Rigid Robot

Soft Robot

Rigid Robot

autistic persons)

Educational support

Soft Robot

Safety

Definition: The perception that a robot operates securely, performing tasks without posing risks or harm and often more safely than humans

Arguments:

- Reliability & precision
- Accuracy & consistency
- Quick response time
- Reduces risks of injury to humans and animals

Arguments: Arguments:

Definition: The beneficial aspects of direct

interactions between humans and (soft) robots, such

as providing support to individuals (e.g., elderly or

- Encourage social interaction
- **Encourage social interaction** Emotional connection, & Emotional connection, & companionship companionship
 - Tactility & human comfort due to life-like features

Risk

Definition: The perception that a robot's actions or operations are unsafe, potentially causing harm or posing greater risks than human performance

Human-Robot-Interaction neg.

Human-Robot-

Interaction

pos.

Definition: The adverse aspects of direct interactions between humans and robots, focusing on challenges or negative outcomes specific to their engagement

Arguments:

Arguments:

Risk of accidents, injuries, & technical failures

Reliability & precision

Quick response time

Ability to learn & adapt

Accuracy & consistency

Risk of malfunction or data security breaches Faulty algorithms

Arguments:

- Risk of accidents, injuries, & technical failures
- Risk of malfunction
- Environmentally vulnerable

Arguments:

- Dependency & unhealthy relationships
- Decline in human interaction

Lack of physical warmth

- Decline in social skills
- Decline in human interaction

relationships

Arguments:

Strong emotional bonds & emotional manipulation

Dependency & unhealthy

Technological Possibility

Definition: The functional capabilities and performance potential of a robot, focusing on its technical features and operational readiness

Anthropomorphism pos.

Definition: The positive evaluation of attributing human-like characteristics or behaviors to a robot, such as autonomy or emotions.

Arguments:

- Improve healthcare
- Efficiency & adaptability
- Precise

Arguments:

- Improve healthcare
- Efficiency & adaptability
- Versaility, ease of use, & tailored theraphy

Arguments:

- **Emotional support &** companionship
- Facilitate interactions
- Limited tactile interaction

Arguments:

- Emotional support & companionship
- Facilitate interactions
- Foster tactile intimacy & comfort in HRI

Technological Limitation

Definition: The inherent constraints or shortcomings in a robot's technological capabilities

Anthropomorphism neg.

Definition: The negative evaluation of attributing human-like characteristics or behaviors to a robot, such as autonomy or emotions.

Arguments:

- Limited learning abilities
- Operational complexity
- Safety risks, & less emotional support

Arguments:

- Limited learning abilities
- Operational complexity
- Over-reliance, & uncertain future prospects

Arguments:

- Lacking empathy & emotional intelligence
- Lacking human complexity
- Uncanny valley
- **Autonomy**

Arguments:

- Lacking empathy & emotional intelligence
- Lacking human complexity
- False empathy