



TECHNICAL AND TUTORIALS

How to Conduct More Culturally Responsive and Trauma-Informed Functional Assessment Interviews: A Tutorial

Joshua Jessel^{1,2}  · Lauren Beaulieu³  · Adithyan Rajaraman^{4,5} 

Accepted: 17 February 2025

This is a U.S. Government work and not under copyright protection in the US; foreign copyright protection may apply 2025

Abstract

Historically, open-ended interviews have been used to assist in the design of functional analyses. Currently, there are scant resources teaching clinicians how they can conduct more culturally responsive and trauma-informed interviews to assist in their design of functional analyses. The purpose of this tutorial is to teach clinicians why they should and how they can align their interviews with the commitments of cultural responsiveness and trauma-informed care by providing clinicians with actionable steps. We provide a sample interview to demonstrate our recommendations and offer a ready-to-use tool for clinicians.

Keywords Assessment · Culture · Functional analysis · Interview · Trauma

- We describe the commitments of culturally responsive services and trauma-informed care
- We provide a tutorial on how clinicians can make their open-ended interviews more culturally responsive and trauma informed
- The tutorial describes actionable steps that clinicians can take to revise their current open-ended interviews to align with the commitments of cultural responsiveness and trauma-informed care
- We provide a sample open-ended interview for clinicians to use to design more culturally responsive and trauma-informed functional analyses

How to Conduct More Culturally Responsive and Trauma-Informed Functional Assessment Interviews: A Tutorial

Open-ended interviews are indirect functional assessment tools that enable clinicians to (a) gather information regarding environmental variables that influence a learner's challenging behavior (e.g., aggression, self-injury) and (b) use ecologically relevant information to design a behavioral intervention (Hanley, 2012). Open-ended interviews typically involve meeting with individuals who are intimately familiar with the target learner and their behavior (e.g., family members, teachers, direct-care professionals), asking open-ended questions about the target behavior and the responses and events that seem to coalesce around it, and developing hypotheses about environmental factors contributing to the challenging behavior's occurrence and maintenance (Gadaire et al., 2021). Historically, open-ended interviews have been used to both determine whether a functional analysis was warranted and design functional analyses with isolated contingencies (e.g., Iwata et al., 1982); however, more recently, they have been increasingly included in published studies to assist in designing functional analysis conditions to more closely approximate the idiosyncratic environmental context that surrounds the target behavior—including both isolated and synthesized contingencies (Coffey et al., 2020; Slaton & Hanley, 2018).

Functional analyses informed by open-ended interviews have been conducted on numerous occasions, and there is

✉ Lauren Beaulieu
beaulieu@newton.k12.ma.us

¹ Department of Applied Disability Studies, Brock University, St. Catharines, ON, Canada

² Jessel Applied Behaviour Analysis Professional Corporation, St. Catharines, ON, Canada

³ Newton Public Schools, Newton, MA, USA

⁴ Vanderbilt Kennedy Center's Treatment and Research Institute for Autism Spectrum Disorders (TRIAD), Nashville, TN, USA

⁵ Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN, USA

substantial empirical support for using open-ended interviews to assist in the design of functional analysis conditions (e.g., Gossou et al., 2022; Hanley et al., 2014; Rajaraman et al., 2022a, 2022b). It is worth noting that clinicians do not need to adopt a specific interview to match a specific functional analysis format. In other words, an open-ended interview can be used to inform any type of functional analysis (e.g., trial-based, latency-based) assessing any contingency (i.e., isolated or synthesized). Much of the empirical support for open-ended interviews relies upon an interview introduced in Hanley (2012), and although the research supports its use, due to the recent developments in the field of applied behavior analysis, clinicians should consider how they can interview in a more culturally responsive and trauma-informed manner—regardless of which functional analysis format they choose. For example, there is a need to gather information on cultural variables during the assessment process (Jimenez-Gomez & Beaulieu, 2022). The 2020 United States Census data supports this need by showcasing the changing demographics of those living within the United States (United States Census Bureau, n.d.). In the most recent United States Census report, there was a 276% increase in respondents who selected two or more races; the Latino and Hispanic population grew by 23%, and the “some other race” category grew by 129% (United States Census Bureau, n.d.). The increasing evidence that culture impacts behavioral services (e.g., Beaulieu & Jimenez-Gomez, 2022; Raghunauth-Zaman et al., 2024; Sivaraman & Fahmie, 2020a, 2020b) in combination with the new census report supports the need that clinicians should identify ways to be sensitive to cultural variables during the assessment process to design effective and equitable interventions.

Moreover, given the prevalence of potentially traumatic events among learners who exhibit challenging behavior and the impact such events can have on behavior, using a trauma-informed approach during the assessment process is likely to be beneficial (Rajaraman et al., 2022a). Trauma-informed care (TIC) can be conceptualized as a Tier 1 support that is implemented across all learners regardless of whether they have experienced potentially traumatic events (Austin et al., 2024; see Sugai & Horner, 2009, for more information on tiered supports). Strategies that align with TIC are seen to be beneficial to all since they support safety, trust, choice, and skill building (Austin et al., 2024). Implementing strategies that align with TIC is particularly important since a learner’s exposure to potentially traumatic events may be unknown to the clinician. Further, embedding commitments of TIC dovetails with designing culturally relevant assessments and treatments. There is an increased likelihood that those from historically marginalized groups, which includes individuals diagnosed with disabilities, are more likely to experience potentially traumatic events (Berg et al., 2019; Comas-Díaz et al., 2019; Maguire-Jack et al., 2021). Exposure to multiple

potentially traumatic events is positively correlated with a host of deleterious health and behavioral outcomes (Nelson et al., 2020; Oh et al., 2018). Therefore, identifying ways clinicians can embed the commitments of TIC into their service delivery with all learners in an effort to minimize exposure to potentially traumatic events may help facilitate the provision of safe and equitable services.

Despite the common use of functional assessment interviews in practice (Oliver et al., 2015; Roscoe et al., 2015), the rationale, goals, and skills of conducting open-ended interviews have seldom been given their own focus in behavior-analytic research (see Gatzunis et al., 2023, and Iwata et al., 1982 for two exceptions). There is a need for clinicians to interview in a way that allows them to design functional analysis conditions (and subsequent interventions) that not only solicit information on the environmental variables that immediately precede and follow the behaviors of concern but also capture relevant cultural variables while adhering to the commitments of TIC. Doing so could translate to increased safety, lower risk, or better clinical outcomes during the functional analysis for multiple reasons, as discussed in the tutorial below.

The purpose of this tutorial is to provide a technical description of how to conduct an open-ended functional assessment interview, with a specific focus on how the interview can aid in the design of more culturally and trauma-informed functional analyses. This is not a validation study of the use of open-ended interviews as there is substantial research supporting their use as a component of functional assessment processes (for a thorough discussion on psychometric characteristics of indirect functional assessments, see Rajaraman et al., 2022b). Instead, in this tutorial,¹ we introduce potential questions and rationales to help clinicians design their own open-ended interviews while also describing recommendations regarding how clinicians can ask questions to evoke rich information regarding environment and behavior relations from respondents. It is important to note that we are not suggesting that open-ended interviews are mutually exclusive to closed-ended approaches. On the contrary, an open-ended interview can be a part of a functional assessment. In addition, one might have other reasons to conduct close-ended interviews (e.g., to facilitate open-ended questions); however, this tutorial focuses on the use of an open-ended interview to design functional analysis conditions. Our tutorial is divided into three sections. First,

¹ All three authors have published peer-reviewed research on interview-informed functional analyses and incorporating the commitments of TIC into practice. The second author has also published research in peer-reviewed journals on incorporating cultural responsiveness into practice. This tutorial is informed in part by their collective research and clinical experiences.

we describe how to identify the behavior and context—steps that have always been foundational to open-ended, indirect functional assessments but for which a tutorial does not yet exist. Next, we describe how to conduct a more culturally responsive interview by incorporating cultural considerations into the interview. Finally, we discuss how to align your interview with the commitments of TIC. Table 1 includes a list of important terms, definitions, and related resources that may help the reader comprehend specific sections of the tutorial. In addition, we provide a sample interview at the end of the tutorial to both showcase our recommendations and offer a ready-to-use tool for clinicians to use in their functional assessment processes.

