

Integrating the **Neurodivergent Scale for Interacting with Robots (NSIR)** with the **Personal Feelings Questionnaire-2 (PFQ-2)** (Harder & Zalma, 1990) allows researchers to examine how a user's baseline tendencies toward **shame** and **guilt** influence their social comfort and emotional bonding with robotic agents.

The PFQ-2 is a widely used instrument to distinguish between shame-proneness (feeling small, exposed, or worthless) and guilt-proneness (feeling regret or remorse over specific actions). Applying the NSIR to this framework can reveal if robots serve as "socially safe" alternatives for individuals with high shame-proneness.

## 1. Shame-Proneness and the "Safety" of Robots

Individuals who score high on the **Shame** scale of the PFQ-2 often feel a painful self-consciousness and a fear of being judged or "seen" by others.

- **Radical Privacy:** Use **NSIR Item 7** (*"I feel comfortable undressing in front of my robot"*) to test if a robot's lack of a judgmental "human gaze" provides a sanctuary for high-shame individuals.
- **Consistent Social Environment:** High shame-proneness is often linked to social anxiety. **NSIR Item 8** (*"I believe that my robot is the same with me as it is with anyone"*) measures the predictability that can mitigate the fear of unexpected social rejection or embarrassment found in human-human interaction.

## 2. Guilt-Proneness and Emotional Reciprocity

The **Guilt** scale of the PFQ-2 measures a person's focus on their effects on others and their desire to make amends.

- **Emotional Recognition:** Use **NSIR Item 5** (*"My robot can tell what I am feeling..."*) to explore if guilt-prone individuals project more emotional agency onto robots. If a user feels a robot can "tell they are sad," they may feel a sense of emotional responsibility or "guilt" toward the robot's perceived well-being.
- **Long-Term Commitment:** **NSIR Item 4** (*"The robot and I will be together forever"*) can be correlated with PFQ-2 scores to see if guilt-prone individuals (who value relational repair and maintenance) form more durable, "loyal" bonds with their robotic partners.

## 3. Non-Verbal Connection as a Buffer for Social Pain

The PFQ-2 often highlights the difficulty shame-prone individuals have with verbalizing their internal states due to a fear of being misunderstood.

- **Cognitive Sharing:** Apply **NSIR Item 3** (*"I think I can share my thinking with the robot without speaking"*). For a neurodivergent user with high PFQ-2 shame scores, the ability to "share thinking" without the pressure of verbal performance may be a critical factor in their **Social Comfort/Trust Safety**.

## Research Integration Strategy

PFQ-2 Dimension	NSIR Factor/Item Application	Hypothesis
<b>Shame-Proneness</b>	<b>Factor: Social Comfort/Trust Safety</b>	High shame will correlate with a preference for robots that are "consistent" (Item 8).
<b>Guilt-Proneness</b>	<b>Factor: Anthropomorphic Connection</b>	High guilt will correlate with higher "naming" (Item 6) and "kinship" (Item 1) behaviors.
<b>Self-Consciousness</b>	<b>NSIR Item 2: "Sometimes I stare..."</b>	Users with low social shame will feel more comfortable with prolonged gaze/staring at the robot.
<b>Public Exposure</b>	<b>NSIR Item 7: Undressing comfort</b>	Robots will provide higher comfort levels for high-shame users than human caregivers.

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By combining these scales, you can determine if a robot's primary value for a neurodivergent user is as a **social peer**(Kinship) or as a **social shield** (Safety) that protects them from the self-conscious painful affects measured by the PFQ-2.