

Case Study: Autism Spectrum Disorder (ASD)

Part 1: Getting to Know Ayana

Ayana and Her Family

Ayana (24 months) lives in a metropolitan neighborhood with her mother Tasha (29), father Marcus (31), older brother Malik (4), and younger brother Jamal (6 months). The Johnson family identifies as African American and has strong ties to their local church and extended family. Tasha works part-time as a medical assistant at a dentist office, and Marcus is employed as a delivery driver for FedEx. The family faces financial challenges and maintains a supportive and nurturing home environment.

Malik attends a local preschool within walking distance of their townhouse and has shown typical developmental milestones. Ayana, however, has exhibited behaviors that concern her parents, including limited eye contact, delayed speech, and repetitive hand movements. Jamal is still an infant and developing typically. Ayana enjoys gathering her older brother's small figurines and hiding them under the couch. She has two or three board books that she looks at before her nap and bedtime. Malik and Ayana both can be found jumping on the couch or their parent's bed.

Medical and Developmental History

Ayana was born full-term with no significant medical complications. However, her parents began noticing developmental differences around 18 months that they hadn't seen with their older son Malik, including limited eye contact, repetitive hand movements, and delayed speech. During a routine pediatric visit, the parents voiced their concerns, and Ayana was referred for developmental screening. Tasha and Marcus expressed concern about Ayana's lack of social engagement, preference for solitary play, and inconsistent responses to verbal cues. They were unsure how to support her development and felt overwhelmed by the complexity of navigating early intervention services.

Discussion Prompts:

- What additional questions might you have as you prepare to learn more about Ayana and her family context?
- Considering cultural context, how can early intervention teams ensure that evidence-based practices (EBPs) are implemented in a culturally responsive manner?
- What strategies from the AFIRM modules or other resources could be adapted to better align with Ayana's family values and routines?

- How might cultural humility and family-centered practices influence the success of interventions?

Part 2: Screening and Assessment

During a routine well-child visit, Ayana's pediatrician initiated a developmental screening using the Modified Checklist for Autism in Toddlers, Revised with Follow-Up (M-CHAT-R/F). This tool, designed for children between 16 and 30 months, helps identify early signs of Autism Spectrum Disorder (ASD) through a structured, two-stage process.

In the first stage, Ayana's parents, Tasha and Marcus, completed a 20-item questionnaire that asked about Ayana's behaviors such as her ability to make eye contact, respond to her name, engage in pretend play, and show interest in peers. Their responses raised several concerns, including Ayana's limited eye contact, her tendency not to respond when called, a preference for playing alone, and repetitive behaviors like hiding her brother's toys under the couch.

Given these red flags, the pediatrician proceeded with the second stage: a follow-up interview designed to clarify the initial responses and reduce the likelihood of false positives. The results of this interview confirmed the initial concerns, prompting the pediatrician to refer Ayana to early intervention services and a developmental specialist for a comprehensive evaluation.

Following Ayana's initial screening with the M-CHAT-R/F, she was referred to a developmental specialist for a comprehensive evaluation. This next step involved applying the DSM-5 diagnostic criteria for Autism Spectrum Disorder (ASD), which outlines two core domains: persistent deficits in social communication and interaction, and restricted, repetitive patterns of behavior.

During the evaluation, Ayana was observed in both clinical and natural environments to ensure a holistic understanding of her development. In the clinic, professionals noted her limited eye contact, delayed speech, and minimal engagement with unfamiliar adults. She showed little interest in toys that encouraged pretend play and often focused on specific objects in repetitive ways.

To gain deeper insight into Ayana's behavior in her everyday context, the team conducted a home observation. In her familiar environment, Ayana was seen gathering her older brother Malik's small figurines and hiding them under the couch which is a behavior she repeated several times with apparent enjoyment. She preferred playing alone, often sitting quietly with her board books before nap time, and showed little interest in interacting with her siblings unless prompted. When her parents called her name, Ayana rarely responded, and her gestures were limited to reaching or pointing without accompanying vocalizations.

The evaluator also noted Ayana's sensory-seeking behaviors, such as jumping on the couch and bed alongside Malik. While these moments offered opportunities for joint play, Ayana often disengaged quickly and returned to solitary activities. Her interactions with her parents were brief and lacked the typical back-and-forth exchanges expected at her age.

These observations, both in the clinic and at home, aligned with the DSM-5 criteria. Ayana demonstrated deficits in social-emotional reciprocity, nonverbal communication, and relationship development. Additionally, her repetitive behaviors, insistence on routines, and fixated interests supported a diagnosis of Autism Spectrum Disorder. The evaluation team used this information to guide the development of a personalized intervention plan, ensuring that strategies would be embedded in Ayana's daily routines and responsive to her family's strengths and needs.

