

Encouraging the engagement with a social robot through creative colouring activities

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Context

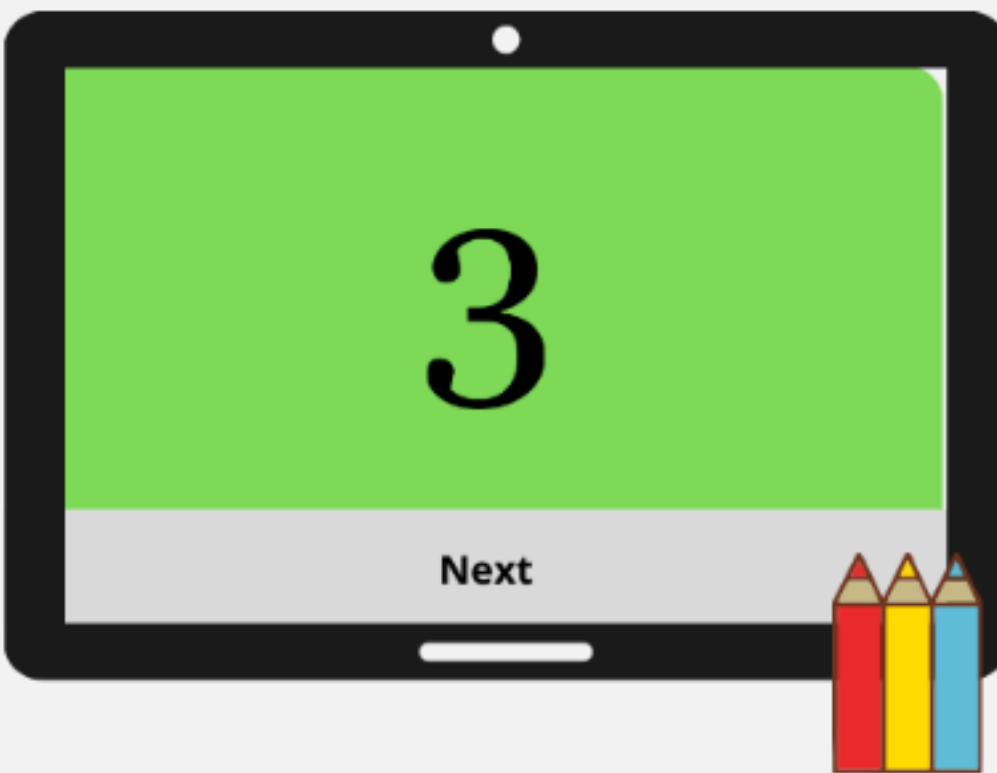
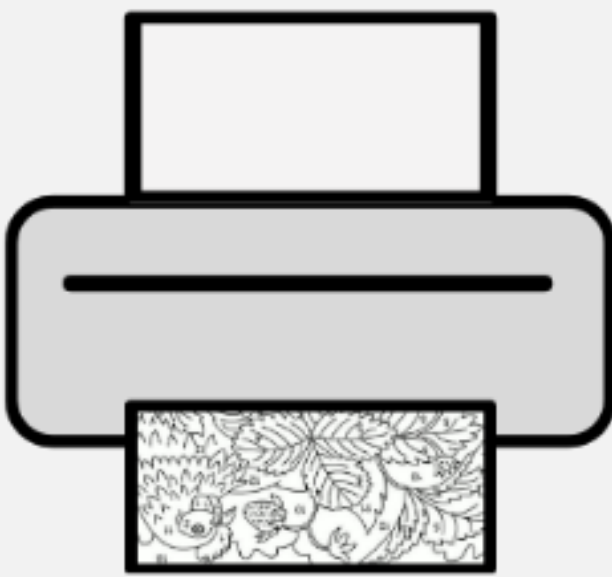
