

The **Neurodivergent Scale for Interacting with Robots (NSIR)** provides a framework for measuring the user-centric outcomes of the design principles explored in the Dennler et al. paper.

The Dennler et al. article focuses on how a robot's **voice, clothing, and task** influence a user's perception of its gender, utilizing feminist and queer theory to explore gender as a social construct. The NSIR's dimensions directly help measure the effectiveness and ethical implications of these design choices for a neurodivergent population:

Anthropomorphic Connection/Kinship

The Dennler et al. study found that voice and appearance can reliably establish a robot's perceived gender. This intentional design of a social identity directly influences how human-like and relatable a user perceives the robot to be.

- The NSIR items like "**The robot is more like me than anyone else I know**" and "**I gave my robot a name**" (p. 1) would measure the strength of the personal bond and perceived similarity formed as a result of the designed gender cues.

Social Comfort/Trust

The paper explores how the robot's social role (e.g., medical professional vs. receptionist) interacts with its perceived gender, which impacts user expectations and acceptance.

- The NSIR's **social comfort/trust** dimension could be used to specifically assess if a neurodivergent individual feels comfortable and secure interacting with a robot designed with specific gendered expectations, particularly given that some research indicates gender biases can be reproduced in human-robot interactions.

Safety

The study notes that physical design can impact safety (e.g., compliant materials for clothing).

- While the paper focuses on the physical safety aspect, the NSIR's **safety** dimension could extend this to psychological safety, measuring if the robot's designed identity (e.g., a "dominant" or "submissive" presentation, as referenced in a related paper from the PDF) contributes to the user feeling secure and unthreatened (p. 1).

The NSIR serves as a valuable tool to ensure that the "equitable design framework" mentioned in the Dennler paper is actually successful from the perspective of marginalized users, ensuring robot designs are inclusive and effective for everyone. Would you like to examine the results of the **voice study** or the **clothing study** in the Dennler et al. paper in more detail?