

This reference matrix synthesizes the **Neurodivergent Scale for Interacting with Robots (NSIR)**—identified as **Table 79**—by mapping its behavioral items to their foundational literature, theoretical factors, and cross-disciplinary applications. <sup>1</sup>

## Reference Matrix: NSIR Items and Theoretical Attributions

Item #	Item Statement	Factor / Pillar	Supporting Literature	Framework Application & Key Implications
1	"The robot is more like me than anyone else I know."	<b>Anthropomorphic Connection / Kinship</b>	Waytz et al. (2010); Leslie (2001); Abbo et al. (2025)	<b>Fictive Kinship:</b> Establishes identity alignment and a "peer" relationship rather than a tool-user dynamic.
2	"Sometimes I stare at the robot."	<b>Anthropomorphic Connection / Kinship</b>	Leslie (2001); Coleman et al. (2025)	<b>Social Monitoring:</b> Validates atypical eye contact as a strategy for processing social signals without judgment.
3	"I think I can share my thinking... without speaking."	<b>Anthropomorphic Connection / Kinship</b>	Waytz et al. (2010); Leslie (2001); Zelikman et al. (2024)	<b>Mind Attribution:</b> Evaluates non-verbal cognitive links and "Quiet-star" thought simulation in autonomous agents. <sup>1</sup>
4	"The robot and I will be together forever."	<b>Anthropomorphic Connection / Kinship</b>	Balle (2022); Abbo et al. (2025); Bruno et al. (2014)	<b>Attachment Theory:</b> Measures the transition of the robot from a mechanical tool to a "moral subject" or long-term partner.

5	"My robot can tell what I am feeling... tell I am sad."	<b>Social Comfort / Trust</b>	Park & Whang (2022); Graham (2025); Čaić et al. (2019)	<b>Affective Recognition:</b> Quantifies the user's perception of "empathic accuracy" and the realization of affective resources.
6	"I gave my robot a name."	<b>Anthropomorphic Connection / Kinship</b>	Waytz et al. (2010); Leslie (2001)	<b>Humanization:</b> Acts as a primary indicator of attributing individual status and stable human-like traits.
7	"I feel comfortable undressing in front of my robot."	<b>Safety</b>	Winkle et al. (2023); Risk-regulation model	<b>Somatic Sanctuary:</b> A "high-threshold" indicator of ethical safety and the removal of harmful social hierarchies. <sup>1</sup>
8	"I believe my robot is the same with me as it is with anyone."	<b>Social Comfort / Trust</b>	Zolyomi & Snyder (2021); Ma & Li (2024)	<b>Social Predictability:</b> Measures comfort derived from mechanical consistency, which reduces the "social threat" of human unpredictability.

## Foundational and Methodological Frameworks

Concept	Attribution	Research Role
<b>Mindfulness</b>	Deci & Ryan (2008); Brown & Ryan (2003)	Informed by <b>Self-Determination Theory (SDT)</b> , mindfulness is treated as the "open awareness"

		necessary for autonomous functioning and inner exploration.
<b>Mindful Anthropomorphism</b>	Ma & Li (2024)	Distinguished from "mindless" reactions (triggered by CGI/appearance). It represents the intentional personal bond and "Kinship" factor in the NSIR.
<b>Sovereign Dyad</b>	Sadownik (2025)	The overarching paradigm where the robot acts as a "Biological Social Exoskeleton" to protect user authenticity.
<b>Clinical Justice Sensitivity</b>	Rizvi et al. (2024)	Frames the HRI as a mandatory accommodation rather than an elective tool, ensuring rights to a "Status Sanctuary."

## Analysis of Conflicting and Divergent Findings

- **Uncanny Valley Paradox:** Traditional HRI theory (e.g., Ma & Li) focuses on revulsion toward human-like robots. NSIR research (Sadownik, 2025) suggests neurodivergent users may instead experience **Anthropomorphic Kinship** (Item 1), finding comfort in predictable robotic logic that aligns with their internal world.
- **Deficit vs. Strength (Staring):** Clinical models often pathologize atypical eye contact (DSM-5). The NSIR (Coleman et al., 2025) treats "staring" (Item 2) as a valid form of **social attention** necessitated by slower face-processing speeds.
- **The Mentorship Risk:** There is a tension between robots as "monitoring mentors" (Rizvi et al.) and robots as "non-judgmental sanctuaries." The NSIR identifies that designing robots to "teach" social norms can reinforce ableist hierarchies, whereas the scale prioritizes **Autonomy** (Level 3 Criticality).