Discussion Prompts:

- What strategies can providers use to ensure families understand the questions and feel comfortable sharing concerns?
- How can interdisciplinary teams support families who may be unfamiliar with developmental milestones or hesitant to disclose concerns?
- What challenges might arise when distinguishing between typical toddler behaviors and early signs of ASD?
- What are the benefits and limitations of observing children in their home or community settings?

Part 3: IFSP Planning and Intervention

After Ayana's diagnosis of Autism Spectrum Disorder (ASD) was confirmed through DSM-5 criteria and observational assessments, her family was invited to participate in an Individualized Family Service Plan (IFSP) meeting. The meeting was held at a local early intervention center and included a multidisciplinary team: a developmental pediatrician, psychologist, speech-language pathologist (SLP), occupational therapist (OT), early intervention specialist, and service coordinator. Tasha and Marcus, Ayana's parents, were actively involved, and Malik, Ayana's older brother, was considered in planning due to his role in peer modeling.

The team reviewed Ayana's evaluation results, which highlighted persistent deficits in social communication and interaction, as well as restricted, repetitive behaviors. Observations in both clinical and home settings revealed Ayana's limited eye contact, delayed speech, repetitive hand movements, and solitary play. The team acknowledged the family's strengths, especially their

commitment to Ayana's development and their strong sibling relationships and discussed the challenges they faced by accessing culturally responsive services in their urban community.

Collaborative Planning and Goal Setting

The IFSP meeting focused on developing a family-centered intervention plan that would be embedded in Ayana's daily routines and tailored to her interests and developmental needs. The team worked with Tasha and Marcus to identify priorities, including enhancing Ayana's communication, social engagement, and play skills.

Intervention Plan Components

1. Parent-Implemented Interventions (PII)

Tasha and Marcus were coached to use naturalistic strategies during everyday routines. Drawing from the AFIRM module on Parent-Implemented Intervention, the team modeled techniques such as following Ayana's lead, using contingent language, and reinforcing communication attempts. These strategies were embedded into mealtime, book reading, and playtime to promote engagement and responsiveness.

2. Discrete Trial Training (DTT)

Structured teaching sessions were introduced to target specific skills like requesting and labeling. Using the AFIRM Discrete Trial Training module, the team developed short, focused trials with clear antecedents, prompts, and reinforcement. For example, Ayana was taught to request her favorite toys using picture cards, with positive reinforcement provided immediately after successful attempts.

3. Visual Supports and PECS

Ayana was introduced to the Picture Exchange Communication System (PECS) to support her expressive communication. The team used visual schedules and choice boards to help Ayana transition between activities and express preferences. The Achievement Centers for Children PECS video was shared with the family to demonstrate practical implementation at home. These tools helped reduce frustration and increase Ayana's independence.

4. Play-Based Therapy and Integrated Play Groups

Recognizing Ayana's interest in solitary play and her bond with Malik, the team incorporated Integrated Play Groups to encourage peer interaction. Malik was included as a peer model, helping Ayana learn through imitation and shared play. The team used strategies from the AFIRM Modeling module to demonstrate desired behaviors and support Ayana's acquisition of social skills.

5. Time Delay and Prompting

To support Ayana’s communication development, the team implemented Time Delay strategies from the AFIRM module. By pausing before providing prompts, Ayana was given opportunities to initiate communication independently. This was especially effective during snack time and book reading, where Ayana began to vocalize or use picture cards to request “more” or choose a preferred activity.

6. Social Narratives and Visual Supports

The team introduced Social Narratives from the Vanderbilt Center to help Ayana understand routines and social expectations. Simple stories with visuals were used to prepare her for transitions, such as going to the park or visiting the dentist. These narratives helped reduce anxiety and improve her participation in new experiences.

7. Behavioral Supports and Functional Assessment

To address Ayana’s repetitive behaviors and occasional frustration during transitions, the team used tools from Wayne RESA’s PBIS Tier Three Resources, including the Antecedent-Behavior-Consequence (ABC) log and Functional Behavioral Assessment (FBA). These tools helped identify triggers and develop proactive strategies to support Ayana’s regulation and engagement.

Discussion Prompts:

- How can early intervention teams ensure that IFSP planning is truly family-centered, especially for families from diverse cultural and socioeconomic backgrounds?
- What strategies can be used to build trust and empower families to actively participate in decision-making?
- How should teams determine which EBPs are most appropriate for a child’s developmental profile and family context?
- How can tools like AFIRM: Time Delay, AFIRM: Modeling, and ABC logs be used to support skill generalization and monitor progress in these settings?