

CASE STUDY

Supporting successful transition for Noah

Noah has autism spectrum disorder (autism). As he prepares to enter first grade, his family, care providers, and teachers collaborate to ensure a smooth transition into public school. The Sensory Profile™ 2 is ideal for exploring any challenges and barriers to his participation. It also helps his family and professionals identify the best course of action for his success in first grade.



BACKGROUND

Through his community, Noah has received ongoing support from early intervention and early childhood education programs. As a result, he and his family have established successful routines for use within the family and their small neighborhood preschool. The family requested a meeting with a team of current providers and public school personnel to plan the best way to support Noah's transition into his public school's first grade class.

Many studies about the original [Sensory Profile](#) show that people with autism respond to sensory experiences differently than their peers. Because this is a well-known and accepted part of the autism profile, the school team wants as much information as possible about Noah's sensory and behavioral patterns.

They request data about successful outcomes at preschool and at home, as well as insights from Noah's care providers. Although Noah's parents had previously completed the Toddler Sensory Profile 2, the occupational therapist on the team asked them to complete the Child Sensory Profile 2, since it has many more items that can reflect the details of Noah's sensory patterns. The preschool teachers also provided findings from the School Companion Sensory Profile 2.

Additionally, Noah's parents offered recorded footage of him at home interacting with his siblings, so school personnel could get to know Noah in this setting. The preschool provided a copy of his visual schedule and social story books they had used to address challenging situations.

The Normal Curve and Sensory Profile 2 Classification System

Scores one standard deviation or more from the mean are expressed as More Than Others or Less Than Others, respectively. Scores two standard deviations or more from the mean are expressed as Much More Than Others or Much Less Than Others, respectively.

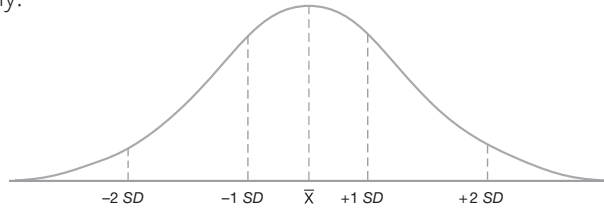


FIGURE 1:
Noah's School Companion
Sensory Profile 2 Scores

		Raw Score Total	Percentile Range ^a	◀ Less Than Others		Just Like the Majority of Others	More Than Others ▶	
				Much Less Than Others	Less Than Others		More Than Others	Much More Than Others
Quadrants	Seeking/Seeker	41 /95	9-84	0-----6	7-----19	20--X--47	48-----60	61-----95
	Avoiding/Avoider	73 /100	97-99	0-----7	8-----20	21-----46	47-----59	60--X--100
	Sensitivity/Sensor	52 /95	87-96	0-----6	7-----17	18-----42	43--X--53	54-----95
	Registration/Bystander	48 /110	87-96	0-----6	7-----18	19-----43	44--X--55	56-----110
Sensory Sections	Auditory	34 /40	97-99	0-----2	3-----9	10-----24	25-----31	32--X--40
	Visual	12 /30	11-82	0-----4	5-----8	9--X--17	18-----21	22-----30
	Touch	12 /55	11-87	0	1-----7	8--X--21	22-----28	29-----55
	Movement	17 /40	8-85	0-----1	2-----6	7--X--18	19-----24	25-----40
	Body Position	11 /40	10-89	0	1-----4	5--X--15	16-----19	20-----40
	Oral	26 /50	88-95	**	0-----7	8-----24	25--X--32	33-----50
Behavioral Sections	Conduct	37 /45	97-99	0-----1	2-----8	9-----22	23-----29	30--X--45
	Social Emotional	43 /70	97-99	0-----2	3-----12	13-----31	32-----41	42--X--70
	Attentional	28 /50	85-93	0	1-----8	9-----24	25--X--31	32-----50

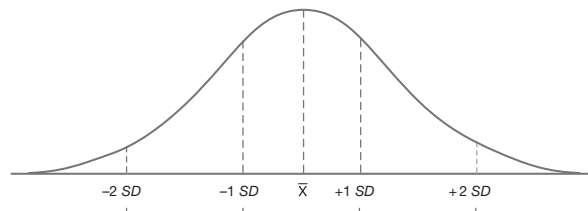


FIGURE 2:
Noah's School Companion
Sensory Profile 2 Scores

		Raw Score Total	Percentile Range ^a	◀ Less Than Others		Just Like the Majority of Others	More Than Others ▶	
				Much Less Than Others	Less Than Others		More Than Others	Much More Than Others
Quadrants	Seeking/Seeker	11 /40	6-86	0	1-----6	7--X--19	20-----25	26-----40
	Avoiding/Avoider	36 /60	97-99	0-----1	2-----7	8-----21	22-----27	28--X--60
	Sensitivity/Sensor	28 /55	87-95	0-----2	3-----9	10-----23	24--X--30	31-----55
	Registration/Bystander	29 /65	86-95	0	1-----9	10-----28	29--X--37	38-----65
Sensory and Behavioral Sections	Auditory	21 /35	96-99	0-----1	2-----5	6-----15	16-----19	20--X--35
	Visual	12 /35	4-84	**	0-----5	6--X--17	18-----23	24-----35
	Touch	10 /40	6-87	0	1-----4	5--X--15	16-----20	21-----40
	Movement	17 /40	5-86	0	1-----5	6--X--17	18-----23	24-----40
	Behavioral	31 /55	94-99	0-----1	2-----8	9-----22	23-----29	30--X--55
School Factors	School Factor 1	22 /65	5-87	0	1-----9	10--X--28	29-----37	38-----65
	School Factor 2	24 /50	6-87	0-----2	3-----9	10--X--24	25-----30	31-----50
	School Factor 3	31 /60	97-99	0-----2	3-----8	9-----23	24-----29	30--X--60
	School Factor 4	27 /45	97-99	0-----1	2-----5	6-----16	17-----21	22--X--45

