

The **Neurodivergent Scale for Interacting with Robots (NSIR)** can be used as a measurement tool to evaluate the effectiveness of the affective communication strategies discussed in the Cano (2021) paper.

The Cano paper focuses on developing robots that can effectively communicate and interpret emotions (affective communication) to support children with autism spectrum disorder (ASD) in their social interactions. The NSIR provides a framework to assess the user's perception of these interactions across three critical dimensions:

### **Anthropomorphic Connection/Kinship**

- The Cano paper explores how robots can express emotions to make the interaction more engaging and relatable for children with ASD.
- NSIR items like "**The robot is more like me than anyone else I know**" (p. 1) or "**I gave my robot a name**" (p. 1) could measure how successfully the affective communication makes the robot feel like a companion or a relatable entity.

### **Social Comfort/Trust**

- The core goal of affective communication is to facilitate social interaction and build a reliable, comfortable relationship.
- The NSIR items in this dimension, such as "**My robot can tell what I am feeling, when I am sad, it can tell I am sad**" (p. 1), directly measure the user's perception of the robot's ability to understand and respond to their emotional state, which is a key outcome of the Cano research.
- Measuring "**I believe that my robot is the same with me as it is with anyone**" (p. 1) would assess the consistency and fairness of the robot's social responses, building essential trust.

### **Safety**

- Creating a safe, non-judgmental environment is a primary benefit of using socially assistive robots (SARs) for children with ASD. Effective affective communication contributes to this by providing clear, predictable emotional cues.
- While the paper focuses on emotional safety, the NSIR's inclusion of safety items (e.g., "**I feel comfortable undressing in front of my robot**") (p. 1) highlights the necessity of ensuring the child feels entirely secure in the robot's presence as the interaction deepens.

In essence, the NSIR provides the metrics to determine if the technical advancements in affective communication proposed by Cano translate into positive, real-world user experiences for neurodivergent children.