the behavior analyst should document the limitations of the required assessment and provide rationale for selecting alternative measures. If a funder contractually requires the use of a specific assessment that may compromise the validity of results due to individual client factors (e.g., lack of cultural sensitivity, incompatible response modality), the behavior analyst should clearly communicate these limitations in their assessment findings. Furthermore, if licensure requirements prevent a practitioner from administering a specific assessment requested by a payer, the behavior analyst should inform the payer of this limitation and propose an alternative assessment permitted under licensure that addresses the same focus areas and can provide valid, meaningful results for the client.

Some payer sources allow for billing a technician to assist in the administration of assessments. Despite payer policy, the behavior analyst must ensure the technician meets publisher administration and regulatory requirements and receives ample training and ongoing supervision.

While publisher requirements may be met, behavior analysts must be aware of regulatory limitations in their scope of practice. For example, whereas behavior analysts meet publisher requirements for administering, scoring, and interpreting the Vineland-3, some regulatory restrictions prohibit this practice (e.g., credentialing board, state licensing board). Behavior analysts must be mindful of regulatory limitations in their scope of practice, as some regulations may restrict their ability to administer, score, or interpret certain assessments.

Norm Population

When selecting norm-referenced assessments, behavior analysts must be mindful of any limitations related to the norm population on which the assessment is based, particularly since individuals with developmental disabilities and complex medical profiles are often under-represented in standardization samples. These limitations can impact the accuracy and relevance of the results, particularly when the client differs significantly from the normative group. In cases where no alternative assessment options are available, it is essential that the behavior analyst clearly documents these limitations within their assessment findings to ensure transparency and support accurate interpretation of the results.
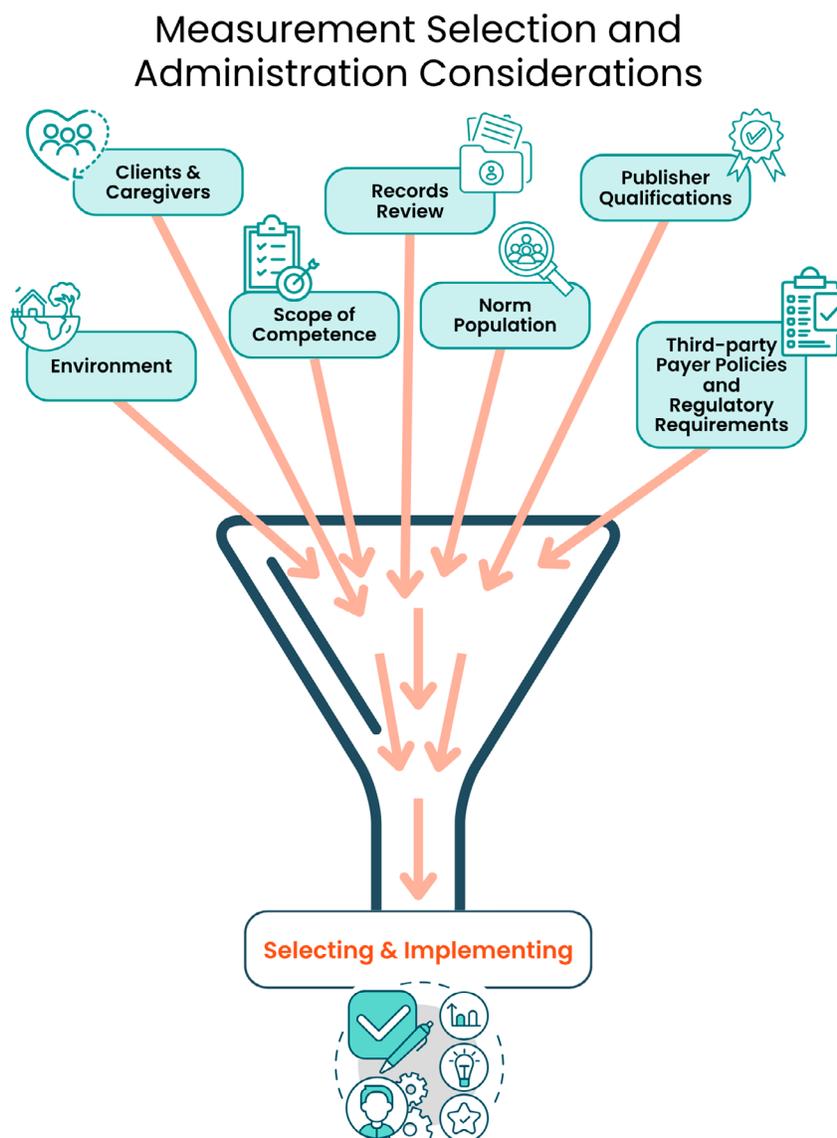
Treatment Planning and Goal Development

