

Module 1 TRN CULTURAL AWARENESS, Learning Unit 1.4 Cultural values, attitudes, views about SARs

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THEORETICAL COMPONENT

Principles and Values

It is natural for caregivers to accept people as they are and to enter a situation without prejudice. Concerning SARs, caregivers can also be expected to accept them and approach them without prejudice. Carers must be encouraged to deal with the advantages and disadvantages of SARs and learn how to handle and integrate them into everyday care. Therefore, it is very important to keep the following values in mind:

- Acceptance
- Being non-judgemental
- Flexibility
- Innovation
- Learning
- Open-mindedness

Aims

The purpose of this tool is to raise awareness on the different attitudes and values that exist regarding the use of Socially Assistive Robots (SARs) in caring for patients/clients, depending on cultural background.

Learning outcomes

At the end of this training, the participants will:

- Define relevant terms like culture, values, attitudes.
- Identify the different attitudes towards SARs of different cultures, especially regarding Eastern and Western cultures.
- Identify expectations and fears health and social care staff might have regarding SARs.
- Describe the most relevant factors leading to different attitudes regarding SARs in different cultures.

Relevant definitions and terms

Attitudes. According to the [Online Cambridge Dictionary](#): feeling or opinion about something. Professionals *expect* from SARs in regard to the social component that the robots increase the caretakers' satisfaction, well-being, social interaction, and communication and therefore reduce the pressure on the caregivers (z. B. [Liang et al. 2017](#); [Wada et al. 2009](#); [Honekamp et al. 2019](#)). Professionals *fear* that interpersonal contact gets diminished ([Bendel 2018](#), p.240), the daily routine gets disturbed, they could be replaced by robots ([Tuisku et al. 2018](#)).

Culture. All human beings are cultural beings. Culture is the shared way of life of a group of people that includes beliefs, values, ideas, language, communication, norms, and visibly expressed forms such as customs, art, music, clothing, and etiquette. Culture influences individuals' lifestyles, personal identity, and their relationship with others both within and outside their culture. Cultures are dynamic and ever changing as individuals are influenced by, and influence their culture, by different degrees ([Papadopoulos, 2006, p 10](#)).

Robot. Giving an exact definition to the term ‘robot’ is difficult. According to the [Cambridge English Dictionary](#) (n.d), a robot is a machine controlled by a computer that is used to perform jobs automatically. Although ‘performing jobs automatically’ is a key element in robotics, that element also exists in other simpler machines (i.e, dishwasher), which can make distinguishing robots based only on this criterion difficult - it is also noted that one important factor of robots that often is not mentioned in the definition, is the use of sensors ([Ben-Ari and Mondada, 2018](#)). Another definition is offered by the [International Organization for Standardization](#) (2012), stating that a robot is an actuated mechanism with a degree of autonomy, moving within its environment, to perform intended tasks.

Robots can be classified using different criteria, for example, based on their application field, environment, and mechanism of interaction ([Ben-Ari and Mondada, 2018](#); [Dobra 2014](#)), control systems, size, design, etc. ([Dobra, 2014](#)). Whatever their application field and capabilities, robots are typically used for replacing the human component to complete a specific task ([Syriopoulou-Delli & Gkiolnta, 2020](#)). The origin of the word robot comes from the Czech word “robota” meaning forced labor ([Murphy, 2000](#)).

The concept of “robot” may be visualized differently in different cultures. According to ([Haring et al. 2014](#)), “A preliminary study through a Google image search revealed that for all countries, the term robot is mostly associated with humanoid robots, but with a different frequency of occurrence. Arabic and African countries show a high percentage of robot-related images like comics, toys, and others (e.g. United Arab Emirates 58%, Egypt 70%) whereas countries associated as technological highly developed countries like the US, Japan or Germany not only show more “real” robots (Japan and US 71% humanoid robots) but also a wider diversity of robots. Robots that look almost exactly like human beings are mainly particular for Japan, although they exist and are also developed in other countries.”

Values. According to The [Online Cambridge Dictionary](#), the beliefs people have, especially about what is right and wrong and what is most important in life, that control their behaviour.

What the research says

- **Haring, K. et al. (2014) ‘Cultural Differences in Perception and Attitude towards Robots’, *International Journal of Affective Engineering*, 13, pp. 149–157.** Japanese and Europeans have different views on the application areas of robots. In Japan, people are open to more social or human activities like entertainment, massaging, etc. However, regardless of cultural background, Eastern and Western cultures seem to see robots mainly for household support. Both cultures agree that robots should look more like machines and less like humans. However, as a Google image search showed, humanoid robots are still quite common in Japan. Available [here](#).
- **Chen, SC., Jones, C. & Moyle, W. (2020) ‘Health Professional and Workers Attitudes Towards the Use of Social Robots for Older Adults in Long-Term Care’, *International Journal of Social Robotics*, 12, pp. 1135–1147.** Most health personnel had positive attitudes towards using social robots in long-term care facilities as they viewed social robots as beneficial and practical in psychosocial care for older adults. Positive attitudes towards using social robots can increase the acceptance and utilisation of social robots. This study strives to support nursing work by providing insights into health personnel’s perceptions of social robots to integrate social robots into the care and lives of older adults. Available [here](#).
- **Papadopoulos, I. and Koulouglioti, C. (2018) ‘The Influence of Culture on Attitudes Towards Humanoid and Animal-like Robots: An Integrative Review’, *Journal of Nursing Scholarship*, 50(6), pp. 653–665.** This integrative review aimed to explore the influence of culture on attitudes towards humanoid and animal-like robots. The study found that culture seems to influence attitudes and behaviour towards robots and preference about the robot’s appearance, expression of emotion, and communication style. Available [here](#).
- **Schutte, M. (2019) *Socially assistive robots in the elderly care : The attitudes of healthcare professionals towards the use of socially assistive robots*. University of Twente.** This study aims to examine the attitudes of the different professionals in the elderly care organisation towards the use