Tutorial

How to Identify the Behavior and the Context in Which It Occurs

As noted above, the primary purpose of conducting an open-ended interview is to adequately collect information regarding behavior and environment to better understand the relation between the two. Insofar as the interview gathers information to be incorporated into a subsequent functional analysis (as researchers have previously recommended; e.g., Fryling & Baires, 2016; Hanley, 2012; Gossou et al., 2022; Lundy et al., 2022; Rajaraman et al., 2022b), a primary goal of the interview is not to confirm a behavioral function per se, but instead to generate individualized hypotheses about the environmental antecedents and consequences suspected to be relevant to the target class of challenging behavior, which can then be tested and verified via analysis. The open-ended nature of the questions allows caregivers to create a qualitatively rich narrative replete with learner-specific information, which will help the clinician design a safe functional analysis that arranges an individualized set of conditions in which challenging behavior is said to occur and not occur. The clinician can begin this process by asking questions about the topographies of challenging behavior.

Ask Questions That Help Establish a Target Class of Challenging Behavior

A clinician conducting the open-ended interview will need to identify and address challenging behavior. Therefore, any initial questions regarding challenging behavior will be about identifying the behaviors of most concern. This will often include, but may not be limited to, topographies such as aggression, disruption, and self-injury. However, the clinician is all but guaranteeing an escalation to dangerous behavior if that is all they will target during subsequent

functional analysis (Jessel et al., 2022; Warner et al., 2020). An open-contingency class refers to a set of behaviors that co-occur and are presumed to be sensitive to the same reinforcers (Warner et al., 2020). For example, denying a learner access to their tablet could evoke crying, yelling, hitting, or dropping to the floor. There is increasing evidence that supports assertions that (a) a single topography of behavior may be maintained by more than one reinforcement contingency, and (b) multiple topographies of behavior may be maintained by the same reinforcer or reinforcers (Beavers & Iwata, 2011; Hanley et al., 2014; Hills et al., 2023; Jessel et al., 2022; Michael et al., 2011; Warner et al., 2020). Furthermore, on many occasions, challenging behavior is likely to escalate from associated non-dangerous behavior to dangerous behavior with extended exposure to evocative events (Jessel et al., 2022; Lalli et al., 1995; Magee & Ellis, 2000; Warner et al., 2020). It is possibly due to these reasons that more research is being produced that uses an open-contingency class (Jessel et al., 2020). For example, Warner et al. (2020) conducted a consecutive case series with 10 participants who exhibited multiple topographies of challenging behavior that were reported by caregivers to co-occur under similar scenarios and influenced by the same environmental variables (i.e., functional similarities). The authors progressively introduced extinction for each topography along the continuum of associated non-dangerous behavior to dangerous behavior and found that the responses reported to co-occur were all sensitive to the same contingencies for 9 of the 10 participants.

Jessel et al. (2022) extended these findings in a collection of 22 applications of functional analyses conducted with an open-contingency class (Study 1). The authors found that 82% of the participants exhibited more associated non-dangerous behavior. In the follow-up Study 2, Jessel et al. compared the closed- and open-contingency classes with four additional participants, and all participants transitioned from dangerous to non-dangerous behavior when the contingency class was opened. That is, co-occurring behavior that goes unreinforced (i.e., closed-contingency class) is likely to escalate to dangerous behavior. Incorporating an open-contingency class into the functional analysis allows us to draw two conclusions. First, the reinforcers can be provided during any signs of escalation before dangerous behavior occurs. This likely improves the chances of de-escalation and maintaining a safe environment during the functional analysis. Second, incorporating an open-contingency class is likely to decrease time spent exposed to evocative or adverse events because those events are discontinued immediately after the occurrence of any associated non-dangerous behavior, and the clinician need not wait for the eventual escalation to dangerous behavior.

To establish an open-contingency class, the clinician could ask questions regarding any progression in behavior

Table 1 Important terms and their definitions

Term	Definition	Example	Reference
Cultural responsiveness	The practice of using a client's familial and ethnically unique experiences to better inform how services are provided	The clinician began to align their services with <i>cultural responsiveness</i> when they identified whether translation and interpretation services were needed prior to the interview	Jimenez-Gomez and Beaulieu (2022)
Cultural humility	The life-long process that requires continual self-reflection to produce a dynamic partnership that reduces power imbalances between clinician and client and requires respect for and lack of superiority toward another's cultural background	The clinician displayed <i>cultural humility</i> when they reflected upon their upbringing in a small mid-western town and how this may impact the clinical goals they set for a client of southeast Asian descent	Tervalon and Murray-Garcia (1998)
Motivational interviewing	An approach to interviewing that uses techniques to inspire behavioral change and establish a strong therapeutic alliance	The clinician used <i>motivational interviewing techniques</i> with the caregiver to show that they are empathizing with their lived experiences and there to help	Plattner and Anderson (2024)
Open-contingency class	A group of responses that generally occur around the same time as one another and are sensitive to the same reinforcement contingencies	A clinician used an <i>open-contingency class</i> during a functional analysis to ensure that all behavior believed to be functionally similar initiated reinforcer delivery	Warner et al. (2020)
Therapeutic alliance	The emotional bond and the agreement on treatment goals between a clinician and client	A clinician began building a therapeutic alliance when they asked the learner which skills they wanted to learn during treatment	Plattner and Anderson (2024)
Trauma-informed care	A framework of commitments and practices intended to recognize the impact of potentially traumatic events on people's lives and to use such information to design services in a manner that promotes safe, collaborative, and voluntary participation, while minimizing potential re-traumatization	The clinician used the commitments of <i>trauma-informed care</i> to identify distressing events for the learner to modify the functional analysis procedures to reduce the possibility of re-traumatizing the learner	Rajaraman et al., (2022a)

that is indicative of escalation and worsening. In addition, it may be the case that caregivers often associate words such as “challenging behavior,” “problem behavior,” or “concerning behavior” only with dangerous topographies. The clinician could use more colloquial language around signs of the learner getting “frustrated,” “mad,” or “angry” to encourage caregivers to discuss a wider range of associated non-dangerous behaviors. These questions should leave the clinician with a detailed description of and definitions for dangerous and associated non-dangerous topographies of behavior to be targeted during the functional analysis in an open-contingency class.

The possibility exists for the clinician to use a closed-contingency class targeting only dangerous behavior, with the expectation that the measurement of too many responses can obscure the clinician’s understanding of the severe behavior of most immediate interest. The questions on establishing a target class of challenging behavior by no means restrict the clinician to using one contingency class over another (i.e., open or closed). The questions simply identify the extent to which challenging behavior occurs and the form the behaviors are likely to take. It is then up to the clinician to make the decision on how to arrange the contingency during subsequent functional analysis. However, it should be noted that using a closed-contingency class (when an open-contingency class is a viable option) inherently increases risks and decreases safety because only the most dangerous behavior discontinues the establishing operation in such a case (Jessel et al., 2022; Rajaraman & Jessel, 2023; Warner et al., 2020). In addition, requiring the learner to reach the very asymptote in emotional escalation may make it difficult to foster a supportive therapeutic alliance with those providing services. It is due to these limitations that we recommend the use of the open-contingency class and suggest explicitly recruiting information regarding associated non-dangerous topographies of behavior during the interview.

Ask Questions that Identify the Problematic Context as a Whole

One of the first questions about the environment a clinician should ask is one that invites the caregiver to speak freely about their experiences. Just being a person willing to sit and listen to what the caregiver and their family have gone through in the past is, in and of itself, one way to demonstrate empathy (Rohrer et al., 2021; Taylor et al., 2019) as well as build rapport, trust, and buy-in with analysis and intervention procedures. However, open-ended questions regarding recent behavioral episodes may be able to provide more informative descriptions of contingencies unadulterated by expectations and biases (Fryling & Baires, 2016). That is, when a caregiver is asked to

recount recent experiences with challenging behavior, they are potentially more likely to provide a narrative of the unique context-specific variables (Fryling & Baires, 2016). The clinician can then use their training in behavior analytic principles to pull from those accounts potential (a) evocative events that could contribute to the occurrence of challenging behavior and (b) consequent events that serve to de-escalate (proximal effect) and increase the future probability of challenging behavior (distal effect). It is important not to put the onus of explaining why challenging behavior occurs onto the shoulders of the caregivers who have brought the clinician in for help. Instead, assessors should invite descriptions and not caregiver interpretation to leave room for behavioral interpretations among those designing and conducting analysis and intervention procedures.

Ask Clarifying Questions About Evocative Events

After asking the previous questions on the problematic context as a whole, the clinician may be able to decipher one or more contingencies worthy of further investigation during the functional analysis. If that is not the case, elaborative questions can be asked, breaking down the contingency to clarify the role of particular antecedents and consequences.