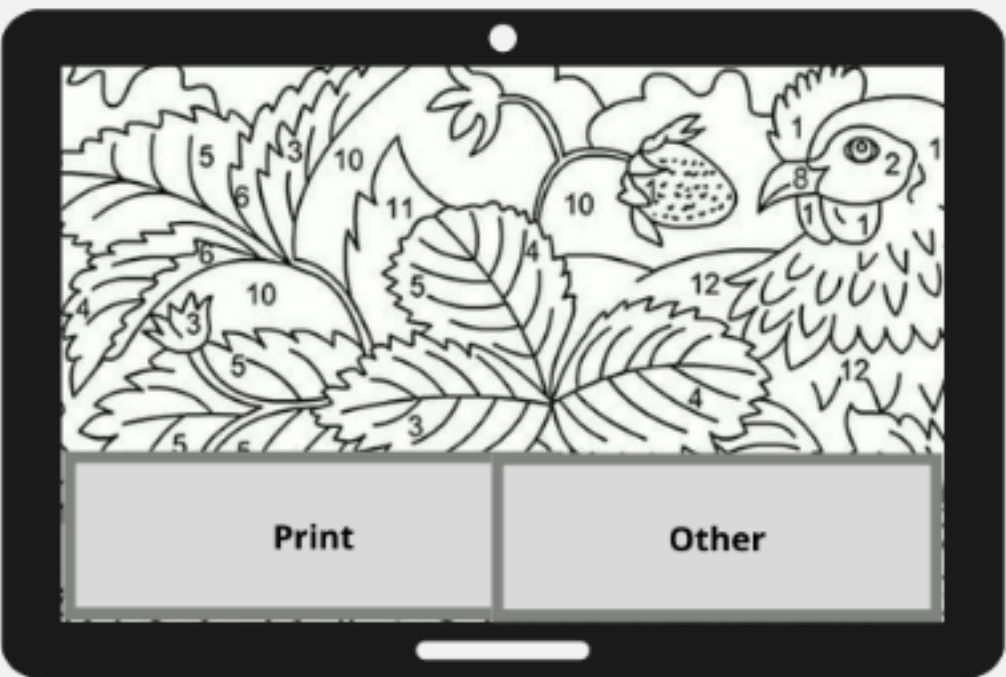
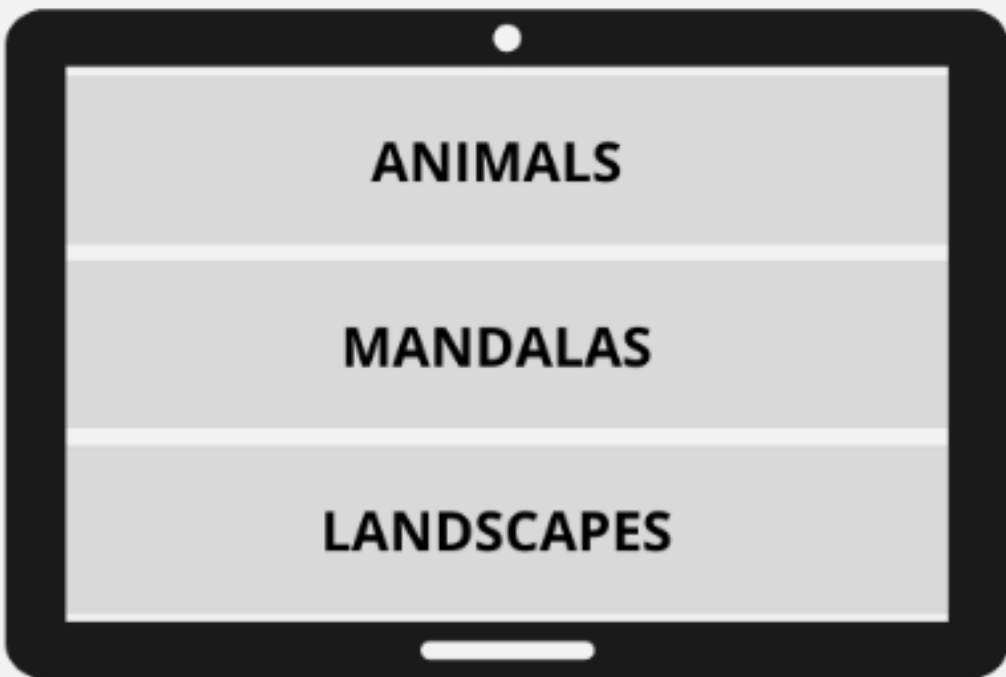
- The aging population and technological advancements pose challenges for older adults
- Social robots can help bridge the technology gap and improve the quality of life for seniors