Whereas the primary purpose of the *ASD Assessment Guidelines* is to provide assessment guidance, it is important to briefly discuss how to apply the information in these guidelines to the development of treatment plans and goals. A practitioner should directly link the information gathered from the assessment to protocol design and the rationale for targeting specific behaviors for treatment. A key objective of most assessments is to identify the environmental contingencies related to socially significant behavior (Johnston et al., 2020). This process includes integrating assessment results into the development of treatment

plans, goals, and protocols tailored to service settings (e.g., school, home, community, and/or center).

When an ABA practitioner analyzes the demographically adjusted scores from norm-referenced assessments, they can better understand the client's strengths and weaknesses. With this information, they can identify areas of symptom impairment, evaluate the client's skill deficits, and recognize any interfering behaviors. Synthesizing this information with the findings from criterion-referenced or skill-based assessments allows the ABA practitioner to gather more specific information regarding their client's potential short- and long-term goals. By combining results from all assessment methods (e.g., interviews, record reviews, observations, and data collection), unique and overlapping targets may emerge. The ABA practitioner should correlate these targets to the relevant domains initially identified within the assessment selection process. These techniques help ensure that treatment planning and goal development are not only socially meaningful but also aligned with the objectives of the assessment process. A thorough multimodal ABA assessment lays the groundwork for individualized treatment goals and recommendations.

While a variety of ABA assessment measures are available, practitioners face the challenge of understanding the different types of assessments and their implications for treatment plan development and progress monitoring. A comprehensive multimodal approach to assessment is essential for developing a thorough understanding of each client's functioning, as well as clarifying the primary purpose of the evaluation and subsequent treatment.

Measurement Selection and Administration Considerations

Clients & Caregivers

Records Review

Publisher Qualifications

Scope of Competence

Norm Population

Third-party Payer Policies and Regulatory Requirements

Environment

Selecting & Implementing

Key Points

When selecting and administering assessments, ABA practitioners must consider a variety of factors to ensure the measures align with the client's specific priorities and anticipated outcomes for treatment. Behavior analysts should choose assessments that are within their scope of competence, seeking training and supervision, as needed. Assessments selected should account for the client's values and preferences, as well as the needs and perspectives of key stakeholders. The environment in which assessment takes place is also critical; evaluations conducted in natural settings, when appropriate, provide a more accurate baseline and contextual variable critical for effective treatment planning and outcomes.
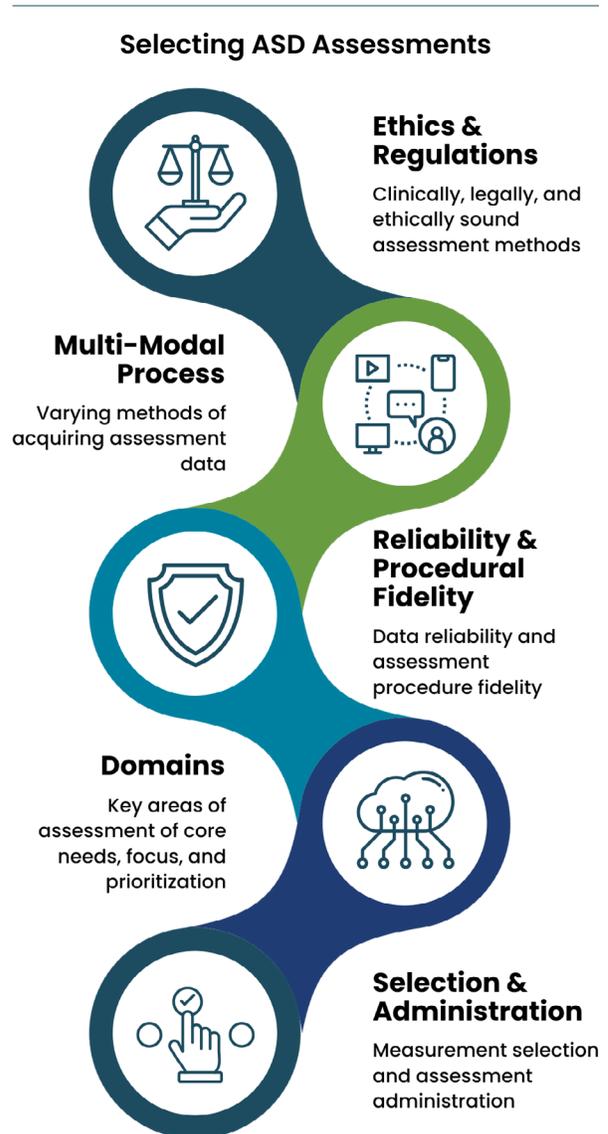
Additional considerations include the influence of funding sources and regulatory requirements on assessment selection. While funding sources may require specific assessments, behavior analysts must adhere to publisher qualifications and regulatory restrictions within their scope of practice. It is essential for practitioners to advocate for their clients when assessments may not fully capture the client's needs, and to respectfully decline the use of an assessment when it would be an unnecessary use of the client's time. Assessment decisions should always be guided by the specific questions relevant to that client at that moment in time. When a funder's assessment requirements may impact the validity of results, explanation of these concerns and justification for selecting alternative measures that more appropriately reflect the client's circumstances is necessary.