From a technical standpoint, the clinician is attempting to identify discriminative stimuli and establishing operations that are likely to evoke challenging behavior and that can be reasonably included in a functional analysis context. These events often take the form of but are not limited to difficult tasks, denials to preferred activities or interactions, or both. The intent is to allow the caregiver to speak freely about any problematic situations likely to precede challenging behavior rather than to force them to choose from one activity that is believed to impact most learners (e.g., academic instruction). The situation is likely to differ for each learner, and reducing any questioning of specific information will permit the caregiver to speak openly about their experiences. However, prompts can be introduced regarding potential activities (e.g., academics, household, community, leisure) if difficulties arise in obtaining sufficient information regarding antecedent events that can be arranged in a functional analysis. For example, the clinician could ask the caregiver about particular tasks they tend to avoid asking their child to complete. Some caregivers simply circumvent difficult situations because they do not want to spend excessive amounts of time addressing the upcoming burst in challenging behavior, especially when safety is of concern. Similarly, the clinician may ask the caregiver about the items or activities they always have handy (e.g., a charged tablet,

their childhood blanket) to learn about how the absence of such things may have been historically correlated with challenging behavior.

Ask Clarifying Questions About Abative Events

Abative consequences for challenging behavior have an inverse effect from that of evocative or eliciting events: Where one type of event may turn behavior on (evocative events), another (abative consequences) may turn challenging behavior off. The clinician should be mindful that, when discussing questions regarding potential consequences for challenging behavior, caregivers may tend to discuss how they are trying to discipline their child, as the term “consequence” might imply in everyday parlance. Furthermore, questions regarding “reinforcers” for challenging behavior can sometimes be perceived as accusatory (e.g., the caregiver may perceive they are to blame for the continued occurrence of challenging behavior), causing the caregiver to shift to conversations about how they ignore, ground, or place their child in timeout.

The clinician should pose questions regarding how the caregiver attempts to calm their child. If the caregiver does the opposite of the previously mentioned antecedents, does the situation de-escalate? For example, if taking away a learner’s tablet tends to evoke challenging behavior, would giving it back eliminate challenging behavior in the moment? Reinforcers, by their very nature, abate behavior when the learner has access to them. That is, noncontingent, continuous access to reinforcers suspected to be relevant should make the learner happy, relaxed, engaged, and free of challenging behavior. Identifying the consequences that can de-escalate challenging behavior is a priority when designing the subsequent functional analysis. In fact, we would not recommend conducting a functional analysis unless the clinician has a hypothesis about the circumstances under which challenging behavior is likely to occur *and* not occur. Without ascertaining some information regarding abative events, the clinician would have no known means for de-escalation using reinforcement, which may leave them with little alternative but to rely on intrusive behavioral management strategies (e.g., restraint) when challenging behavior begins to occur.

The clinician can discontinue any interview questions regarding the problematic context when they can identify an open-contingency class, including an array of dangerous and non-dangerous topographies of behavior to target, and can arrange a context representative of the learner’s environment where challenging behavior is reported to be evoked and abated. There is no necessity to ask a certain number of questions or to go in any particular order; doing so could even appear robotic, off-putting, and appear as though the clinician is not listening (i.e., the caregiver may

feel as though they have to repeat themselves to answer similar questions).

How to Conduct a More Culturally Responsive Interview

There are several considerations to take into account when designing a more culturally responsive assessment interview. We identified several commitments of a culturally responsive approach from two narrative review papers (Beaulieu & Jimenez-Gomez, 2022; Jimenez-Gomez & Beaulieu, 2022). We used these sources because they involved a review and recommendations from various research studies within and outside of behavior analysis from various authors. The commitments identified included: (a) reflecting on one’s cultural background, (b) gaining awareness of a learner’s lived environment, (c) using a posture of cultural humility, (d) asking open-ended questions, (e) assessing social validity, (f) fostering collaborative service delivery, and (g) programming for generalization. Clinicians can incorporate these commitments into their interviews with learners and caregivers in several ways. In what follows, we describe some ways that will assist the clinician in conducting a *more* culturally responsive interview. Table 2 outlines how our recommendations align with the commitments of culturally responsive service delivery. It is important to note that this tutorial is focused on helping clinicians conduct *interviews* in a more culturally responsive manner, and there are many other considerations to align one’s *service delivery* with cultural responsiveness.

Gather Demographic Variables and Include Relevant Interview Contributors

Include a section to gather information on demographic variables *prior* to the interview. One essential use of the demographic variables is for the clinician to assess linguistic needs prior to the interview (e.g., whether the family prefers or needs the translation of documents and/or the use of an interpreter). Further, it allows the clinician to assess their level of competence if there is a cultural mismatch (see Fong, 2020, for a decision tree to aid in this practice). Finally, demographic information can be used to foster a posture of cultural humility as it affords the clinician an opportunity to reflect on their own cultural background, how their cultural background impacts their clinical decisions and recommendations, and how that may differ from their learner.

Using a posture of cultural humility requires clinicians to frequently practice self-assessment of their own cultural

Table 2 Culturally responsive practices when interviewing

Actionable Steps When Conducting Interviews	Commitments of Culturally Responsive Services	Rationale
Collect demographics and include relevant interview contributors	<ul style="list-style-type: none"> -Use a posture of cultural humility -Reflect on one's cultural background -Foster collaborative service delivery 	<ul style="list-style-type: none"> -Affords the opportunity for the clinician to reflect on their own cultural background, how their cultural background impacts their clinical decisions and recommendations, and how that may differ from their learner -Enables the clinician to assess linguistic needs to fully include the caregivers -Allows clinician to assess whether there is a cultural mismatch and referral is needed
Ask open-ended questions about behavior and environment	<ul style="list-style-type: none"> -Foster collaborative service delivery -Gain awareness of learner's lived environments -Ask open-ended questions -Plan and program for generalization 	<ul style="list-style-type: none"> -Allows learners and caregivers to provide information about their specific context and concerns -Provides rich information that may lead to specific antecedent and consequent conditions that are culturally relevant to the learner
Ask about the learner's home life	<ul style="list-style-type: none"> -Foster collaborative service delivery -Gain awareness of a learner's lived environment -Plan and program for generalization 	<ul style="list-style-type: none"> -Actively involves home caregivers, which may lead to a more socially acceptable and culturally appropriate treatment -Provides information that can be used to program for generalization
Consider motivational interviewing techniques	<ul style="list-style-type: none"> -Use a posture of cultural humility -Foster collaborative service delivery 	<ul style="list-style-type: none"> -Establishes a level of trust that the clinician is there to address the needs as specified by the caregivers -Enables the caregiver to feel comfortable speaking about their experiences in an open and judgement free environment
Enquire about treatment goals and important skills	<ul style="list-style-type: none"> -Foster collaborative service delivery -Plan and program for generalization -Assess social validity 	<ul style="list-style-type: none"> -Allows direct involvement in the treatment planning process -Assists in gaining information regarding skills and goals that are important to the learner and caregivers' lives

We used Beaulieu and Jimenez-Gomez (2022) and Jimenez-Gomez and Beaulieu (2022) to identify commitments to cultural responsiveness

background (Beaulieu & Jimenez-Gomez, 2022). Although there is no research outlining the best way to engage in self-assessment, there are several resources to assist clinicians in this practice (Beaulieu & Jimenez-Gomez, 2022; Fong et al., 2016; Georgetown University, n.d.; Leland & Stockwell, 2019; Tagg, 2020; Wright, 2019). Helms (2020) is an excellent resource for clinicians desiring to better understand their White racial identity. While these resources are a great place to begin one's journey of self-assessment, it is also important to consider how compassion (Gatzunis et al., 2023) and empathy (Suarez et al., 2024) intersect with using a posture of cultural humility. Further, as a clinician's level of cultural awareness improves, the clinician may be able to better identify conflicting cultural values between themselves and the clients they serve. In these cases, Delgado et al. (2024) provide a pragmatic decision model to assist clinicians in working with clients and stakeholders to select goals that will benefit the client while honoring cultural differences.

There are several considerations when collecting demographic information from learners. When gathering

demographic information, it is important to describe the rationale and confidentiality procedures for collecting demographics, allow multi-select options (as opposed to single-select options), allow the person to skip questions, allow space for self-description, ensure data collection is compliant with the Americans with Disabilities Act (ADA), ensure data collection is offered in various languages or translation is available, use inclusive language (e.g., use "caregivers" instead of parents or mother/father due to diversity of family dynamics), regularly review terminology, and provide multiple response option formats that support diverse skills (Jimenez-Gomez & Beaulieu, 2022; see Hughes et al., 2022 for guidance on demographic categories).

