The **Neurodivergent Scale for Interacting with Robots (NSIR)** can be applied to the work of Bjornsdottir et al. (2024) to measure the user-reported outcomes of social perception biases, specifically those related to perceived social class and stereotypes, as they might be embedded in human-robot interactions.
The Bjornsdottir et al. (2024) papers focus on how subtle static facial features (e.g., facial width, complexion) drive subjective impressions of a person's social class, competence, and trustworthiness, and how these biases are rooted in stereotypes. The NSIR's dimensions are highly relevant for assessing the impact of these biases when they are applied to a robot's design:

Anthropomorphic Connection/Kinship

- The research shows that a face's appearance can determine perceptions of social identity.
- The NSIR can measure if a robot designed with "higher-class" or "lower-class" features (as identified in the study) affects the neurodivergent user's sense of connection. Items like **"The robot is more like me than anyone else I know"** (Item 1) would quantify this perceived similarity or difference, which is a key outcome of the social perception biases the paper discusses.

Social Comfort/Trust

- The study found that "poor-looking" faces were mirrored with features associated with being "incompetent, cold, and untrustworthy-looking". This directly relates to the concept of trust.
- The NSIR's **social comfort/trust** dimension could assess if a robot designed with facial cues that elicit negative stereotypes makes a neurodivergent user feel less comfortable or trusting. Measuring items such as **"I believe that my robot is the same with me as it is with anyone"** (Item 8) could also ensure that the robot's design does not perpetuate unfair biases in perceived trustworthiness.

Safety

- The research highlights how face-based impressions can "contribute to maintaining group boundaries and inequality" and how these biases must be "disrupted" to reduce inequality. This links to the fundamental need for safety and a non-threatening environment in HRI.
- The NSIR's **safety** dimension provides a crucial user-reported measure that ensures the design of social robots does not inadvertently introduce or reinforce

harmful societal biases that compromise the physical and psychological safety of the user.

The NSIR effectively translates the social perception theories of Bjornsdottir et al. into measurable, user-centric data for evaluating modern human-robot interaction designs and ensuring they are equitable and inclusive.
Would you like a deeper dive into the specific **facial features** that drive social class judgments, or another article from the document?