

The **Neurodivergent Scale for Interacting with Robots (NSIR)** can be used to measure the user-centric outcomes of the psychological and ethical considerations discussed in the Boch & Thomas paper.

The paper explores key psychological factors like anthropomorphism (attributing human qualities to robots) and how they influence the development of human-robot relationships, alongside ethical controversies such as deception, over-trust, and dependency. The NSIR provides specific metrics to assess these abstract concepts from the neurodivergent user's perspective:

Anthropomorphic Connection/Kinship

- The Boch & Thomas paper explains that humans naturally anthropomorphize robots, which has implications for designing social robots that evoke emotional attachments.
- The NSIR items like **"The robot is more like me than anyone else I know"** and **"I gave my robot a name"** provide a direct way to quantify the level of perceived kinship and emotional attachment a user forms, which is a primary psychological dynamic the paper discusses.

Social Comfort/Trust

- The paper addresses the ethical risks of over-trust and dependency, suggesting that some individuals, particularly vulnerable populations, may be more at risk of becoming emotionally deceived or overly dependent on a robot.
- 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"**, measure the user's perception of the robot's emotional intelligence. A high score here might indicate a user who is more susceptible to the "engineered illusions" or potential deception the paper warns about.
- The items help in evaluating the development of trust and social comfort in a measurable way, allowing researchers to assess if design factors promote healthy levels of trust or encourage potentially harmful over-reliance.

Safety

- The paper discusses the need for ethically safe robots and avoiding the replacement of human therapists. It emphasizes the importance of design factors for positive interaction to ensure ethical design technology.

- The NSIR's **safety** dimension can be used to ensure that while a connection is being built, the user still feels secure and their boundaries are respected (e.g., the item about undressing in front of the robot). This directly links to the paper's call for research that ensures "ethically safe robots".

The NSIR effectively translates the philosophical and psychological discussions of the Boch & Thomas paper into a quantifiable tool for field-based evaluation of user experience.

Would you like to examine another article, or perhaps compare how the concept of "**trust**" is measured by the scale versus how it's discussed in the paper?