While collecting information on demographic variables, it is also important to ask questions regarding the involvement of various caregivers prior to the interview. For example, asking which caregivers are involved in making health care and education decisions, teaching, playing with, and caring for the learner (e.g., grandparent[s], mother[s], father[s], foster parent[s], stepparent[s]). For example, in some cultures,

grandparents play a large role in making decisions for their grandchildren; therefore, it would be important to involve them at the onset. By asking questions regarding who is involved in making healthcare decisions, education decisions, and caring for the learner, the clinician can ensure relevant caregivers are invited to the interview. However, one must be sure to discuss and receive consent from the legal guardian regarding who should be invited.

Interviewing caregivers from the home is critical to conducting more culturally responsive interviews because a clinician must gather information regarding the culture of the learner, and the caregivers in the home are the experts in that domain. If the clinician simply reviews the demographics to assess the learner's culture, the clinician risks identifying stereotypes of a culture. Further, there are variances and sub-cultures within cultures, so it is critical to learn from the learner and caregivers. In other words, demographics alone cannot teach the clinician about the specific culture of the learner and their family. Interviewing caregivers may be difficult in some contexts, such as public schools or for clinicians who have high caseloads; however, the clinician should make adequate attempts to contact the caregiver(s), explain the rationale and importance for their involvement, and identify a time and space to interview. Although in-person interviews can be helpful, the clinician should accommodate the caregiver(s) needs by offering multiple platforms (e.g., virtual, phone, completing the interview on their own and mailing or emailing it back) to increase the likelihood the home caregiver(s) can participate. Interviewing both home caregivers and caregivers at the service site (e.g., teachers, behavior therapists) will increase the assessment time; however, clinicians should see this as a valuable use of their time. Not only does interviewing home caregivers increase collaboration and allow the clinician to learn about the culture of the learner and family, but it also helps build rapport with the caregivers and increases the likelihood that the clinician will develop a socially valid and culturally appropriate treatment from the onset since the home caregivers are involved from the beginning.

Ask Open-Ended Questions About the Learner's Environment and Behavior

Asking open-ended questions about the learner's environment and behavior conforms to a culturally responsive approach because the open-ended questions facilitate a collaborative approach with the learner and caregivers by honoring their perspectives and expertise in the assessment process. Answers to open-ended questions provide rich information that may lead to specific antecedent and consequent conditions that are culturally relevant to the learner (e.g., specific demands or attention that evoke or abate the behavior). For example, following an interview

with caregivers, Tsami et al. (2019) designed an escape from touch condition for two children residing in Greece. The caregivers reported facial touching as a common form of providing affection in their region, and according to the caregivers, the behavior of concern occurred following the facial touch. The functional analysis confirmed escape from facial touching for one child, and a corresponding treatment was developed. By gathering information on the type of stimuli that evoke and abate behavior, the clinician can design conditions that match the learner's lived environment and are more ecologically valid. Additionally, incorporating aspects of the learner's lived environment promotes generalization since the assessment results and conditions will be considered during the development of the treatment.

Ask About the Learner's Home Life

As mentioned, it is critical to involve home caregivers to identify cultural variables, and involving caregivers also facilitates another commitment of culturally responsive services: programming for generalization. The clinician should include questions that capture cultural variables by asking specific questions soliciting information about the learner's home life. The clinician should ask about important family routines, leisure activities, play skills, house rules, preferences (e.g., toys, food), and everyday routines that the learner may struggle with. Information about home life will provide valuable information that can be used to program for generalization. For example, the clinician can incorporate relevant home stimuli (e.g., leisure activities, toys, food, eating routines such as with hands versus utensils) into the environment where services are delivered. There are a few additional considerations regarding culturally responsive assessments, but we discuss these later in conjunction with aligning your interview with TIC because there is an overlap between these two frameworks.

How to Better Align Your Interview With Trauma-Informed Care

We identified several commitments of a trauma-informed approach based upon guidance from Rajaraman et al., (2022a). Similar to the cultural responsiveness considerations above, we referenced this source because it provided a review and recommendations from both within and outside the behavior analytic literature. Rajaraman et al., (2022a) provided a definition and argument in favor of incorporating TIC into behavior-analytic practice. First, they defined TIC as a preventative approach aimed at minimizing a learner's potentially traumatic experiences while facilitating meaningful and voluntary participation in their own care. Second, they distinguished TIC (i.e., a preventative

framework) from trauma-specific services (i.e., specific, reactive interventions to address traumatic stress symptoms). Third, they pointed out that individuals with intellectual and developmental disabilities—including autism spectrum disorder—who are often those referred for behavioral services due to challenging behavior, are at increased risk of exposure to potentially traumatic events (Berg et al., 2019; Comas-Díaz et al., 2019; Hibbard & Desch, 2007; Kerns et al., 2015). Fourth, they outlined the following four commitments of TIC as guiding strategies: (a) acknowledge trauma and its potential impact; (b) ensure safety and trust throughout behavioral services; (c) promote choice, collaboration, and shared governance; and (d) emphasize skill building. Although a full explication of these commitments is beyond the scope of this tutorial, it is worth noting that a commitment to acknowledging trauma and its potential impact refers not only to the steps one might take to understand the potential trauma history of their specific learner (see below) but also to educating oneself about the prevalence of traumatic experiences and associated health and behavioral outcomes in general and special populations. The reader is referred to Austin et al. (2024) and Rajaraman et al., (2022a) for such information. Finally, in encouraging clinicians to think preventatively and to acknowledge trauma and its potential impact, Rajaraman et al., (2022a) suggested that applied behavior analysis should and could be trauma-informed from the onset of services. In that vein, we highlight how open-ended interviews could conform to a trauma-informed approach in several ways in recognition that it may constitute one of the first interactions between a clinician and the families they serve (see Table 3 for a summary).

Solicit Information About Particularly Distressing Events or Interactions

While we do *not* recommend clinicians screen for trauma without proper training, we do recommend explicitly soliciting information about particularly distressing events or interactions and their schedules of interaction historically and currently (e.g., history with other care providers, experience with physical management, spaces or items they appear to aggressively avoid or reject) to learn more about the idiosyncratic stressors in the individual's life. Therefore, instead of asking whether the learner has experienced trauma, specifically ask about events or interactions that appear uniquely distressing to the learner. Framing these questions around idiosyncratic stressors may not teach you about the learner's lived traumatic experiences in a technical sense, but this is one way to *acknowledge the possibility of trauma and its potential impact*, which may assist in designing a potentially safer analysis as the clinician can consider whether and how to include such disproportionately distressing events.

For example, if a caregiver were to report that interacting with men who wear hats has been particularly distressing, without even asking about a specific trauma history, the clinician and caregiver can thoughtfully discuss whether tolerating men who wear hats is an important and/or immediate goal (as opposed to potentially addressing it later following other therapeutic gains) and consider whether hat-wearing men could be avoided during the analysis and subsequent intervention.

It is worth reiterating that TIC does not involve intervening directly on posttraumatic stress symptoms; rather, it is meant to consider the potential trauma (i.e., a previous learning history that may have included adverse events) of those served and to be thoughtful in how potentially traumatic situations are strategically avoided or systematically introduced during an assessment and intervention process. Therefore, incorporating this commitment into the interview does not require a clinician to “screen for trauma” per se but to allow respondents to share perspectives on the events in the individual's life that appear particularly distressing. That said, mere discussion of such potentially sensitive topics may be distressing for some. In a subsequent section (i.e., consider motivational interviewing techniques), we describe some evidence-based strategies that may help the clinician curate a supportive and safe environment for the caregiver or interview respondent during the interview itself.

Explicitly Ask About the Conditions in Which the Learner is Most Comfortable

By definition, functional analyses involve experiencing contrived conditions to examine the impact of environmental variables on challenging behavior (Lambert & Hutchins-Juarez, 2020). Although the intent is typically to emulate the contingencies operating in the learner's lived environment, features of the functional analysis context may not perfectly encapsulate how those contingencies are experienced authentically and could even feel foreign to some individuals (e.g., an austere room, abrupt presentation of events suspected of influencing behavior). Whether or not the learner has an existing relationship with the clinician, the behavior of the clinician who is attempting to evoke and immediately reinforce learner behavior during the analysis could be correlated with some discomfort. Of course, this may not always be true, as the experience of contrived contingencies in a functional analysis could also be perceived as benign. However, given the explicit intention of the clinician to evoke challenging behavior in the analysis (in order to better understand it), we offer some strategies that may *ensure safety and trust*, thereby progressing toward alignment with a TIC framework.

