

The facets of the **HEXACO personality model** can be applied to the Neurodivergent Scale for Interacting with Robots (NSIR) to understand how a neurodivergent individual's stable personality traits influence their perception of a robot's social interactions, comfort, and safety.

### **Honesty-Humility (H)**

Facets in this dimension (Sincerity, Fairness, Greed Avoidance, Modesty) relate to a user's expectations of fairness and consistency in social interactions.

- **Fairness** would likely influence the user's agreement with the NSIR item: "**I believe that my robot is the same with me as it is with anyone**" (p. 1).
- A user high in **Sincerity** might perceive the robot's emotional expression more skeptically if it seems insincere, impacting the "Social Comfort/Trust" dimension (p. 1).

### **Emotionality (E)**

Facets like Fearfulness, Anxiety, and Sentimentality have a direct link to comfort and safety.

- A user high in **Anxiety** or **Fearfulness** might score lower on the NSIR **Safety** items, such as "**I feel comfortable undressing in front of my robot**" (p. 1), regardless of the robot's design.
- **Sentimentality** might increase the "Anthropomorphic Connection/Kinship" a user feels, influencing items like "**The robot and I will be together forever**" (p. 1).

### **Extraversion (X)**

Facets such as Sociability, Expressiveness, and Liveliness could influence the desire for interaction and connection.

- A user high in **Sociability** might be more likely to form a strong "Anthropomorphic Connection" with the robot, agreeing strongly with "**The robot is more like me than anyone else I know**" (p. 1).
- **Liveliness** might correlate with a preference for a more dynamic and responsive robot, impacting overall satisfaction and comfort.

### **Agreeableness (A) (vs. Anger)**

Facets here include Forgiveness, Gentleness, and Patience. These might influence how a user reacts to robot errors or unpredictability.

- A user high in **Forgiveness** might be more tolerant of a robot's occasional mistakes, which could positively impact the "Social Comfort/Trust" dimension.
- **Gentleness** might influence a user's perception of the robot's interaction style as non-threatening, thus increasing the score on the **Safety** dimension (p. 1).

### **Conscientiousness (C)**

Facets such as Organization, Diligence, and Perfectionism relate to a need for order and reliability.

- A user high in **Diligence** might be more likely to follow the robot's instructions in an educational setting.
- **Perfectionism** might influence the perception of the robot's consistency, potentially impacting the agreement with "**I believe that my robot is the same with me as it is with anyone**" (p. 1).

### **Openness to Experience (O)**

Facets including Curiosity, Creativity, and Unconventionality can predict an openness to new forms of interaction.

- A user high in **Curiosity** might be more exploratory in their interaction, potentially scoring higher on items related to connection and engagement like "**Sometimes I stare at the robot**" (p. 1).
- **Unconventionality** might lead to a greater acceptance of the robot as a unique social entity, separate from human norms, which could influence the entire scale positively.

Understanding these links helps researchers use the NSIR to account for pre-existing personality traits when evaluating the effectiveness of a social robot's design for neurodivergent individuals.

Would you like to focus on how one of these **HEXACO facets** might influence a specific **NSIR item** in more detail?