

	Rigid Robot	Soft Robot		Rigid Robot	Soft Robot
Safety	<p>Definition: The perception that a robot operates securely, performing tasks without posing risks or harm and often more safely than humans</p> <p>Arguments:</p> <ul style="list-style-type: none">Reliability & precisionAccuracy & consistencyQuick response time<i>Ability to learn & adapt</i>	<p>Arguments:</p> <ul style="list-style-type: none">Reliability & precisionAccuracy & consistencyQuick response time<i>Reduces risks of injury to humans and animals</i>	Human-Robot-Interaction pos.	<p>Definition: The beneficial aspects of direct interactions between humans and (soft) robots, such as providing support to individuals (e.g., elderly or autistic persons)</p> <p>Arguments:</p> <ul style="list-style-type: none">Encourage social interactionEmotional connection, & companionship<i>Educational support</i>	<p>Arguments:</p> <ul style="list-style-type: none">Encourage social interactionEmotional connection, & companionship<i>Tactility & human comfort due to life-like features</i>
Risk	<p>Definition: The perception that a robot's actions or operations are unsafe, potentially causing harm or posing greater risks than human performance</p> <p>Arguments:</p> <ul style="list-style-type: none">Risk of accidents, injuries, & technical failuresRisk of malfunction or <i>data security breaches</i><i>Faulty algorithms</i>	<p>Arguments:</p> <ul style="list-style-type: none">Risk of accidents, injuries, & technical failuresRisk of malfunction<i>Environmentally vulnerable</i>	Human-Robot-Interaction neg.	<p>Definition: The adverse aspects of direct interactions between humans and robots, focusing on challenges or negative outcomes specific to their engagement</p> <p>Arguments:</p> <ul style="list-style-type: none">Dependency & unhealthy relationshipsDecline in human interaction<i>Decline in social skills</i><i>Lack of physical warmth</i>	<p>Arguments:</p> <ul style="list-style-type: none">Dependency & unhealthy relationshipsDecline in human interaction<i>Strong emotional bonds & emotional manipulation</i>
Technological Possibility	<p>Definition: The functional capabilities and performance potential of a robot, focusing on its technical features and operational readiness</p> <p>Arguments:</p> <ul style="list-style-type: none">Improve healthcareEfficiency & adaptability<i>Precise</i>	<p>Arguments:</p> <ul style="list-style-type: none">Improve healthcareEfficiency & adaptability<i>Versatility, ease of use, & tailored therapy</i>	Anthropomorphism pos.	<p>Definition: The positive evaluation of attributing human-like characteristics or behaviors to a robot, such as autonomy or emotions.</p> <p>Arguments:</p> <ul style="list-style-type: none">Emotional support & companionshipFacilitate interactions<i>Limited tactile interaction</i>	<p>Arguments:</p> <ul style="list-style-type: none">Emotional support & companionshipFacilitate interactions<i>Foster tactile intimacy & comfort in HRI</i>
Technological Limitation	<p>Definition: The inherent constraints or shortcomings in a robot's technological capabilities</p> <p>Arguments:</p> <ul style="list-style-type: none">Limited learning abilitiesOperational complexity<i>Safety risks, & less emotional support</i>	<p>Arguments:</p> <ul style="list-style-type: none">Limited learning abilitiesOperational complexity<i>Over-reliance, & uncertain future prospects</i>	Anthropomorphism neg.	<p>Definition: The negative evaluation of attributing human-like characteristics or behaviors to a robot, such as autonomy or emotions.</p> <p>Arguments:</p> <ul style="list-style-type: none">Lacking empathy & emotional intelligenceLacking human complexity<i>Uncanny valley</i><i>Autonomy</i>	<p>Arguments:</p> <ul style="list-style-type: none">Lacking empathy & emotional intelligenceLacking human complexity<i>False empathy</i>