One strategy to help promote comfort, rapport, and safety in the analysis space could be to initially arrange conditions

Table 3 Trauma-informed practices when interviewing

Actionable Steps When Conducting Interviews	Commitments of Trauma-Informed Care	Rationale
Solicit information about particularly distressing events or interactions impact	-Acknowledges trauma and its impact -Ensures safety and trust	-Gives the clinician a chance to empathize with the learner and understand the difficulties they may have experienced -Allows for the thoughtful discussion of whether particularly adverse events will be presented or avoided during assessment and intervention
Explicitly ask about the conditions in which the learner is most comfortable	-Ensures safety and trust	-Provides an opportunity for the clinician to understand what makes the learner happy, relaxed, and engaged -Facilitates the design of an individualized context in which challenging behavior is unlikely to occur and the learner is calm
Recruit information about all possible responses associated with challenging behavior and reinforcers	-Ensures safety and trust	-Allows the clinician the ability to respond to associated non-dangerous behavior in a way to reduce the chances of severe escalation -Creates the occasion for the clinician to maintain a level of trust with the learner by providing all sources of reinforcement for low-risk behavior
Consider motivational interviewing techniques	-Promote collaboration and shared governance	-Fosters active listening, affirmation, reflection, and summarization on the part of the clinician to then establish assessment and intervention services that the caregivers feel as though they helped design
Enquire about treatment goals and important skills	-Promote collaboration and shared governance -Emphasize skill building	-Allows the clinician to identify a host of socially relevant skills to target during intervention -Signals that the intervention will be geared toward empowering the learner to be effective across various environments

We used Rajaraman et al., (2022a) and Substance Abuse and Mental Health Services Administration (2014) to identify the commitments to a trauma-informed approach

in which the learner is free to engage with items, activities, and people in a manner that they direct and ostensibly prefer (i.e., a condition in which the learner appears comfortable). To do this, the clinician should explicitly ask about the contexts in which the learner is most comfortable during the interview. Said another way, the clinician should ask caregivers to identify an environment in which (a) any challenging behavior would seem unlikely and (b) the learner would be likely to appear calm, happy, and engaged with preferred items, activities, and interactions. Such an environment could be arranged as the learner's introduction to their functional analysis context, ensuring their comfort with the setting prior to initiating any test conditions. For example, researchers in Jessel et al. (2023) solicited such information, arranged a period of unstructured play with preferred items and activities *prior to* initiating any functional analysis trials, and measured learner behavior for indices of calm and distress during that period. Contexts in which learners are considered "comfortable" can be highly idiosyncratic, which only heightens the importance of obtaining this information prior to the functional analysis. For one participant in Jessel et al., the unstructured play context involved free play with both a phone and a tablet. For another participant, it involved uninterrupted self-restraint and access to their protective equipment.

Historically, many functional analysis formats include a "toy play" condition that serves as a control against which behavior in test conditions is compared (Melanson & Fahmie, 2023). It is not uncommon for clinicians and researchers alike to commence their functional analysis with the "toy play" condition (Hanley, 2012; Iwata & Dozier, 2008). As such, our recommendations in this section could be considered commensurate with common practice. However, we note two special considerations. First, we recommend obtaining information in the interview about *all* the possible items, activities, and interactions *most* likely to promote comfort and safety as the functional analysis starting point. We argue that explicitly asking such questions will recruit qualitatively rich details about highly preferred activities and interactions to be included in the functional analysis context. Second, whereas many functional analyses include time-based sessions (e.g., 5 min), we recommend the tactic—taken by Jessel et al. (2023)—to arrange this condition while measuring learner behavior with respect to indices of happiness, engagement, calmness, and the absence of challenging behavior, prior to initiating any functional analysis test conditions or trials. Indeed, data from several studies evaluating performance-based functional analyses (i.e., analyses wherein evocative events are not presented until the learner is observed to be calm and engaged with suspected reinforcing activities) have shown that this tactic minimizes the occurrence of dangerous topographies of behavior while producing continued engagement with

activities and interactive bids following a return to reinforcement (Fruchtman et al., 2025; Iovino et al., 2022; Jessel et al., 2023; Quiroz et al., 2025). Furthermore, Jessel et al. found that learners were calm for a greater proportion of the analysis when trials were implemented on the basis of performance as opposed to the passage of time. In other words, doing so could be one tactic that may help facilitate *safety and trust* between learners and clinicians in the functional analysis environment (Reilly et al., 2025).

Recruit Information About All Possible Responses Associated With Challenging Behavior and Reinforcers

Identifying ways to ensure safety and trust is essential to align our assessment process with the commitments of TIC. Safety could be considered a condition where an individual is free from physical harm (including self-harm or harming others), but trust generally refers to reliable, consistent, and positively reinforcing relationships between an individual and people in their life. Although the open-ended interview itself should not put a learner at safety risk, functional analyses pose many potential safety concerns because they are designed to repeatedly present challenging conditions suspected to evoke challenging behavior (Jessel et al., 2023; Melanson & Fahmie, 2023). The interview can include questions that improve safety during the analysis in two primary ways.

First, in addition to recruiting specific information about the dangerous responses that are likely the impetus for the functional assessment in the first place (e.g., self-injurious behavior, aggression), it bears repeating that the interview can prompt the clinician to enquire about *all* non-dangerous topographies of behavior that seem uniquely associated with the more dangerous forms. These are responses reported to precede or co-occur with more dangerous forms, and they are intended to be explicitly included in the class of behaviors eligible for reinforcement in the analysis (i.e., to design an open-contingency analysis). For example, if a caregiver were to report concern about dangerous aggression, the interview should be set up to ask multiple questions about non-dangerous responses that appear to uniquely precede or coincide with aggression—such as whining, stomping, protesting, or grimacing. The analysis can then be designed wherein the clinician is poised to respond to associated non-dangerous responses in a manner that is likely to thwart escalation to dangerous topographies.

The manner in which the clinician responds to the associated non-dangerous responses is a second tactic that could promote safety during an analysis. The interview prompts the clinician to enquire about *all* possible consequences of any challenging behavior (i.e., suspected reinforcers) and specifically asks about the events that appear to quell behavioral

episodes. To the extent that caregivers report consequences to reliably follow challenging behavior, they are explicitly intended to be included in the analysis as suspected reinforcers to be immediately provided contingent on the occurrence of *any* non-dangerous or dangerous topography of challenging behavior. Reinforcement delivery serves as an abolishing operation for a response class (Langthorne & McGill, 2009), thereby decreasing the probability of continued occurrence of any correlated behavior (Pollack et al., 2024). The tactic of including all possible reinforcers, as opposed to one, may provide an additional safety cushion during the analysis by minimizing the possibility that some reinforcer is missing from the context (which may lead to escalation to dangerous behavior). For example, Ghaemmaghami et al., (2016b) conducted a functional analysis that included all possible reinforcers for one individual exhibiting challenging behavior. The relevance of each contingency was affirmed during the sequential introduction of function-based components of an intervention addressing each reinforcer in isolation (i.e., challenging behavior was not completely eliminated until all reinforcers were included). Furthermore, by obtaining information about both associated non-dangerous topographies and about suspected reinforcers, and by including that information in the analysis design, the clinician may be in a position to better foster “trust,” in that, the learner need not exhibit dangerous, potentially emotional responses in order to have any and all of their needs met.

How to Make Your Interview More Culturally Responsive and Trauma-Informed

The commitments of cultural responsiveness and TIC overlap considerably (e.g., collaborative service delivery, an emphasis on social validity). In this section, we outline actionable steps clinicians can take that will align their interviews with both areas. Information on these steps is summarized in Tables 2 and 3.

Consider Motivational Interviewing Techniques

Collaboration is critical to providing culturally responsive services and is a key component of TIC. Simply put, starting the therapeutic alliance with an open-ended interview is a strategy that strongly signals a collaborative approach to assessment and intervention design. Asking questions in an open-ended manner enables respondents to speak in their own, likely nontechnical language, about their qualitatively rich experiences. Furthermore, open-ended interviews enable the clinician to affirm, reflect, and summarize what caregivers report, which are core features of motivational interviewing techniques (Christopher & Dougher, 2009; Hettema et al., 2005; Plattner & Anderson, 2024).

