

## COVER SHEET

**Dilemma topic:**

Artificial Companion

**Group number:**

17

**Group members:**

- |                           |  |
|---------------------------|--|
| 1) Mariia Khromova        | Yes, I have contributed to this report <input checked="" type="checkbox"/> |
| 2) Sergey Gonchar         | Yes, I have contributed to this report <input checked="" type="checkbox"/> |
| 3) Richard Cinkanic       | Yes, I have contributed to this report <input checked="" type="checkbox"/> |
| 4) Andrii Ushakov         | Yes, I have contributed to this report <input checked="" type="checkbox"/> |
| 5) Adam Stefka            | Yes, I have contributed to this report <input checked="" type="checkbox"/> |
| 6) Diana Caisin           | Yes, I have contributed to this report <input checked="" type="checkbox"/> |
| 7) Prashant Rawat         | Yes, I have contributed to this report <input checked="" type="checkbox"/> |
| 8) Mohammad Shadik Ansari | Yes, I have contributed to this report <input checked="" type="checkbox"/> |

# 1) ARGUMENTS

## 1a) Collected arguments in favor of ... (PRO)

1. **Companionship and Emotional Support:** the AI provides companionship, reducing loneliness and isolation.
2. **Mental Health:** AI companions can improve the elderly woman's mental health.
3. **Adaptability and Customization:** the AI can be fine-tuned to fit the woman's specific needs.
4. **Availability and 24/7 Support:** unlike humans, AI is available 24/7.
5. **Cognitive Stimulation:** the AI engages the woman in conversations, providing mental stimulation. It can help with keeping elderly women's minds active.
6. **Safety:** AI companions might have emergency response features and can help with keeping elderly women safe.
7. **Assistance in Daily Life and Physical Health:** the AI assists with various tasks like setting reminders for medication or engaging in physical exercises.
8. **Entertainment and Recreational Engagement:** The AI provides entertainment like music, movies, and stories utilizing gamification elements.
9. **Learning and Development:** AI may encourage language learning and acquiring new skills.
10. **Emotional and Social Engagement:** AI Companion supports friendship unconditionally.
11. **Cognitive and Memory Assistance:** AI aids in memory-related activities and can connect women with online communities.

*Members of subgroup PRO:* Mohammad Shadik Ansari, Prashant Rawat, Diana Caisin, Andrii Ushakov.

## 1b) Collected arguments against ... (CON)

12. **Consideration of emotions:** every human has emotions and we cannot live without it, even if she feels better with the AI she will realize it in some time and will feel even worse than before
13. **AI manipulation:** AI can change the elderly lady's whole mindset and she would not be able to look at the world as before, since AI companions can be manipulative.
14. **Inequality of Access:** Not everyone may have access to such technology, potentially widening the gap between economic groups.
15. **Privacy Risks:** AI companions could collect sensitive personal data, posing significant privacy risks if data security is compromised. Also, AI companions are in danger of being hacked which can then be used for benefitting other people.
16. **Dependency:** An elderly woman may become dependent on the AI for social interaction, reducing her ability and motivation to seek out human companionship.

17. **Potential reduction of physical activity:** Relying on AI for companionship may lead to reduced physical activity, as users may prefer virtual interactions over going out.
18. **Health Monitoring Problems:** While AI can offer some level of health monitoring, it is not a substitute for professional healthcare services.
19. **Inadequate Emergency Response:** AI companions may not be equipped to recognize and respond appropriately to medical emergencies. In the event of a sudden health crisis, such as a fall, heart attack, or stroke, the AI may fail to detect the seriousness of the situation or lack the capability to contact emergency services in time.
20. **Errors and misunderstandings:** AI assistants can misunderstand instructions which could lead to some errors or unintended actions, which could also be dangerous
21. **Lack of emotional intelligence:** AI does not fully understand human emotions and can not provide emotional support or empathy
22. **Job displacement:** People who take care of the elderly will lose their jobs as a result of the use of AI companions.
23. **Bias and discrimination:** AI companions can inherit biases in the training process which could lead to discrimination
24. **Understanding AI Intelligence:** There's a big question about how smart AI really is. It's hard to tell the difference between AI's thinking and what we consider as being alive.
25. **Taking Care of AI:** If AI can really think or feel in some way, we need to think about how we treat them. Should they have rights like humans? How do we make sure they are treated fairly?

*Members of subgroup CON:* Richard Cinkanic, Adam Stefka, Sergey Gonchar, Mariia Khromova.

## 2) GROUP DISCUSSION

### 2a) Date and place of pro/con discussion

**Date:** December 1, 2023

**Location:** Potential disadvantages of AI Companions

**Duration:** 1,5 hours

**Main Topic:** Potential disadvantages of AI Companions (mini group meeting)

**Date:** December 5, 2023

**Location:** Offline at Library, JKU.

**Duration:** 2 hours

**Main Topic:** Potential advantages of AI Companions (mini group meeting)

**Date:** December 15, 2023

**Location:** Online via Zoom Video Conference

**Duration:** 1 hour

**Main Topic:** Synthesizing and choosing the best arguments for the AI Companion idea.

**Date:** December 20, 2023

**Location:** Online via Zoom Video Conference

**Duration:** 40 minutes

**Main Topic:** Final decision on AI Companions

## 2b) Exemplary excerpt from pro/con discussion

On December 15, In our meeting, we talked about two important points: one side said AI companions might make people less physically active, but the other side said they could help people be healthier. We tried to figure out which one was more likely to happen.

