The **Neurodivergent Scale for Interacting with Robots (NSIR)** by Sadownik (2025) provides a framework for evaluating how neurodivergent individuals connect with and feel around robots, focusing on two main factors: **Anthropomorphic Connection/Kinship** and **Social Comfort/Trust Safety**. While the Azizian et al. (2025) study does not explicitly use the NSIR, the scale's items offer a tool to measure the human-robot interaction (HRI) dynamics that the study's AI aims to predict and replicate.

1. Evaluating Multimodal LLM Consistency vs. Human Subjectivity

Azizian et al. (2025) found that multimodal Large Language Models (LLMs) like Gemini 2.5 Pro exhibit **high within-model consistency** when extracting behavioral features from home videos, whereas human raters (clinicians and crowdworkers) showed more moderate agreement.

- **NSIR Application:** The scale could be used to quantify the "Social Comfort" and "Anthropomorphic Connection" (e.g., *"The robot and I will be together forever"* or *"I feel comfortable undressing in front of my robot"*) that a child exhibits in videos.
- The study highlights that LLMs focus more on **language and behavioral markers**, while humans prioritize **social-emotional engagement**. The NSIR's focus on internal states like kinship (e.g., *"The robot is more like me than anyone else I know"*) aligns with the "social-emotional" nuances that humans currently detect better than AI.

2. Identifying Fine-Grained Social Cues

The Azizian study notes that while LLMs are improving, they still struggle with **fine-grained tasks** like detecting specific "Stereotyped Behaviors" or complex social overtures compared to specialized human annotators.

- **Kinship Items:** Items 1-3 of the NSIR (e.g., staring at the robot or believing one can share thinking without speaking) represent the very types of "atypical" or "fine-grained" social cues that the study seeks to automate.
- **Diagnostic Gap:** Because the NSIR measures a user's *perception* of the robot as a social agent, it provides a metric for the "Social Interaction" domain where Azizian et al. found complex patterns of agreement between raters.

3. Personalization and "Predictable" Agents

Research by Dubois-Sage et al. (2025), cited in the context of the Azizian study, suggests that autistic individuals may find robots easier to interact with because they are **simplified and predictable agents**.

- **NSIR Connection:** This predictability is reflected in NSIR Item 8: *"I believe that my robot is the same with me as it is with anyone"*.

- **LLM Role:** Azizian’s work explores using LLMs to replace human coders in diagnostic sessions. The NSIR provides the specific "items" that an LLM would need to "score" if it were tasked with assessing the quality of a child's interaction with a social robot, rather than just a human caregiver.

Comparison Summary

Azizian et al. (2025) Focus	**NSIR (Sadownik, 2025) Metric**
Social Interaction Features (e.g., eye contact, emotional expression)	**Social Comfort/Trust Safety** (e.g., feeling comfortable undressing/sharing thoughts)
Atypical Behavioral Markers (e.g., staring, repetitive speech)	**Anthropomorphic Connection** (e.g., "Sometimes I stare at the robot")
AI vs. Human Performance Gap (detecting nuanced social cues)	**Internal Perception Scale** (quantifying the child's subjective kinship with the AI/robot)