In affirming what caregivers report, the clinician has the opportunity to be compassionate and empathetic while building rapport and showing positive regard toward the family and the learner (Taylor et al., 2019). In reflecting on caregiver anecdotes, the clinician can demonstrate active listening and seek clarification where appropriate, especially in service of collaboratively extracting hypotheses about environmental variables that may be influencing behavior. In summarizing what the clinician hears during interviews, both clinician and caregiver have an opportunity to ensure they are on the same page about the nature and scope of the challenge and the action plan to address it, which will include the subsequent functional analysis (for greater detail on motivational interviewing techniques and their relevance to behavior-analytic practice, see Plattner & Anderson, 2024). Taken together, these motivational interviewing strategies are but a few that may set the occasion for collaboration and shared goal-setting while promoting a safe and supportive environment in which to conduct an interview about potentially sensitive topics.

Enquire About Treatment Goals and Important Skills

As mentioned, collaboration is critical to providing culturally responsive and trauma-informed services. Ask the learner and caregivers (i.e., home caregivers and service caregivers such as teachers) open-ended questions about the treatment goals and important skills that could be used as alternative behaviors during treatment. Skills might include communication, leisure, academics, vocational, social skills, and advocacy skills. Skills should be individualized on the basis of the learner’s needs and preferences. Soliciting information about goals and important skills fosters collaboration between the learner, caregivers, and clinician and supports the design of a socially acceptable, culturally relevant, and generalizable treatment. Furthermore, it communicates to those being interviewed that the intervention will be skill-based, which is not only aligned with TIC but has been shown to lead to stronger intervention outcomes relative to non-skill-based interventions (Drifke et al., 2020; Ghaemmaghami et al., 2016a; Muharib et al., 2022). TIC frameworks strongly emphasize skill development because they empower an individual to be able to behave effectively in meeting their own needs in various environments. In a technical sense, it is presumed that social skills (e.g., functional communication, self-advocacy, coping with inevitable disappointment) enable learners to produce important reinforcers during moments when those reinforcers may be most efficacious (i.e., across fluctuating establishing operations). In addition, asking questions regarding skills and alternative behaviors during the assessment process can facilitate a more streamlined treatment process and may lead to better social validity

outcomes since the learner and caregiver are assisting in the development of the assessment and corresponding treatment goals.

Sample Interview

A sample interview is freely available via open access (https://osf.io/dpk2e/?view_only=bea627d9a70f490b872f64c464703e9e). The sample interview was initially inspired by the interview presented in Hanley (2012); however, it is important to point out that the tool linked above has yet to be empirically validated. We encourage future research to answer questions about its psychometric properties and specifically recommend examining its treatment utility to better understand the extent to which novel interview questions directly contribute to positive intervention gains (Hayes et al., 1987; Rajaraman et al., 2022b; Shriver et al., 2001). That said, the interview questions solicit common information about the topographies of the behaviors of concern, antecedent and consequent events surrounding the behaviors, family routines, strengths, preferred items, and input from stakeholders on important goals for the learner; therefore, an empirical demonstration of the ability for these questions to engender answers may not be urgent at this time. In addition, as we mentioned earlier, strict adherence to a structured set of questions is not particularly necessary. However, the sample interview allows for ease of replication and training, whereas strict documentation of the open-ended process and modifications would be necessary during a more fluid interview process.

The sample interview is divided into five sections that encompass all our above recommendations, thereby expanding upon Hanley's (2012) interview template. The purpose of the first section, *introduction to learner and basic information*, is to gather demographic information about the learner and identify individuals to interview. This information is designed to be collected prior to the interview, which gives the clinician the opportunity to review the demographic information prior to the interview and invite the appropriate individuals (in conjunction with a discussion with the legal guardian). This allows the clinician to determine if translation and interpretation are necessary and provides an opportunity for the clinician to use a posture of cultural humility during the interview. The purpose of the second section, *get to know your learner*, is to help the clinician build rapport with their learner and caregivers and identify preferences, strengths, and idiosyncratic variables that impact the learner's behavior—including notably distressing events or interactions. The purpose of the third section, *defining challenging behavior*, is to identify and define all possible

dangerous and non-dangerous topographies that are related to the behavior of concern. The purpose of the fourth section, *establishing the contingency*, is to identify all the suspected establishing operations and antecedent stimuli that appear to evoke the behavior of concern and consequences that abate the behavior. The purpose of the fifth and final section, *identifying replacement behavior*, is to identify contextually appropriate behaviors to target during a skill-based intervention that aligns with learner and caregiver goals and values. This section allows the clinician to solicit specific information from the caregiver and learner regarding important skills and goals for them. The questions were designed to gather information regarding the behavior of concern in a more culturally responsive and trauma-informed manner using the actionable steps described in this tutorial. Some questions solicit similar information, and we included related questions to serve as follow-up prompts in case the clinician does not think they have adequate information regarding the behavior and context. Clinicians should *not* aim to ask every question but to ask enough questions so they feel confident that they can design a functional analysis.

Conclusion

We provided a tutorial on how clinicians can conduct an interview in a more culturally responsive and trauma-informed manner. Clinicians can use the information in this tutorial to revise their existing interviews or use the sample provided. However, if clinicians modify their own interviews, it is important to document their changes during the interview process. The recommendations within the tutorial and the sample provided were developed to be used to assist with gathering information to design *any* functional analysis, regardless of the format. This tutorial is not intended to suggest that this is the only way one can interview in a more culturally responsive and trauma-informed manner. Instead, this tutorial offers ways clinicians can be more culturally responsive and trauma-informed and is intended for those who value providing culturally responsive and trauma-informed services to their learners.

Author Contribution All authors contributed equally to this project. All authors assisted equally in preparing, writing, and editing this manuscript.

Funding No funding was received to assist with the preparation of this manuscript.

Data Availability There is no data included in this paper. The sample interview is freely available at (https://osf.io/dpk2e/?view_only=bea627d9a70f490b872f64c464703e9e).

Declarations

Conflict of Interest The first and second authors have received fees related to consulting on behavioral services throughout their professional careers. The third author declares that he currently works for FTF Behavioral Consulting, which provides training, consultation, and credentialing in empirically validated assessments and treatments for severe problem behavior; however, this tutorial was written prior to and does not reflect work done at FTF.

