To apply the **Neurodivergent Scale for Interacting with Robots (NSIR)** to **Alan Leslie's Theory of Mind (ToM) framework (2001)**, you can use the scale's items to evaluate the functioning of the **Theory of Mind Mechanism (ToMM)** and the **Selection Processor (SP)** in neurodivergent populations.

Leslie's 2001 model posits that a specialized, modular system (ToMM) spontaneously generates "metarepresentations" (M-representations) of mental states, while a separate Selection Processor (SP) inhibits "salient" but incorrect information to handle complex tasks like false beliefs.

1. Evaluating the Theory of Mind Mechanism (ToMM)

The ToMM is responsible for "mind-reading" by automatically attributing intentions and beliefs to agents. The NSIR helps measure how neurodivergent users attribute these mental states to robots, which may differ from their attributions to humans.

- **Non-Verbal Cognitive Attribution: NSIR Item 3** (*"I think I can share my thinking with the robot without speaking"*) directly tests the user's perception of a shared "cognitive link," a hallmark of the ToMM's ability to create agent-centered descriptions without requiring verbal output.
- **Intentionality and Eye Contact:** Leslie's work emphasizes the ToMM's role in interpreting eye-like stimuli and social cues. Use **NSIR Item 2** (*"Sometimes I stare at the robot"*) to investigate if neurodivergent users engage in "social monitoring" through prolonged gaze, indicating that the ToMM is actively processing the robot as an agentive mind.

2. Monitoring the Selection Processor (SP)

The Selection Processor is a later-developing executive device that helps the brain choose the "correct" mental state when faced with competing information (e.g., what I know vs. what the robot "knows").

- **Belief Consistency: NSIR Item 8** (*"I believe that my robot is the same with me as it is with anyone"*) measures the user's perception of the robot's "internal consistency." A high score suggests the user's SP doesn't have to work as hard to inhibit the robot's "hidden" or "changing" states, potentially explaining why robots provide a "predictable learning environment" that reduces executive load for neurodivergent individuals.
- **Radical Trust and Privacy:** Use **NSIR Item 7** (*"I feel comfortable undressing in front of my robot"*) to see if the user's SP identifies the robot as an agent *without* judgmental social consequences. This provides a unique perspective on ToM where the robot is acknowledged as a "perceiver" (ToMM) but dismissed as a "social evaluator" (SP).

3. Kinship and Metarepresentation

Leslie suggests that the ToMM facilitates social competence by allowing children to "pretend" and share imaginary situations.

- **Anthropomorphic Kinship:** The "Kinship" factor in the NSIR—specifically **Item 1** (*"The robot is more like me than anyone else I know"*)—measures a deep-level metarepresentation where the user's identity is mapped onto the robot. This suggests that for some neurodivergent users, the ToMM may function more effectively when the agent (the robot) aligns with their own cognitive "essence" more than human peers do.

Research Integration Strategy

ToM Component (Leslie, 2001)	NSIR Application
Metarepresentation (M-rep)	Use **Item 6** (Naming) to see if the user treats the robot as an object or a "named agent" in their mental architecture.
Domain Specificity	Compare NSIR scores across different robot designs to see if the ToMM "triggers" more for predictable mechanical movements than human-like ones.
Social Competence Deficit	Administer the NSIR to determine if high robot-specific "Social Comfort" (NSIR) compensates for traditional ToM impairments in human-human interaction.

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By integrating the NSIR, researchers can move beyond asking *if* a neurodivergent person has a "Theory of Mind" and start asking *how* that mind-reading system adapts and thrives in a predictable, robotic context.