

# Module 3 TRN CULTURAL SENSITIVITY, Learning Unit 3.4 Culturally sensitive and compassionate human-robot companionship

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## THEORETICAL COMPONENT

### Principles and Values

Although we might not consciously think about our culture and its impact on our lives daily, culture profoundly affects our communication style, character, personality, knowledge, and motivation (O'Neill-Brown, 1997). Our cultural background also plays a significant role in care: caring as culture is part of one's identity and shapes our beliefs and values (Papadopoulos, 2003). Peoples' cultural behaviours, needs, and beliefs need to be considered to be able to provide them with compassionate care (Papadopoulos, 2006). Compassion is an essential concept in healthcare, and it has been found that compassion can positively impact patient well-being.

A model for cultural competence in nursing, developed by Papadopoulos, Tilki and Taylor in the 1990s, has four constructs: cultural awareness, cultural knowledge, cultural sensitivity, and cultural competence. The model provides an insight into what providing culturally competent care should entail (Papadopoulos, 2003). In human-to-human care, providing culturally competent care has been associated with acceptance (Liu et al, 2012) and higher patient satisfaction (Govere and Govere, 2016). Receiving person-centred care that respects and recognises one's culture could promote dignity, equality, diversity, and inclusion. Robots that are culturally competent could provide more person-centred care and possibly increase care recipients' acceptance of using robots in care. We believe that it is important and beneficial for your learning to examine culturally sensitive and compassionate care and why it is crucial for the successful implementation of SARs in health and social care.

The principles and values that guide this tool include:

- Respect
- Competence
- Dignity
- Equity
- Acceptance

### Aims

This tool aims to enhance your understanding of compassionate care and your ability to consider culturally sensitive and compassionate human-robot companionship in health and social care.

### Learning outcomes

At the end of this training, the participants

- Will familiarise themselves with the principles of culturally sensitive and compassionate care.
- Should gain knowledge about the significance of culturally sensitive and compassionate human-robot companionship in health and social care.
- Should gain awareness about the ways that SARs can provide culturally sensitive and compassionate human-robot companionship in health and social care.

### **Relevant definitions and terms**

**Caring.** The concept of caring has many definitions. For instance, Leininger (1984 p 4, cited in [Smith and Turkel \(eds\), 2012](#)) defined caring as ‘the direct (or indirect) nurturant and skillful activities related to assisting people’, whereas Papadopolous ([2006, p 11](#)) has defined caring as an ‘activity that responds to the uniqueness of individuals in a culturally sensitive and compassionate way using therapeutic communication’.

**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](#)).

**Cultural awareness.** The degree of awareness we have about our own cultural background and cultural identity. This helps us to understand the importance of our cultural heritage and that of others and makes us appreciate the dangers of ethnocentricity. ([Papadopoulos, 2006](#)).

**Cultural Competence.** The capacity to provide effective healthcare taking into consideration people’s cultural beliefs, behaviours, and needs. Cultural competence is the synthesis of a lot of knowledge and skills which we acquire during our personal and professional lives and to which we are constantly adding. ([Papadopoulos, 2006](#)).

**Culturally competent compassion.** The human quality of understanding the suffering of others and wanting to do something about it using culturally appropriate and acceptable nursing interventions. This takes into consideration both the patients’ and the carers’ cultural backgrounds as well as the context in which care is given ([Papadopoulos, 2011](#)).

**Cultural Knowledge.** It derives from a number of disciplines such as anthropology, sociology, psychology, biology, nursing, medicine, and the arts, and can be gained in a number of ways. Meaningful contact with people from different ethnic groups can enhance knowledge around their health beliefs and behaviours as well as raise understanding around the problems they face ([Papadopoulos, 2006](#)).

**Cultural Sensitivity.** Cultural sensitivity entails the crucial development of appropriate interpersonal relationships with our clients. An important element in achieving cultural sensitivity is how professionals view people in their care. Unless clients are considered as true partners, culturally sensitive care is not being achieved ([Papadopoulos, 2006](#)).

**Health.** World Health Organization ([2006, p1](#)) defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity.” Health also refers to a state of well-being that is culturally defined, valued, and practised and which reflects the ability of individuals (or groups) to perform their daily role activities in culturally expressed, beneficial, and patterned lifeways ([Leininger 1991](#))\*.

**Human-robot companionship.** The production of real or apparent companionship between human beings and robots. This can either be considered to be ‘real’ companionship in the sense of an objectively visible relationship between human and robot, or a ‘felt’ level of companionship for which a human feels a relationship is present even if it is not objectively visible. The majority of work conducted upon human-robot companionship, particularly in the case of social robots, focuses on providing cognitive support, personalized chats, or pet-like affective therapy ([Li et al, 2013](#)). Through such interaction and communication a companionship may be created ([Prescott and Robillard, 2021](#)).