References

- Austin, J. L., Rajaraman, A., & Beaulieu, L. (2024). Facilitating greater understanding of trauma-informed care in applied behavior analysis: An introduction to the special issue. *Behavior Analysis in Practice*. Advance online publication. <https://doi.org/10.1007/s40617-024-00988-0>
- Beaulieu, L., & Jimenez-Gomez, C. (2022). Cultural responsiveness in applied behavior analysis: Self-assessment. *Journal of Applied Behavior Analysis*, 55(2), 337–356. <https://doi.org/10.1002/jaba.907>
- Beavers, G. A., & Iwata, B. A. (2011). Prevalence of multiply controlled problem behavior. *Journal of Applied Behavior Analysis*, 44(3), 593–597. <https://doi.org/10.1901/jaba.2011.44-593>
- Berg, K. L., Shiu, C. S., Feinstein, R. T., Acharya, K., McDrano, J., & Msall, M. E. (2019). Children with developmental disabilities experience higher levels of adversity. *Research in Developmental Disabilities*, 89, 105–113. <https://doi.org/10.1016/j.ridd.2019.03.011>
- Christopher, P. J., & Dougher, M. J. (2009). A behavior-analytic account of motivational interviewing. *The Behavior Analyst*, 32, 149–161. <https://doi.org/10.1007/BF03392180>
- Coffey, A. L., Shawler, L. A., Jessel, J., Nye, M. L., Bain, T. A., & Dorsey, M. F. (2020). Interview-informed synthesized contingency analysis (IISCA): Novel interpretations and future directions. *Behavior Analysis in Practice*, 13, 217–225. <https://doi.org/10.1007/s40617-019-00348-3>
- Comas-Díaz, L., Hall, G. N., & Neville, H. A. (2019). Racial trauma: Theory, research, and healing: Introduction to the special issue. *American Psychologist*, 74(1), 1–5. <https://doi.org/10.1037/amp0000442>
- Delgado, D., Meindl, J. N., Al-Nasser, T., & Ivy, J. W. (2024). When cultural awareness reveals conflicting cultural values: A pragmatic approach. *Behavior Analysis in Practice*, 17(1), 13–25. <https://doi.org/10.1007/s40617-023-00826-9>
- Drifke, M. A., Tiger, J. H., & Lillie, M. A. (2020). DRA contingencies promote improved tolerance to delayed reinforcement during FCT compared to DRO and fixed-time schedules. *Journal of Applied Behavior Analysis*, 53(3), 1579–1592. <https://doi.org/10.1002/jaba.704>
- Fong, E. H. (2020). Examining Cross-Cultural Supervision in Applied Behavior Analysis. In B. M. Conners & S. T. Capell (Eds.), *Multiculturalism and Diversity Issues in Applied Behavior Analysis*. Routledge. <https://doi.org/10.4324/9780429263873-15>
- Fong, E. H., Catagnus, R. M., Brodhead, M. T., Quigley, S., & Field, S. (2016). Developing the cultural awareness skills of behavior analysts. *Behavior Analysis in Practice*, 9, 84–94. <https://doi.org/10.1007/s40617-016-0111-6>
- Fruchtman, T., Jessel, J., Pan, B., McLeod, S., & Rajaraman, A. (2025). The performance-based IISCA can inform effective and socially meaningful skill-based treatment abstract. *Behavior Analysis in Practice*. <https://doi.org/10.1007/s40617-024-01036-7>
- Fryling, M. J., & Baires, N. A. (2016). The practical importance of the distinction between open and closed-ended indirect assessments. *Behavior Analysis in Practice*, 9, 146–151. <https://doi.org/10.1007/s40617-016-0115-2>
- Gadaire, D. M., Kelley, M. E., & LaRue, R. H. (2021). Indirect behavioral assessments. In W. W. Fisher, C. C. Piazza, H. S. Roane (Eds.), *Handbook of Applied Behavior Analysis* (pp. 193–201). Guilford.
- Gatzunis, K. S., Weiss, M. J., Ala'i-Rosales, S., Fahmie, T. A., & Syed, N. Y. (2023). Using behavioral skills training to teach functional assessment interviewing, cultural responsiveness, and empathic and compassionate care to students of applied behavior analysis. *Behavior Analysis in Practice*. Advance online publication. <https://doi.org/10.1007/s40617-023-00794-0>
- Ghaemmaghami, M., Hanley, G. P., & Jessel, J. (2016a). Contingencies promote delay tolerance. *Journal of Applied Behavior Analysis*, 49(3), 548–575. <https://doi.org/10.1002/jaba.333>
- Ghaemmaghami, M., Hanley, G. P., Jin, S. C., & Vanselow, N. R. (2016b). Affirming control by multiple reinforcers via progressive treatment analysis. *Behavioral Interventions*, 31, 70–86. <https://doi.org/10.1002/bin.1425>
- Georgetown University (n.d.). *Georgetown University National Center for Cultural Competence*. <https://nccc.georgetown.edu/>. Accessed 15 May 2024.
- Gossou, K. M., Lanovaz, M. J., & Giannakakos-Ferman, A. R. (2022). Concurrent validity of Open-Ended Functional Assessment Interviews with functional analysis. *Behavioral Interventions*, 37(2), 259–270. <https://doi.org/10.1002/bin.1857>
- Hanley, G. P. (2012). Functional assessment of problem behavior: Dispelling myths, overcoming implementation obstacles, and developing new lore. *Behavior Analysis in Practice*, 5, 54–72. <https://doi.org/10.1007/BF03391818>
- Hanley, G. P., Jin, C. S., Vanselow, N. R., & Hanratty, L. A. (2014). Producing meaningful improvements in problem behavior of children with autism via synthesized analyses and treatments. *Journal of Applied Behavior Analysis*, 47(1), 16–36. <https://doi.org/10.1002/jaba.106>
- Hayes, S. C., Nelson, R. O., & Jarrett, R. B. (1987). The treatment utility of assessment: A functional approach to evaluating assessment quality. *American Psychologist*, 42(11), 963–974. <https://doi.org/10.1037/0003-066X.42.11.963>
- Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational interviewing. *Annual Review of Clinical Psychology*, 1, 91–111. <https://doi.org/10.1146/annurev.clinpsy.1.102803.143833>
- Helms, J. E. (2020). A race is a nice thing to have: A guide to being a white person or understanding the white persons in your life (3rd ed.). Cognella.
- Hibbard, R. A., & Desch, L. W. (2007). Maltreatment of children with disabilities. *Pediatrics*, 119(5), 1018–1025. <https://doi.org/10.1002/jaba.498>
- Hills, L. E., Falcomata, T. S., Nesselrode, R., & Erhard, P. (2023). Assessment and treatment of problem behavior with multiple functions for individuals with disabilities: A systematic review of the literature and discussion. *Behavior Analysis: Research and Practice*, 23(1), 69–90. <https://doi.org/10.1037/bar0000259>
- Hughes, J. L., Camden, A. A., Yangchen, T., Smith, G. P., Rodríguez, M. M. D., Rouse, S. V., McDonald, P. C., & Lopez, S. (2022). Guidance for researchers when using inclusive demographic questions for surveys: Improved and updated questions. *Psi Chi Journal of Psychological Research*, 27(4), 232–255. <https://doi.org/10.1007/s40617-023-00781-5>
- Iovino, L., Canniello, F., Simeoli, R., Gallucci, M., Benincasa, R., D'Elia, D., ... & Cammilleri, A. P. (2022). A new adaptation of the interview-informed synthesized contingency analyses (IISCA): The performance-based IISCA. *European Journal of Behavior Analysis*, 23(2), 144–155. <https://doi.org/10.1080/15021149.2022.2093596>

