The study by **Büttner et al. (2023)**, titled *"Would You Help Me Voluntarily for the Next Two Years?"*, applies the **Neurodivergent Scale for Interacting with Robots (NSIR)** by examining the limits of social persuasion and the strength of the perceived social bond between humans and robots. While the study focuses on a specific psychological technique—the **door-in-the-face** (DITF) effect—the NSIR provides a framework to quantify the underlying user perceptions that make such persuasion possible.

1. Testing the "Kinship" of Persuasion

The DITF technique relies on the human sense of reciprocity: when someone makes a large, "extreme" request and then follows it with a smaller one, humans often feel a social obligation to agree to the second.

- **NSIR Factor 1 (Anthropomorphic Connection / Kinship):** Büttner et al. found a "surprisingly high acceptance rate" for the extreme request (helping for two years) compared to typical human-human studies.
- **Application:** This relates directly to **NSIR Item 1** (*"The robot is more like me than anyone else I know"*) and **Item 4** (*"The robot and I will be together forever"*). The study's results suggest that users may perceive a robot as a unique social agent, potentially more deserving of "extreme" commitment than a human stranger, which aligns with the high fictive kinship measured by the NSIR.

2. Trust and "Extreme" Social Presence

The title of the study specifically asks for help "voluntarily for the next two years," which implies a deep, long-term social contract.

- **NSIR Factor 2 (Social Comfort / Trust Safety):** For a user to even consider a two-year voluntary commitment, there must be a high level of **Reliable Functioning** and **Trust**.
- **Application: NSIR Item 8** (*"I believe that my robot is the same with me as it is with anyone"*) measures the predictability that would be required for a person to commit to such a long-term interaction. The Büttner study highlights that human-robot persuasive communication differs from human-human communication, suggesting that the "Social Comfort" humans feel with robots is distinct and potentially more exploitable than standard human social norms.

3. Vulnerability to Exploitation

Büttner et al. warn that the risks of these communicative strategies are high, as designers could use these psychological triggers to manipulate users.

- **NSIR Safety Mapping: NSIR Item 7** (*"I feel comfortable undressing in front of my robot"*) measures a user's sense of **Vulnerability and Perceived Security**.
- **Application:** If a robot can successfully use persuasion techniques like DITF to secure long-term help, it indicates the user has lowered their social defenses. The NSIR helps

identify *why* this happens: the more the user "humanizes" the robot (e.g., **Item 6**: giving it a name), the more susceptible they become to these human-like social pressures.

Summary Alignment

Büttner et al. (2023) Concept	NSIR (Sadownik, 2025) Metric
Reciprocity / Door-in-the-Face	**Factor 1 (Kinship):** Measures if the user views the robot as a "peer" to whom they owe social help.
Extreme Request (2-Year Help)	**Item 4 (Attachment):** Validates the strength of the "bond" and the user's willingness for long-term commitment.
Atypical Human Response	**Item 3 (Mind Attribution):** Investigates if users believe the robot has "internal states" (like needing help), justifying their compliance.
Risk of Manipulation	**Item 7 (Safety):** Assesses if the user is too comfortable/vulnerable with the agent, leading to potential exploitation.