Taking into account these key considerations for selecting and administering assessments ensures behavior analysts conduct assessments within their scope of competence and practice and aligns with the client's unique needs, leading to more accurate, meaningful, and actionable assessment results. This comprehensive approach fosters both ethical practice and effective outcomes for clients.

SUMMARY

The *ASD Assessment Guidelines* and the *ASD Assessment Repository* support clinicians in developing individualized treatment plans based on comprehensive data collection and collaborative information gathered throughout the assessment process. The *ASD Assessment Guidelines* aim to assist practitioners in selecting assessment tools that address their clients' needs while also adhering to professional and ethical standards. Behavior analysts should be aware of potential limitations when selecting assessments, including their qualifications and training, the current psychometric properties (or lack thereof), and the interpretation of scores based on normative samples for standardized assessments. *The ASD Assessment Repository* serves as a resource for selecting scientifically validated tools (where psychometric properties are noted) and helps differentiate these from more commonly used assessments in ABA practice.

While the primary purpose of these guidelines is to serve as a framework for assessing needs and planning for ABA services for individuals with ASD, it is important to highlight that ongoing assessment is a crucial and continuous process. Assessment is not a one-time event or limited to payer required intervals to secure authorizations or contract renewals. Instead, it is a key component of treatment, integral to evaluating progress, ensuring treatment integrity, maintaining data reliability, and assessing overall treatment efficacy. Regular intervals of assessment not only assist with ensuring treatment goals are clear, observable and measurable but also support tracking progress, determining the most effective treatment protocols, and identifying where adjustments are warranted. On-going assessment provides objective data that informs the overall clinical direction of treatment. By continuously evaluating the impact of interventions, behavior analysts can refine treatment plans, ensuring protocols are effective and optimizing the client's desired outcomes.

Selecting ASD Assessments

Ethics & Regulations

Clinically, legally, and ethically sound assessment methods

Multi-Modal Process

Varying methods of acquiring assessment data

Reliability & Procedural Fidelity

Data reliability and assessment procedure fidelity

Domains

Key areas of assessment of core needs, focus, and prioritization

Selection & Administration

Measurement selection and assessment administration

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APPENDICES

Appendix A: Review Process for ASD Assessments for Repository Inclusion

Practitioners are faced with many options when selecting assessment tools and may not have the necessary training to thoroughly vet an assessment. In an effort to support practitioners, the Council of Autism Service Providers (CASP) and the Association of Professional Behavior Analysts (APBA) carried out a comprehensive review of relevant published literature (including professional journals, books, and technical reports) which resulted in a list of over 100 instruments that can be used for the following purposes:

- To assess individuals for a potential ASD diagnosis
- To document the incidence or prevalence of ASD in the population—to describe the course of ASD over time
- To plan services for individuals with an autism diagnosis
- To evaluate effects of various treatments.

The CASP/APBA team then searched research literature, examiner and technical manuals, and the websites of publishers or developers for information about key characteristics. They then compared these key characteristics against:

1. the *Standards for Educational and Psychological Testing*, which specify rationale and procedures for developing assessment instruments and evaluating their measurement properties (American Educational Research Association et al., 2014);
2. research reviews published in the last 10 years that assessed individuals diagnosed with ASD (Ackley et al., 2019; Ayres et al., 2018; Brugha et al., 2015; Goldstein, 2018; Grzadzinski et al., 2020; Hanratty et al., 2015; Ikeda et al., 2014; Kasari et al., 2013; McConachie et al., 2015; Naglieri et al., 2018; Padilla et al., 2023; Santhanam & Hewitt, 2015; Smith et al., 2018; Vasilopoulou & Nisbet, 2016); and
3. best practice guidelines and expert recommendations regarding assessment in ASD (Hedges et al., 2018; Hyman et al., 2020; Powell et al., 2018; Volkmar et al, 2014).