The PROs group is green.

The CONs group is red.

### Physical exercises:

- ...
- Using the AI companion the elderly lady might become lazy, leading to not wanting to do exercises.
- However, the AI companion can remind the elderly lady that she needs to do some physical activity.
- Also, it can check if she does the exercises correctly and tell her if she needs to do something differently.
- But the AI companion can tell her to do exercises which may not be suitable for her and whether the AI actually knows how to do exercises safely.
- AI can be trained specifically for coaching, so it might be studied with the best and safest practices. It might also be far more observant, being able to prevent injuries in advance.
- ...

### Mental Health:

- ...
- AI does not have emotional intelligence and it can not relate to how humans feel.
- But it can act as a friend and discuss their feelings and give advice
- But AI can not be trusted 100% since it may give wrong advice.
- However it is specifically programmed to recognize human emotions and give relevant advice.
- It can make the situation worse by making her not want to go out in public thus being more disconnected.
- ...

## 2c) Final group decision

Our final answer to the question is **NO**,

Despite all the possible pros of an AI companion, it is still a “black box” and you never know what it will decide to do. AI is not able to reason and analyze the consequences of its actions.

## 3) LEARNINGS

1. The discussion was really interesting but sometimes confusing because there were complicated thoughts that were related to the main topic but not our exact case and we had to figure out what to focus on.
2. We found it easy to debate with each other on different perspectives as everyone was respectful and listened well. It made the discussion productive and enjoyable for all members.
3. We found it easy to come to mutual agreement with each other since everyone presented their points with strong arguments. The only challenge was to sort out all different ideas and opinions that we had.
4. We learned that this topic has many sides and we were surprised by how many benefits and consequences AI might be able to bring in the future.

## 4) SOURCES

1. **Your AI Companion Will Support You No Matter What.**

**Authors:** Kyle Chayka

**Publication Date:** November 13, 2023

Retrieved from

<https://www.newyorker.com/culture/infinite-scroll/your-ai-companion-will-support-you-no-matter-what>

**Summary:** This article discusses the emotional effects on users and influences people's thoughts, feelings.

2. **Breaking the Silence: How Do AI Companions Help Combat Loneliness?**

**Authors:** Kaushik Pal

**Publication Date:** June 12, 2023

Retrieved from

<https://www.techopedia.com/breaking-the-silence-how-do-ai-companions-help-combat-loneliness>

**Summary:** This paper discusses how AI companions can be used and it highlights that these companions can be useful for people feeling lonely and disconnected.

3. **AI Companionship & Mental Health**

**Author:** Kristina Robb-Dover

**Publication Date:** November 2, 2022

Retrieved from

<https://fherehab.com/learning/ai-companionship-mental-health>

**Summary:** This article discusses the benefits and downsides of AI systems, in particular their impact on mental health.

4. **Potential Benefits and Limitations of Artificial Intelligence Technology Used in Oracle-Bone Studies**

**Authors:** Yang Jin

**Publication Date:** December 7, 2023

**DOI:** [10.22554/ijtel.v7i2.136](https://dx.doi.org/10.22554/ijtel.v7i2.136)

**Summary:** This paper discusses the benefits and limitations of AI technologies in oracle-bone studies, with a focus on the role of AI in educational and scholarly contexts.

5. **Artificial Hydration at the End of Life: Balancing Benefits and Risks in the Absence of Conclusive Evidence**

**Authors:** P. Béland

**Publication Date:** September 2, 2020

**DOI:** [10.7748/ns.2020.e11595](https://dx.doi.org/10.7748/ns.2020.e11595)

**Summary:** Although focused on artificial hydration at the end of life, this article explores the decision-making process in the absence of conclusive evidence, which could be analogous to the dilemmas faced in deploying artificial companions.

6. **Innovative Personal Protective Equipment: Advantages and Disadvantages of Applying Artificial Intelligence**

**Authors:** A. Ledda, Davide Giordani, Maria Rosaria Fizzano

**Publication Date:** August 22, 2023

**DOI:** [10.54941/ahfe1004102](https://dx.doi.org/10.54941/ahfe1004102)

**Summary:** This paper examines the use of AI in personal protective equipment, which could offer insights into the broader implications of AI applications, including artificial companions.

**Applications of Artificial Intelligence in Forensic Sciences: Current Potential Benefits, Limitations, and Perspectives**

**Authors:** Nicola Galante, Rosy Cotroneo, Domenico Furci, Giorgia Lodetti, M. Casali

**Publication Date:** December 12, 2022

**DOI:** [10.1007/s00414-022-02928-5](https://dx.doi.org/10.1007/s00414-022-02928-5)

**Summary:** This paper likely discusses the applications of AI in forensic sciences, which may include aspects relevant to artificial companions, focusing on the current benefits and limitations.