The **Neurodivergent Scale for Interacting with Robots (NSIR)** can be applied to Brandizzi's work on conversational agents by providing a structured way to measure how neurodivergent individuals perceive and interact with agents possessing a "theory of mind" (ToM) (p. 1).

The Brandizzi paper explores the use of reinforcement learning to develop conversational agents that can understand and model human mental states, emotions, and intentions (a "theory of mind"). The NSIR is relevant to evaluating the user experience of these advanced agents across its three dimensions:

Anthropomorphic Connection/Kinship

- The paper discusses how conversational agents with ToM capabilities can be more intuitive and responsive, adapting to user needs and preferences.

- The NSIR items in this dimension (e.g., **"The robot is more like me than anyone else I know"**, **"I gave my robot a name"** (p. 1)) can measure the depth of the personal bond and perceived similarity a neurodivergent user forms with an agent that appears to understand them on a deeper, human-like level.

Social Comfort/Trust

- The ability to attribute mental states to others is crucial for human-to-human interaction and building trust. The Brandizzi research aims to integrate this into AI to develop "socially intelligent and trustworthy robots".

- NSIR items such as **"My robot can tell what I am feeling, when I am sad, it can tell I am sad"** directly assess the user's perception of the agent's emotional intelligence and understanding (p. 1). A high score on this dimension would indicate successful implementation of the ToM capabilities in a way that builds healthy **social comfort** and **trust**, while also allowing researchers to monitor potential for over-trust or dependence.

Safety

- The Brandizzi paper's focus on misalignment issues between agents' communication and human interpretability highlights the need for a reliable and safe interaction.

- The NSIR's **safety** dimension can ensure that as the agent's intelligence grows, the user continues to feel secure. Ethical concerns about privacy violations (as a mind-reading agent could be perceived as invasive) or potential for manipulation can be measured through items in this dimension.

The NSIR provides the crucial qualitative data from the user's perspective to complement the technical advancements in AI described in the Brandizzi paper.

Would you like to explore how the concept of **"misalignment"** in Brandizzi's paper could be measured using the NSIR?