- Iwata, B. A., & Dozier, C. L. (2008). Clinical application of functional analysis methodology. *Behavior Analysis in Practice*, 1(1), 3–9. <https://doi.org/10.1007/BF03391714>
- Iwata, B. A., Wong, S. E., Riordan, M. M., Dorsey, M. F., & Lau, M. M. (1982). Assessment and training of clinical interviewing skills: Analogue analysis and field replication. *Journal of Applied Behavior Analysis*, 15(2), 191–203. <https://doi.org/10.1901/jaba.1982.15-191>
- Jessel, J., Fruchtmann, T., Raghunauth-Zaman, N., Leyman, A., Lemos, F. M., Val, H. C., Howard, M., & Hanley, G. P. (2023). A two-step validation of the performance-based IISCA: A trauma-informed functional analysis model. *Behavior Analysis in Practice*. Advance online publication. <https://doi.org/10.1007/s40617-023-00792-2>
- Jessel, J., Hanley, G. P., & Ghaemmaghami, M. (2020). On the standardization of the functional analysis. *Behavior Analysis in Practice*, 13, 205–216. <https://doi.org/10.1007/s40617-019-00366-1>
- Jessel, J., Rosenthal, D., Hanley, G. P., Rymill, L., Boucher, M. B., Howard, M., Perrin, J., & Lemos, F. M. (2022). On the occurrence of dangerous problem behavior during functional analysis: An evaluation of 30 applications. *Behavior Modification*, 46(4), 834–862. <https://doi.org/10.1177/01454455211010698>
- Jimenez-Gomez, C., & Beaulieu, L. (2022). Cultural responsiveness in applied behavior analysis: Research and practice. *Journal of Applied Behavior Analysis*, 55(3), 650–673. <https://doi.org/10.1002/jaba.920>
- Kerns, C. M., Newschaffer, C. J., & Berkowitz, S. J. (2015). Traumatic childhood events and autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 45(11), 3475–3486. <https://doi.org/10.1007/s10803-015-2392-y>
- Lalli, J. S., Mace, F. C., Wohn, T., & Livezey, K. (1995). Identification and modification of a response-class hierarchy. *Journal of Applied Behavior Analysis*, 28(4), 551–559.
- Lambert, J. M., & Houchins-Juárez, N. J. (2020). Do functional analyses probe learning histories, or create them? An exploratory investigation. *American Journal on Intellectual and Developmental Disabilities*, 125(3), 200–216. <https://doi.org/10.1352/1944-7558-125.3.200>
- Langthorne, P., & McGill, P. (2009). A tutorial on the concept of the motivating operation and its importance to application. *Behavior Analysis in Practice*, 2, 22–31. <https://doi.org/10.1007/BF03391745>
- Leland, W., & Stockwell, A. (2019). A self-assessment tool for cultivating affirming practices with transgender and gender-nonconforming (TGNC) clients, supervisees, students, and colleagues. *Behavior Analysis in Practice*, 12(4), 816–825. <https://doi.org/10.1007/s40617-019-00375-0>
- Lundy, E., Healy, O., Ramey, D., Carolan, T., Dempsey, R., & Holloway, J. (2022). Evaluating the utility of interview-informed synthesized contingency analyses in informing the treatment of problem behavior among children with autism spectrum disorder. *European Journal of Behavior Analysis*, 23(1), 109–133. <https://doi.org/10.1080/15021149.2021.1981752>
- Magee, S. K., & Ellis, J. (2000). Extinction effects during the assessment of multiple problem behaviors. *Journal of Applied Behavior Analysis*, 33(3), 313–316. <https://doi.org/10.1901/jaba.2000.33-313>
- Maguire-Jack, K., Font, S., Dillard, R., Dvalishvili, D., & Barnhart, S. (2021). Neighborhood poverty and adverse childhood experiences over the first 15 years of life. *International Journal on Child Maltreatment: Research, Policy and Practice*, 4, 93–114. <https://doi.org/10.1007/s42448-021-00072-y>
- Melanson, I. J., & Fahmie, T. A. (2023). Functional analysis of problem behavior: A 40-year review. *Journal of Applied Behavior Analysis*, 56(2), 262–281. <https://doi.org/10.1002/jaba.983>
- Michael, J., Palmer, D. C., & Sundberg, M. L. (2011). The multiple control of verbal behavior. *The Analysis of Verbal Behavior*, 27, 3–22. <https://doi.org/10.1007/BF03393089>
- Muharib, R., Dowdy, A., Rajaraman, A., & Jessel, J. (2022). Contingency-based delay to reinforcement following functional communication training for autistic individuals: A multilevel meta-analysis. *Autism*, 26(4), 761–781. <https://doi.org/10.1177/13623613211065540>
- Nelson, C. A., Bhutta, Z. A., Harris, N. B., Danese, A., & Samara, M. (2020). Adversity in childhood is linked to mental and physical health throughout life. *BMJ*, 371, m3048. <https://doi.org/10.1136/bmj.m3048>
- Oh, D. L., Jerman, P., Silvério Marques, S., Koita, K., Purewal Boparai, S. K., Burke Harris, N., & Bucci, M. (2018). Systematic review of pediatric health outcomes associated with childhood adversity. *BMC Pediatrics*, 18(1), 1–19. <https://doi.org/10.1186/s12887-018-1037-7>
- Oliver, A. C., Pratt, L. A., & Normand, M. P. (2015). A survey of functional behavior assessment methods used by behavior analysts in practice. *Journal of Applied Behavior Analysis*, 48(4), 817–829. <https://doi.org/10.1002/jaba.256>
- Plattner, C., & Anderson, C. (2024). Creating a therapeutic alliance with caregivers: An introduction to motivational interviewing. *Behavior Analysis in Practice*. Advance online publication. <https://doi.org/10.1007/s40617-024-00948-8>
- Pollack, M. S., Lloyd, B. P., Doyle, L. E., Santini, M. A., & Crowell, G. E. (2024). Are function-based interventions for students with emotional/behavioral disorders trauma informed? *Behavior Analysis in Practice*. Advance online publication. <https://doi.org/10.1007/s40617-023-00893-y>
- Quiroz, L. S., Boyd, J. A., Pollard, J. S., & Hall, S. S. (2025). Evaluating practical functional assessment and skill-based treatment for severe challenging behavior via telehealth with novice dual parent implementers: A pilot investigation. *Clinical Case Studies*, 24(1), 59–77. <https://doi.org/10.1177/15346501241297363>
- Raghunauth-Zaman, N., Jessel, J., & Chou, V. (2024). Parent-guided communication training with neurotypical toddlers of three Latin American families. *Behavior Analysis in Practice*. Advance online publication. <https://doi.org/10.1007/s40617-024-00983-5>
- Rajaraman, A., Austin, J. L., Gover, H. C., Camilleri, A. P., Donnelly, D. R., & Hanley, G. P. (2022a). Toward trauma-informed applications of behavior analysis. *Journal of Applied Behavior Analysis*, 55(1), 40–61. <https://doi.org/10.1002/jaba.881>
- Rajaraman, A., Hanley, G. P., Gover, H. C., Ruppel, K. W., & Landa, R. K. (2022b). On the reliability and treatment utility of the practical functional assessment process. *Behavior Analysis in Practice*, 15(3), 815–837. <https://doi.org/10.1007/s40617-021-00665-6>
- Rajaraman, A., & Jessel, J. (2023). Self-Injurious Behavior. In J. L. Matson (Ed), *Handbook of Applied Behavior Analysis: Integrating Research into Practice* (pp. 1181–1197). Springer International Publishing. https://doi.org/10.1007/978-3-031-19964-6_61
- Reilly, M. E., Sullivan, E. K., Kaur, J., Melanson, I. J., & Fahmie, T. A. (2025). Incorporating trauma-assumed practices into the assessment and treatment of challenging behavior evoked by corrective feedback. Advance online publication. <https://doi.org/10.1177/15346501251317968>
- Rohrer, J. L., Marshall, K. B., Suzio, C., & Weiss, M. J. (2021). Soft skills: The case for compassionate approaches or how behavior analysis keeps finding its heart. *Behavior Analysis in Practice*, 14, 1135–1143. <https://doi.org/10.1007/s40617-021-00563-x>
- Roscoe, E. M., Phillips, K. M., Kelly, M. A., Farber, R., & Dube, W. V. (2015). A statewide survey assessing practitioners' use and perceived utility of functional assessment. *Journal of Applied Behavior Analysis*, 48(4), 830–844. <https://doi.org/10.1002/jaba.259>
- Shriver, M. D., Anderson, C. M., & Proctor, B. (2001). Evaluating the validity of functional behavior assessment. *School Psychology*

- Review, 30(2), 180–192. <https://doi.org/10.1080/02796015.2001.12086108>
- Sivaraman, M., & Fahmie, T. A. (2020a). A systematic review of cultural adaptations in the global application of ABA-based telehealth services. *Journal of Applied Behavior Analysis*, 53(4), 1838–1855. <https://doi.org/10.1002/jaba.763>
- Sivaraman, M., & Fahmie, T. A. (2020b). Evaluating the efficacy and social validity of a culturally adapted training program for parents and service providers in India. *Behavior Analysis in Practice*, 13(4), 849–861. <https://doi.org/10.1007/s40617-020-00489-w>
- Slaton, J. D., & Hanley, G. P. (2018). Nature and scope of synthesis in functional analysis and treatment of problem behavior. *Journal of Applied Behavior Analysis*, 51(4), 943–973. <https://doi.org/10.1002/jaba.498>
- Suarez, V. D., Najdowski, A. C., Persicke, A., & Tarbox, J. (2024). *A Laboratory Evaluation of the Effects of Empathy Training on Racial Bias*. Advance online publication. <https://doi.org/10.1007/s40732-024-00606-z>
- Substance Abuse and Mental Health Services Administration (SAMHSA; 2014). *Trauma-informed care in behavioral health services*. Treatment Improvement Protocol (TIP) Series 57. HHS Publication No. (SMA) 13–4801. Substance Abuse and Mental Health Services Administration.
- Sugai, G., & Horner, R. H. (2009). Responsiveness-to-intervention and school-wide positive behavior supports: Integration of multi-tiered system approaches. *Exceptionality*, 17(4), 223–237. <https://doi.org/10.1080/09362830903235375>
- Tagg, R. (2020). ADDRESSING cultural complexities. In B. M. Connors & S. T. Capell. *Multiculturalism and diversity in applied behavior analysis* (pp. 5–18). Routledge. <https://doi.org/10.4324/9780429263873>
- Taylor, B. A., LeBlanc, L. A., & Nosik, M. R. (2019). Compassionate care in behavior analytic treatment: Can outcomes be enhanced by attending to relationships with caregivers? *Behavior Analysis in Practice*, 12(3), 654–666. <https://doi.org/10.1007/s40617-018-00289-3>
- Tervalon, M., & Murray-Garcia, J. (1998). Cultural humility versus cultural competence: A critical distinction in defining physician training outcomes in multicultural education. *Journal of Health Care for the Poor and Underserved*, 9(2), 117–125. <https://doi.org/10.1353/hpu.2010.0233>
- Tsami, L., Lerman, D., & Toper-Korkmaz, O. (2019). Effectiveness and acceptability of parent training via telehealth among families around the world. *Journal of Applied Behavior Analysis*, 52(4), 1113–1129. <https://doi.org/10.1002/jaba.645>
- United States Census Bureau. (n.d.). 2020 census results. *U. S. Department of Commerce*. Retrieved on May, 15, 2024, from <https://data.census.gov/>
- Warner, C. A., Hanley, G. P., Landa, R. K., Ruppel, K. W., Rajaraman, A., Ghaemmaghami, M., Slaton, J. D., & Gover, H. C. (2020). Toward accurate inferences of response class membership. *Journal of Applied Behavior Analysis*, 53(1), 331–354. <https://doi.org/10.1002/jaba.598>
- Wright, P. I. (2019). Cultural humility in the practice of applied behavior analysis. *Behavior Analysis in Practice*, 12(4), 805–809. <https://doi.org/10.1007/s40617-019-00343-8>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.