The team generally excluded instruments that lacked the necessary characteristics or were developed primarily for screening or research purposes, with a few exceptions. They also excluded instruments designed to assess academic skills, as behavior analysts in school settings typically focus on supporting clients' access to and benefit from their educational programs, not on delivering academic instruction. However, the team included several commonly used non-standardized or "skills-based" assessments to clarify their appropriate use in ABA treatment (e.g., setting treatment goals based on standardized assessment findings) and to highlight common misuses.

The majority of instruments included in the ASD Assessment Repository (a) are standardized; (b) are the most recent editions; (c) are readily available to qualified practitioners; (d) have documented evidence of validity and reliability that meets or reasonably approximates accepted standards (American Educational Research Association et al., 2014); and (e) have been identified as appropriate for autistic individuals and/or their caregivers in at least one research review or at least one set of expert guidelines or recommendations published within

the past 10 years. Some exceptions to these requirements were made due to their prominent use in ABA practice and are discussed in in "Role and Limitations of Non-standardized Assessments" section of these guidelines and coded accordingly in the ASD Assessment Repository.

This list is not exhaustive and reflects the information available as of 2025. Practitioners must make assessment selections aligned with publisher requirements, their own scope of competence and clinical judgement, and other relevant parameters from payers, credentialing bodies, and other regulatory entities.

Appendix B: Ecobehavioral Analysis and Social Determinants of Health Influence on Behavior

ANTECEDENT VARIABLES

APPLICATION: An event or condition that occurs before a behavior. Examples: illness, chronic pain (e.g., dental cavities), medication side effects, increased sensory experiences (e.g., loud rooms, visual distractions, clothing sensitivities), sleep disruption, parental separation, inconsistent caregiver expectations, instructions given (e.g., clear vs. ambiguous), transitions between activities, presence or absence of preferred stimuli or people.

PROTECTIVE FACTORS: Addresses clients' needs to remove or proactively plan for common antecedent variables, clear or consistent routines or prompts.

RISK FACTORS: Increases the likelihood that interfering behavior evoked by antecedents will be reinforced, transitions without warning or unclear directions may evoke interfering behavior.

CONSEQUENT VARIABLES

APPLICATION: Client-specific consequences that function to strengthen or weaken a behavior. Examples: social reinforcement (e.g., laughter, genuine praise, attention, play or other social activities), access to toys, music, games, bike riding, relaxation, quiet time, special treats or sensory stimuli (e.g., bubbles, lights, preferred tactile toys); removal of access to a privilege (e.g., iPad®, television, phone).

PROTECTIVE FACTORS: Access to reinforcers in the natural environment for desired behaviors; varied reinforcers including social consequences (e.g., praise, attention); sufficient training and oversight to develop competent care-provider use of meaningful reinforcement; manages access to reinforcers in the natural environment to prevent boredom, satiation, over-use (e.g., screen-time, eating); manages access to potentially dangerous activities (e.g., climbing, strangers); manages access to delicate toys, materials, or devices; develops conditioned reinforcers for greater effectiveness and sustainability.

RISK FACTORS: Lacks effectively targeted contingencies, has too few reinforcers, is too lean a schedule of reinforcement; reinforcement for behavior interferes with the individual's ability to learn or function independently.

ECOLOGICAL CONTEXT

APPLICATION: The broader context that impacts behavior. Examples: cultural norms in the home, school, and community; expectations of behavior across environment; stability of family structure and routine.

PROTECTIVE FACTORS: Existence of behaviors aligns with individual's ecological norms and is more likely to be reinforced.

RISK FACTORS: Lack of alignment between home, school, and other settings may result in inconsistent expectations and implementation of strategies.

SOCIAL DETERMINANTS

APPLICATION: The systems that influence an individual's health and well-being. Examples: access to food, housing, healthcare and mental health services; access to quality education; employment status and overall economic stability; caregiver education level and social and community context.

PROTECTIVE FACTORS: Stable housing, social support, and resources to access supportive services may improve readiness to learn and engage with others.

RISK FACTORS: May result in chronic stress, illness, and environmental inconsistencies which may impact the individual's ability to learn and engage in meaningful ways with others in the environment.