### **What the research says**

- **Lim, V., Rooksby, M. and Cross, E., S. (2021) 'Social Robots on a Global Stage: Establishing a Role for Culture During Human-Robot Interaction', *International Journal of Social Robotics* volume 13, pp 1307-1333.** Authors of this paper note that the impact of culture is considered more and more when developing new robotic technologies. This review aims to provide a general overview of how culture shapes human-robot interaction. Firstly, it explores how culture and robotics are intertwined from a psychological perspective, and then a review of 50 studies on how our expectations, attitudes, and behaviours are influenced by culture is conducted. The authors also discuss how robotic design that is culturally specific can improve the human user's experience. It is concluded that culture holds a potentially significant role in influencing users' interactions with social robots. Among other recommendations for future research, authors suggest that developing culturally adaptive robots rather than culturally specific is an area that needs more attention. Available [here](#).
- **Broadbent, E., Stafford, R. and MacDonald, B. (2009) Acceptance of Healthcare Robots for the Older Population: Review and Future Directions, *Int J Soc Robot* (2009) 1: 319-330.** This article investigates individual and robot variables that have been found to influence older persons' acceptance of healthcare robots. Authors note that three key requirements considered necessary for acceptance need to occur: a) motivation to use the robot, b) ease of use, c) comfort with the robot physically, emotionally, and cognitively. Numerous individual variables, such as age, gender, education level, past experiences, and culture, were identified, alongside robot variables, such as humanness, facial characteristics, and 'personality.' Available [here](#).
- **Papadopoulos, C. et al. (2021) The CARESSES Randomised Controlled Trial: Exploring the Health-Related Impact of Culturally Competent Artificial Intelligence Embedded Into Socially Assistive Robots and Tested in Older Adult Care Homes, *Int J Soc Robot* 1(12) doi: 10.1007/s12369-021-00781-x.** This article describes CARESSES (short for Culture-Aware Robots and Environmental Sensor Systems for Elderly Support), an international, multidisciplinary project that aims to design the first culturally competent care robots that autonomously adapt the way they behave and speak to the person they assist. The trial of CARESSES is significant in multiple ways, as it is among the first to study the impact of culturally competent SARs for improving health and wellbeing. Although more research is needed, results from the given trial imply that using a CARESSES (experimental) robot compared to not using any robot could likely enhance the emotional wellbeing of older adults. Available [here](#).
- **Papadopoulos, I. et al. (2020) Enablers and barriers to the implementation of socially assistive humanoid robots in health and social care: a systematic review, *BMJ Open* 10 (1)** This systematic review investigates the barriers and enablers that exist concerning the implementation of humanoid robots in health and social care. Identified enablers were related to enjoyment, usability, personalisation, and familiarisation. In contrast, barriers were associated with technical problems, robots' limited capabilities, and the negative preconceptions towards using robots in care. Available [here](#).
- **Papadopoulos I. (2006) The Papadopoulos, Tilki and Taylor model of developing cultural competence. In: Papadopoulos I. ed. *Transcultural Health And Social Care: Development of culturally competent practitioners*. Churchill Livingstone, p 7-24** This chapter describes the Papadopoulos, Tilki, and Taylor model. The aim is to help healthcare professionals and services deliver culturally competent care and high-quality care. As mentioned above, the model has four constructs- (1) Cultural Awareness; (2) Cultural Knowledge; (3) Cultural Sensitivity; and (4) Cultural Competence, which all are further described in the second chapter. This model is significant in the field of Transcultural Nursing. Available [here](#).
- **Šabanović, S., Bennett, C., C. and Lee H., L. (2014) 'Towards culturally robust robots: A critical social perspective on robotics and culture'. *Proceedings of the ACM/IEEE Conference on Human-Robot Interaction (HRI) Workshop on Culture-Aware Robotics (CARS)*. Bielefeld, Germany. In Press.** The authors of this article discuss the theme of culturally robust robotics, which, in their

view, is a step ahead of culturally aware robots. However, this requires a different design process. The authors provide critical analysis of how culture has been addressed in robotics until 2014 and what steps are needed to move towards culturally robust robotics. It is suggested that culturally robust robotics could be achieved by designing robots to be more culturally reflexive and inclusive of the perspective of diverse stakeholders. Furthermore, they note that robotic technologies should be adaptive and sensitive to particular cultural factors instead of only being able to identify and mimic specific cultures so that they could be used in more than one cultural situation. Finally, the authors also explore why roboticists and users should be reflexive and aware of their own cultural backgrounds. Available [here](#).

