Design for Togetherness at Home:

Integrating Technology to Bond Children and Grandparents Through Shared Experiences
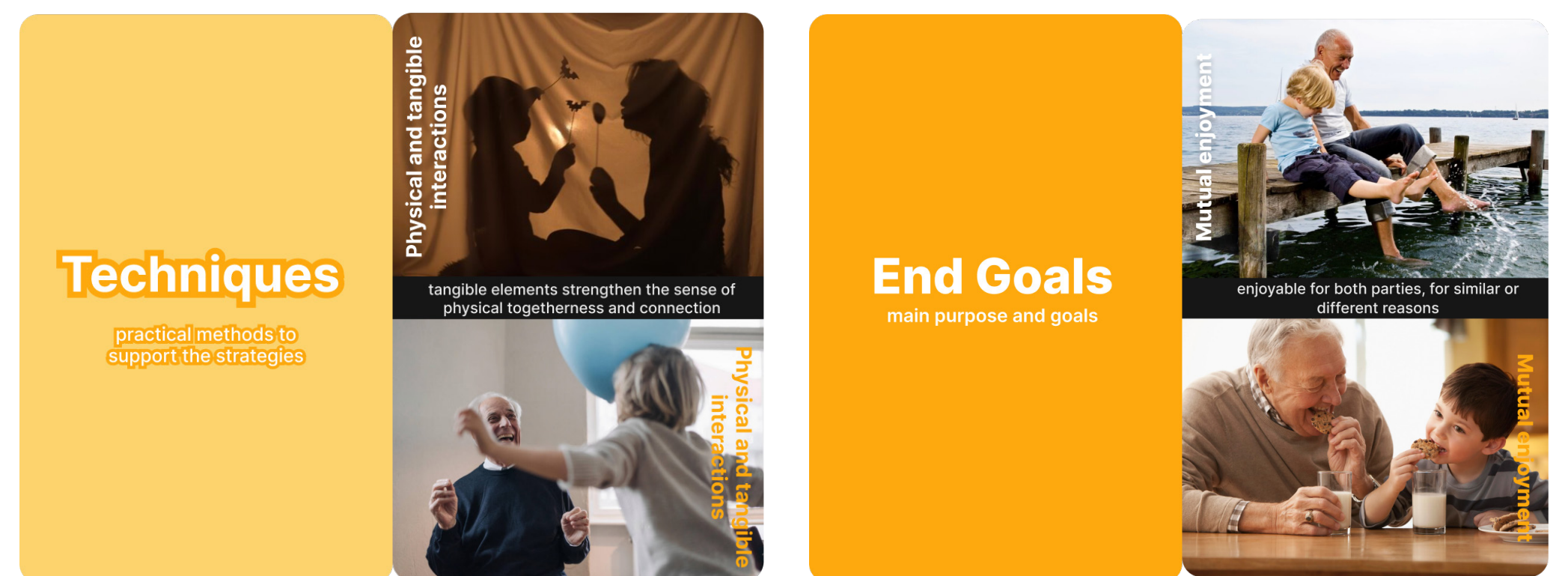
Introduction

Strong intergenerational relationships can provide emotional support and stability for both grandparents and grandchildren. Technology tools have been proven to be beneficial in connecting grandchildren and grandparents. Prior work mainly examined how to use technology to connect children and their grandparents over a distance. Those collocated grandparents and grandchildren who keep regular physical contact are often neglected in the research. It is essential to understand technology's potential in bonding them in physical meet ups considering the trending of multigenerational families.

Project Focus

This graduation project aims to foster connectedness between children aged 8 to 12 and their collocated grandparents in the Netherlands through physical interactions. Adopting a holistic approach, we explored moments of togetherness, identifying desired qualities of these interactions and defining promising shared experiences for the future.

Conducted in three empirical phases, the research begins by examining how technology could positively impact their bond. Using participatory cards during interviews, this phase captures participants' perspectives, identified key elements in shared activities that promote or impede intergenerational connectivity. This analysis informs a framework to guide the development of technology aimed at supporting connectivity. Eight design concepts were developed, which are then visualized through storyboards by generative AI. The final phase involves evaluating these concepts by presenting the storyboards to both experts and child-grandparent pairs. This step is intended to refine our understanding of how these technological solutions can be leveraged to strengthen family bonds.

End goals - *main purpose and goals*
Engagement, Mutual enjoyment, Positive experience.

Strategies - *strategies to fulfill the end goals*
Exploration, Education and learning, Support, Collaboration, Habituality.

Techniques - *practical methods to support the strategies*
Attention and affection, Fairness in competition, Genuine achievement, Manifestation of talents/skills, Laughing and humor, Physical and tangible interactions, Justified challenge

Prerequisite - *essential conditions for generations to involve in*
inclusivity and low threshold of participation.

design guidelines for crafting shared experiences for generational bonding

Techniques
practical methods to support the strategies

Physical and tangible interactions
tangible elements strengthen the sense of physical togetherness and connection

End Goals
main purpose and goals

Mutual enjoyment
enjoyable for both parties, for similar or different reasons

turn your dreams and stories into cotton candy

last time, we went to surfing...

grandmother telling her personal stories and experiences to the girl and cotton candy starts growing according to the story.

The color and flavor of the cotton candy change based on the mood or elements of the story.

The cotton candy grows larger because they shared more story. New color and flavor are added to it.

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