^a For percentile ranges, see Appendix A in the Sensory Profile 2 User's Manual.
 ** No scores are available for this range.

SCORES

Many of Noah's scores on both the School Companion Sensory Profile 2 and the Child Sensory Profile 2 were different from the majority of others who took these profiles (see figures 1 and 2).

In particular, Noah's scores showed he had more challenges with Auditory processing at home and school. Noah also had differences in Oral Sensory processing and the Behaviors Associated with Sensory Processing. However, his Visual processing was a relative strength.

INTERPRETATION

From the information provided, the occupational therapist developed hypotheses about Noah and how he might perform at school. (The therapist had worked at both the preschool and the elementary school, therefore she had direct knowledge about the two settings.)

Because of available evidence in the literature and reports from families and individuals with autism, along with the findings of the School Companion Sensory Profile 2 and Child Sensory Profile 2 validity studies, the therapist did not find it surprising that many of Noah's scores differed from the majority of others on both the School Companion Sensory Profile 2 and the Child Sensory Profile 2. Differences in Oral Sensory processing were consistent with parent and preschool reports of adaptations to meals and snack routines. The therapist considered differences in the Behaviors Associated with Sensory Processing scores as part of the autism profile (i.e., lack of attention to social cues).

The therapist, school psychologist, and primary teacher met to watch the family's home recordings. They observed Noah engaging in parallel activities with his siblings; he seemed unaware of their playing. They also observed that Noah had very clear patterns in his play schemas and if anyone interfered with these rituals he became very upset. He hummed and

lined up small cars and trucks against the open door. If one of the other children moved a car or disrupted the order, Noah screamed, flapped his hands, and began to sway. This seemed to be the only time he was aware of his siblings.

The team invited Noah and his parents to come to school to give Noah an introductory experience with the school and continue their discussion. Noah generated sounds during this visit and mouthed objects as he roamed the classroom.

The parents explained that Noah commonly acts this way in new places. Later, Noah participated with the therapist in a play pattern in which the therapist copied what Noah did. This led Noah to stop his activity and give momentary eye contact. Noah's sensory processing patterns included Much More Than Others Avoiding scores. Dunn (1997) hypothesized that when a person is uncomfortable with new input (i.e., an Avoider), establishing rituals is one way to reduce the discomfort of new or unpredictable stimuli. Sometimes these ritualistic behaviors can be misinterpreted as Seeking. However, when the behaviors observed are rigid or ritualistic, they can indicate a need for sameness.

INTERVENTION

As this team made plans for Noah, they considered the most important issue, from a sensory processing point of view, was to honor what Noah was telling them with his behavior. The rituals he established indicated which stimuli he could manage (i.e., what is in the ritual) and what he found overwhelming (i.e., what he avoids with the ritual behavior). Insights from the preschool suggested that getting into a power struggle with Noah was not only ineffective, but very disruptive to the family and class.

The elementary school teacher spent a day at the preschool watching how everyone interacted with Noah. She noted that the

preschool team took cues from Noah and redirected him to required activities with a timer and visual schedule. A few children were recruited to copy Noah's play behaviors during free play. During structured activities, Noah listened to a recording of his own humming with earbuds (the parents had recorded this and use it when he plays at home). He stayed on task with this strategy.

The public school team decided to implement these ideas in their class routines as well. They moved Noah's desk to the perimeter of the room to reduce both sound and touch input. They let Noah roam during unstructured time and allowed him to stand when they had the morning routine. His roaming seemed to provide needed proprioceptive input, while also reducing the intensity of sounds and the opportunities for touch. The occupational therapist framed these strategies as adaptations to support his sensory processing need, so Noah could stay in class.

During the first months at school, the team expanded their ideas about how to support Noah. The librarian offered to have Noah push the book cart around the school to

deliver reading books to the classrooms. This gave Noah some needed movement and proprioceptive input within a school-appropriate task. The teacher's aide added weights to Noah's preferred toys. Noah began wearing a backpack around school; he hooked it over the back of his chair in class and would lean forward, creating pressure on the straps as he worked, allowing Noah to control his own proprioceptive input while doing seated tasks.

INTERVENTION OUTCOMES

With the intervention plan in place, Noah participated successfully in his new class. Everyone became comfortable with the routines, including the other children. Toward the end of the year, the teacher recorded Noah's classroom rituals to pass along to the next year's teachers.

The school also decided to create a Circle of Friends group with Noah to begin building social support for him. As a result, the students are able to offer information about Noah's patterns and provide ideas to their teachers when needed.