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

- **United Nations (UN) Office of the High Commissioner for Human Rights (OHCHR) (2008), Fact Sheet No. 31, The Right to Health.** This document states that 'All services, goods and facilities must be available, accessible, acceptable and of good quality' (page 4). The document further notes that 'The facilities, goods and services should also respect medical ethics, and be gender-sensitive and culturally appropriate. In other words, they should be medically and culturally acceptable' (p 4). Available [here](#).
- **International Council of Nurses (ICN) (2007, Revised 2013) Cultural and linguistic competence. Position Statement. Geneva Switzerland.** In this statement document, the ICN and its member organisations highlight the importance of cultural and linguistic competence to deliver the best possible outcomes for the client. It is noted that clients have the right to receive culturally and clinically appropriate care, and it is necessary to recognise individual differences (i.e., race, ethnicity, gender, sexual orientation, socio-economic status, age, physical abilities, spiritual or religious beliefs, political beliefs, or other ideologies). However, the statement also emphasizes that 'accepting and respecting cultural differences and adapting care to be congruent with the client's culture should not result in nursing practice that would be in contravention of professional codes of ethics, nursing practice standards, legal frameworks or United Nations human rights conventions' (p 1). Available [here](#).
- **Schouler-Ocak et al. (2015) 'EPA guidance on cultural competence training', European Psychiatry 30, pp 431-440.** This guidance document was created by The European Psychiatric Association (EPA). It aims to provide an outline for cultural competence, structured in the context of knowledge, skills, attitudes, and components of cultural competency. Authors state that to improve cultural competence, 'the systems need to value diversity, assess their own cultural values, be aware of cultural interactions, incorporate cultural knowledge, and adjust service delivery accordingly' (p 436). Although the paper's focus is largely connected to psychiatry, the overview provided about cultural competence and some of the key issues related to the subject and how to deal with these are also relevant in other health and social care areas. Available [here](#).
- **Napier et al. (2014) 'Culture and health', The Lancet Commissions. Vol 384, Issue 9954, p 1607-1639.** This Commission paper thoroughly analyses health and health practices related to culture. The authors also review the aspects of cultural competence and inequalities related to culture and health-care delivery. Twelve findings that need attention in the research were identified. Some examples are: 1) Culture should not be neglected in health and health-care provision, 2) Culture should become central to care practises, 3) Competence should be reconsidered across all cultures and systems of care, 4) Exported and imported practises and services should be aligned with local cultural meaning, 5) Building of trust in health care should be prioritised as a cultural value, and 6) New models of wellbeing and care should be identified and nourished across cultures.' Available [here](#). Please note that registering yourself at the website might be necessary to get free access to the article.

## PRACTICAL COMPONENT

### Learning Activities

#### Activity 1: Reflect on culturally competent SARs

- After reading through the provided information about terms and definitions and navigating through the 'what research says' and 'what international/... treaties say' and 'what research says' chapters, please visit CARESSES webpage at this [address](#) and read through the information provided. This website is dedicated to the CARESSES trial and provides background information about the culturally competent system and the project itself.
- After visiting the webpage, watch again the video [CARESSES, A robot for the elderly that knows about different cultures](#) (6:10), which you watched in a previous Learning Unit.
- Considering all your learning from this learning unit, create a post on the social platform for collaborative learning where you share your thoughts about culturally competent SARs. Write about your opinion on how culturally sensitive and compassionate care provided by SARs could affect the quality of care in your own workplace. Do you think culturally competent SARs will change the way how care is delivered in the future? If yes, in what ways? Share your post on the discussion board and read answers from other participants. Pick one post from someone else and leave a reply.
- Resources: [YouTube video](#), social platform for collaborative learning.
- Duration: 20minutes.

#### Activity 2: Mind map

- Considering all your learning so far, create a mind map using Word, PowerPoint, or similar software about the key points you learned during this unit. You can also make the mind map on paper or use this [website](#). If you do not know how to create a mind map or you want some ideas, you can watch this short video about creating one [here](#) (2:51)
- Remember, your mind map aims to summarize the main points you have learned from this topic which you would like to tell others about or remind yourself. Feel free to be as creative as you wish (use different colours, pictures, collages, etc.).
- After finishing, please upload your mind map on the discussion board of the social platform for collaborative learning. If you made one on paper, please use your phone or other camera devices to take a photo of your mind map and then upload the file. Have a look at other participants' mind maps and reflect on how they differ from yours.
- Resources: [YouTube video](#), software for drawing mind maps or [GoCongr](#), social platform for collaborative learning
- Duration: 15 minutes.

## ASSESSMENT COMPONENT

### Assessment Activities

#### Activity 1: Complete the sentences.

- Go to the following [address](#) and complete the the sentences.
- Resources needed: [GoCongr](#), a tool for Questionnaires; social platform for collaborative learning.
- Post your results on the social platform for collaborative learning.
- 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/LRL28FW>