of socially assistive robots and the determinants that influenced these attitudes. Results say that the respondents' attitudes can be divided into respondents with a positive and open attitude and respondents with a wait-and-see attitude. The determinants that seemed to positively affect the attitudes were compatibility, complexity, knowledge, self-efficacy, awareness of innovation content, client cooperation, relevance for the client, and social support. The determinants with a twofold effect were observability, personal benefits/drawbacks, and time available. This study did not find an answer on differences between professions, but it found that respondents with a coordinating or facilitating role had more positive attitudes than their colleagues. The moderators that seemed to influence the relation between the determinants and attitude are the gender and level of education. Available [here](#).

- **Honekamp I., Sauer L., Wache T., Honekamp W. (2019) 'Akzeptanz von Pflegerobotern im Krankenhaus: Eine quantitative Studie', *Journal for Technology Assessment in Theory and Practice*, 28(2), pp. 58-63.** In this study 120 senior citizens who lived in an assisted living facility were interviewed about their attitude towards nursing robots. It was shown that these people do not reject the usage of nursing robots in hospitals in principle. The acceptance and scepticism depends strongly on the scenario, where robots were used. Available [here](#).
- **Tuisku O., Pekkarinen S., Hennala L., Melkas H. (2018) 'Robots do not replace a nurse with a beating heart: The publicity around a robotic innovation in elderly care', *Information Technology & People* 32(1):47-67.** In this study was shown, that the public opinion is mainly negative, but there is little information about the robot and its tasks. The views of the staff were more positive. The robot was seen as a recreational tool, not as a replacement. Available [here](#).

What do national legislation and international/European treaties and conventions say on the topic?

- **European Commission: Whitepaper on AI.** The European Commission claims regarding AI, that “the infrastructures should support the creation of European data pools enabling trustworthy AI, e.g. AI based on European values and rules.” “The EU will continue to cooperate with like-minded countries, but also with global players, on AI, based on an approach based on EU rules and values.” “The use of AI can affect the values on which the EU is founded and lead to breaches of fundamental rights, including the rights to freedom of expression, freedom of assembly, human dignity, nondiscrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation, as applicable in certain domains, protection of personal data and private life, or the right to an effective judicial remedy and a fair trial, as well as consumer protection. These risks might result from flaws in the overall design of AI systems (including as regards human oversight) or from the use of data without correcting possible bias (e.g. the system is trained using only or mainly data from men leading to suboptimal results in relation to women).” Available [here](#).

PRACTICAL COMPONENT

Learning Activities

Activity 1: Culture shock in the robot age

- Please read the article by Emily Cross about how cultural background and attitudes influence social interactions and acceptance towards robots (available [here](#)).
- Share your thoughts on the social platform for collaborative learning. Please discuss the term “culture” in general and the common phenomenon of multicultural identities (due to migration, etc.). Try to summarise and come up with additional reasons why Western and Eastern countries have quite different attitudes towards robots.
- Resources needed: Online [article](#); social platform for collaborative learning.

- Duration of activity: 15 minutes for reading and reflecting, 10 minutes for discussing.

Activity 2: Write a short reflective text (about 250 words)

- Please describe factors influencing health care professionals' views and attitudes towards SARS being used in care settings. Elaborate on the most relevant factor (in your opinion): why and how does it influence professionals. How does the factor influence people from different countries/cultures differently (if at all)? Upload the document on the social platform for collaborative learning.
- Select one text written by a fellow student and review this. Don't judge the paper but please share your point of view on the text based on concrete arguments.
- Resources needed: Word or similar software for writing; social platform for collaborative learning.
- Duration: 20 minutes.

ASSESSMENT COMPONENT

Assessment Activities

Activity 1: Quiz

- Go to the following [address](#) and play the short quiz.
- Resources needed: [TryInteract](#), a tool for online Quizzes.
- Duration: 3 minutes.

EVALUATION COMPONENT

Participants to evaluation

The online evaluation questionnaire of each Learning unit is completed by the MOOC participants (students and student/facilitators) on Survey Monkey.

What to evaluate

The Learning Unit's evaluation criteria are: coverage of the identified learning needs, innovation, quality of the content and training materials, intuitive and friendly presentation, relevance of learning activities, and efficiency for achieving established learning outputs.

Please, complete this online evaluation of the learning unit by clicking on this link:

<https://www.surveymonkey.com/r/LCTGPP2>