



SENSORY PROCESSING AND FETAL ALCOHOL SPECTRUM DISORDER (FASD)

A COMMON CHALLENGE. AN UNDER-RECOGNIZED PART OF FASD.

Prenatal alcohol exposure (PAE) can affect how the brain and body process sensory information. Many people with FASD experience sensory processing differences that impact learning, behavior, regulation, and daily life—yet this area remains under-studied and often overlooked.

“

I have done a lot of exploring about how my sensory world impacts me and slowly every day I am finding more answers all the time!”

– Adolescent with FASD

HIGHLY PREVALENT



In a study of more than 300 children with prenatal alcohol exposure,

73% had clinically significant sensory processing differences.

This shows how common and meaningful these differences can be.

UNDER-STUDIED IN FASD



Sensory differences are commonly recognized in conditions like autism and ADHD, but in FASD they have historically received much less research attention.

We still have little research on how these differences change across the lifespan and very little on FASD-specific interventions.

PART OF THE IMPACT OF PAE



Prenatal alcohol exposure can directly affect how the brain receives, organizes, and responds to sensory information.

Higher levels of exposure are associated with greater sensory processing impacts.

SENSORY PROCESSING DIFFERENCES CAN IMPACT MANY AREAS OF FUNCTIONING



LEARNING & ACADEMICS

Can affect attention, working memory, learning, and participation.



ATTENTION & ADHD SYMPTOMS

Linked to higher levels of inattention, hyperactivity, and impulsivity.



SLEEP

Sensory differences are associated with more sleep difficulties and poor sleep quality.



ADAPTIVE FUNCTIONING

Linked to challenges in daily living skills and greater need for support.



BEHAVIOR & REGULATION

Associated with externalizing behaviors and difficulty regulating emotions.



SOCIAL PARTICIPATION

Can affect social interaction, relationships, and community participation.

IT AFFECTS FAMILIES, TOO



SP differences in children with FASD have also been linked to high levels of parenting stress

In fact, caregivers report that SP differences among young children with PAE are one of their most significant concerns.

WHAT IT CAN LOOK LIKE

When sensory systems are overwhelmed or under-responsive, it may show up as:



- ✓ Distractibility
- ✓ Hyperactivity
- ✓ Withdrawal
- ✓ Difficulty working
- ✓ Emotional dysregulation
- ✓ Social difficulties
- ✓ Overreacting or seeming “difficult”



Before interpreting the behavior, consider the sensory environment.

THE ENVIRONMENT MATTERS

Sensory experiences are not always consistent. What a person can tolerate one day may be overwhelming another day—especially when anxiety is high or the environment is demanding.



Loud spaces



Crowded, busy spaces



Someone talking too fast or too loudly



Too many people talking at once



A calmer, quieter, more predictable setting can reduce overwhelm and help the person access learning and daily activities.



Needs may be different from day to day and in different settings.

ASSESSMENT OF SP DIFFERENCES



Sensory processing is not always included in FASD assessment. And when assessed, it is often superficial.

Identifying SP differences can help explain the roots of challenges and guide effective intervention and support.

ASK ABOUT IT



Researchers and families emphasize that we should explicitly ask individuals with FASD and their caregivers about their sensory experiences and concerns.

This leads to earlier identification, more accurate understanding, and support that actually fits.

THERE IS NO ONE-SIZE-FITS-ALL



A one-size-fits-all approach is unlikely to meet the sensory needs of everyone.

Supports should be individualized and consider both the person's unique sensory profile and the environment/context.

WE NEED MORE RESEARCH



Across the lifespan (children, adolescents, adults)



On environmental influences and sensory experiences



On brain mechanisms and sensory processing



On FASD-specific interventions and what works



On assessment tools that are comprehensive and meaningful

More research will help us better understand sensory processing differences in FASD and how to support individuals and families throughout life.