Motivation

- Improve mental, emotional, and physical well-being through creative activities
- Increase the acceptance and frequent use of robots through enjoyable experiences

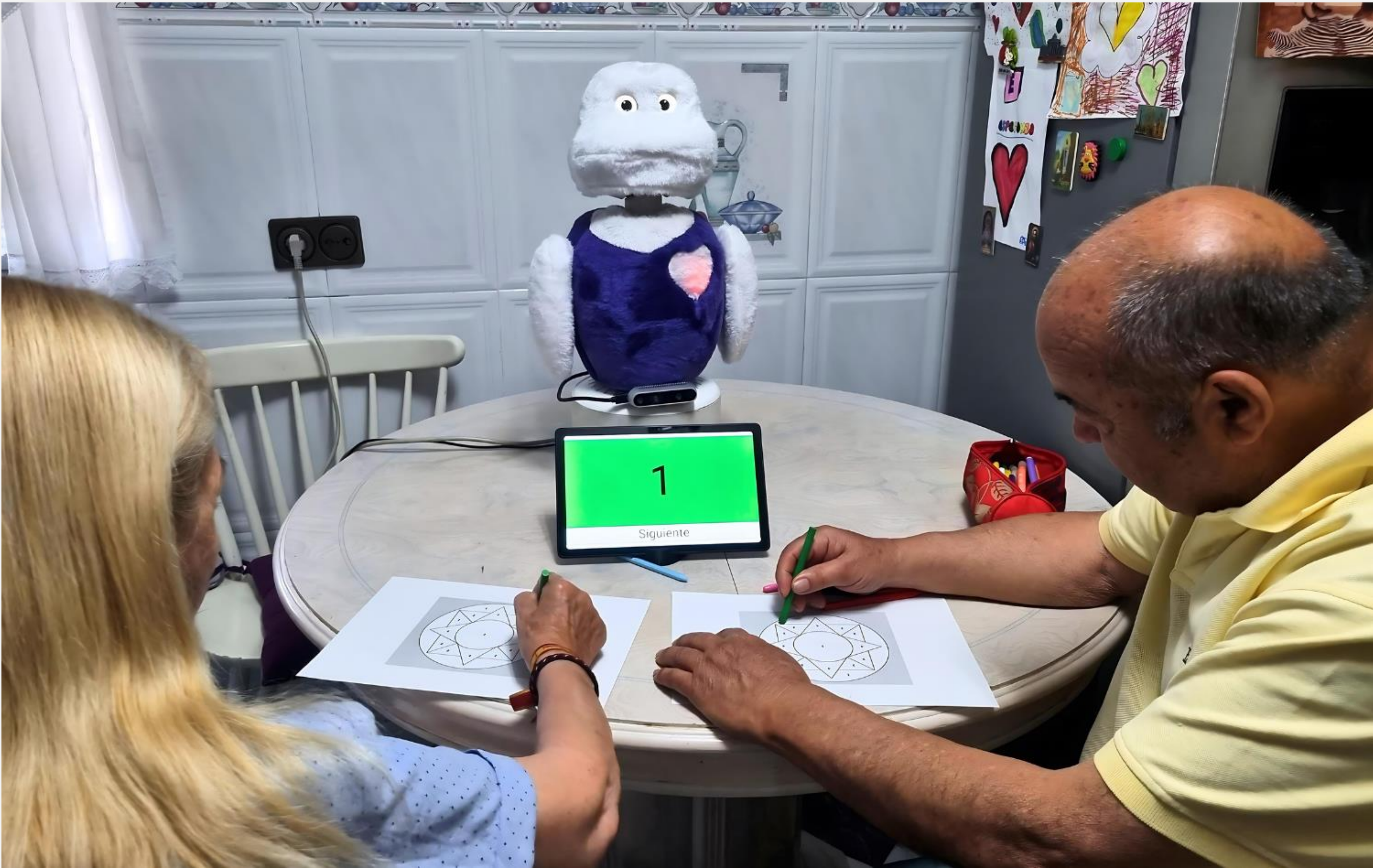
Coloring with Mini

Mini engages older adults in a guided painting activity using a color-by-number system. Each drawing is divided into numbered sections, with each number corresponding to a specific color



Procedure

1. Users select a drawing category (animals, mandalas, or landscapes)
2. Users choose the difficulty level (easy, medium, or hard)
3. Mini provides instructions by indicating which areas to color and what colors to use
4. The activity can be completed individually or in groups



Engagement Strategies

- Complexity of the drawings and progressive difficulty - Flow in the game
- Voice and Tablet Interaction
- Participation in groups or individually
- Variable Rewards

Case Use

- Session of 45 minutes with Mini
- Two seniors (ages 74 and 76) participated
- Collecting data through a survey
- Results showed that the activity led to enhanced emotional well-being, high levels of satisfaction, and improved interaction between users and the robot

Conclusion

- Enhancing emotional well-being through engagement with Mini
- First approach to the concept of art therapy with Mini

Acknowledgements

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