

The study by **Casey & Wakeling (2022)**, titled "*University or degree apprenticeship? Higher education choices and social class*," examines the decision-making processes of students choosing between traditional academic routes and work-based learning. While their focus is on social class and educational pathways, the **Neurodivergent Scale for Interacting with Robots (NSIR)** applies through the lens of **environment-person fit** and the reduction of **social anxiety** in professional learning contexts.

For neurodivergent individuals, the "situated" learning of an apprenticeship can be as socially taxing as a university campus. The NSIR identifies how social robots might bridge the gap between these two pathways.

1. Reducing the "Social Class" Gaze (NSIR Item 7)

Casey & Wakeling highlight that students from different social classes often feel a sense of "not fitting in" at elite universities, a feeling of being judged or out of place.

- **NSIR Application: Item 7** (*"I feel comfortable undressing in front of my robot"*) measures a lack of perceived judgment and high **Ethical Safety**.
- **The Connection:** In the context of Casey & Wakeling's study, the robot represents a "neutral" social agent. For a neurodivergent apprentice who may feel judged by both academic peers and workplace superiors, the robot provides a training environment free from the "normative gaze" or class-based social pressures.

2. Predictability in High-Stakes Transitions (NSIR Item 8)

The choice between university and apprenticeship is a high-stakes transition. Casey & Wakeling discuss the risks students take when choosing a path that may not align with their social capital.

- **NSIR Factor 2 (Social Comfort / Trust Safety): Item 8** (*"I believe that my robot is the same with me as it is with anyone"*) measures **Social Predictability**.
- **The Connection:** For neurodivergent students, the "unwritten rules" of a university social scene or a corporate workplace are a major barrier. The NSIR validates that a robot's **Reliable Functioning** provides a stable "social constant." This predictability makes a robot-led apprenticeship or tutorial session a lower-risk entry point for those who struggle with the social volatility described in the study.

3. Fictive Kinship in Isolated Learning (NSIR Item 1 & 4)

The study notes that apprentices can sometimes feel isolated from the traditional "student identity."

- **NSIR Application: Item 1** (*"The robot is more like me than anyone else I know"*) and **Item 4** (*"The robot and I will be together forever"*) measure **Fictive Kinship** and **Attachment**.
- **The Connection:** If a neurodivergent apprentice uses a social robot as a workplace coach or academic tutor, they may form a stronger bond with the machine than with their

human colleagues. The NSIR quantifies this bond, suggesting that the robot can provide the social "belonging" that Casey & Wakeling identify as a missing element for many non-traditional students.

4. Mind Attribution vs. Social Performance (NSIR Item 3)

Casey & Wakeling describe the "performative" nature of university interviews and workplace interactions.

- **NSIR Item 3** (*"I think I can share my thinking with the robot without speaking"*) measures **Mind Attribution**.
- **The Connection:** Neurodivergent students often find the verbal "performance" of their knowledge exhausting. The NSIR validates a mode of interaction where the student feels "seen" and "understood" by the robot without the need for neurotypical social performance, potentially making the "degree apprenticeship" path more accessible if robotic interfaces are used for assessment or coaching.

Summary Alignment

Casey & Wakeling
(2022) Concept

NSIR (Sadownik, 2025) Application

Social Fit / Belonging

Factor 1 (Kinship): Measures if the robot becomes the primary "peer" for students who feel like outsiders.

Navigating "Unwritten Rules"

Item 8 (Reliability): Offers a predictable social partner that doesn't have hidden social agendas.

Social Risk / Anxiety

Item 7 (Safety): Provides a non-judgmental space to practice skills before entering human-centric environments.

Identity in Education

Item 6 (Naming): Acts as a marker for the student's internal acceptance of the robot as a valid social mentor.

Export to Sheets

By applying the NSIR to the educational pathways discussed by **Casey & Wakeling**, we can see that social robots could serve as "transitional objects"—providing the safety and reliability neurodivergent students need to navigate the class-based and social complexities of both university and apprenticeship life.