

# Future You: A Digital Twin AI for Supporting Mental Health and Personal Growth

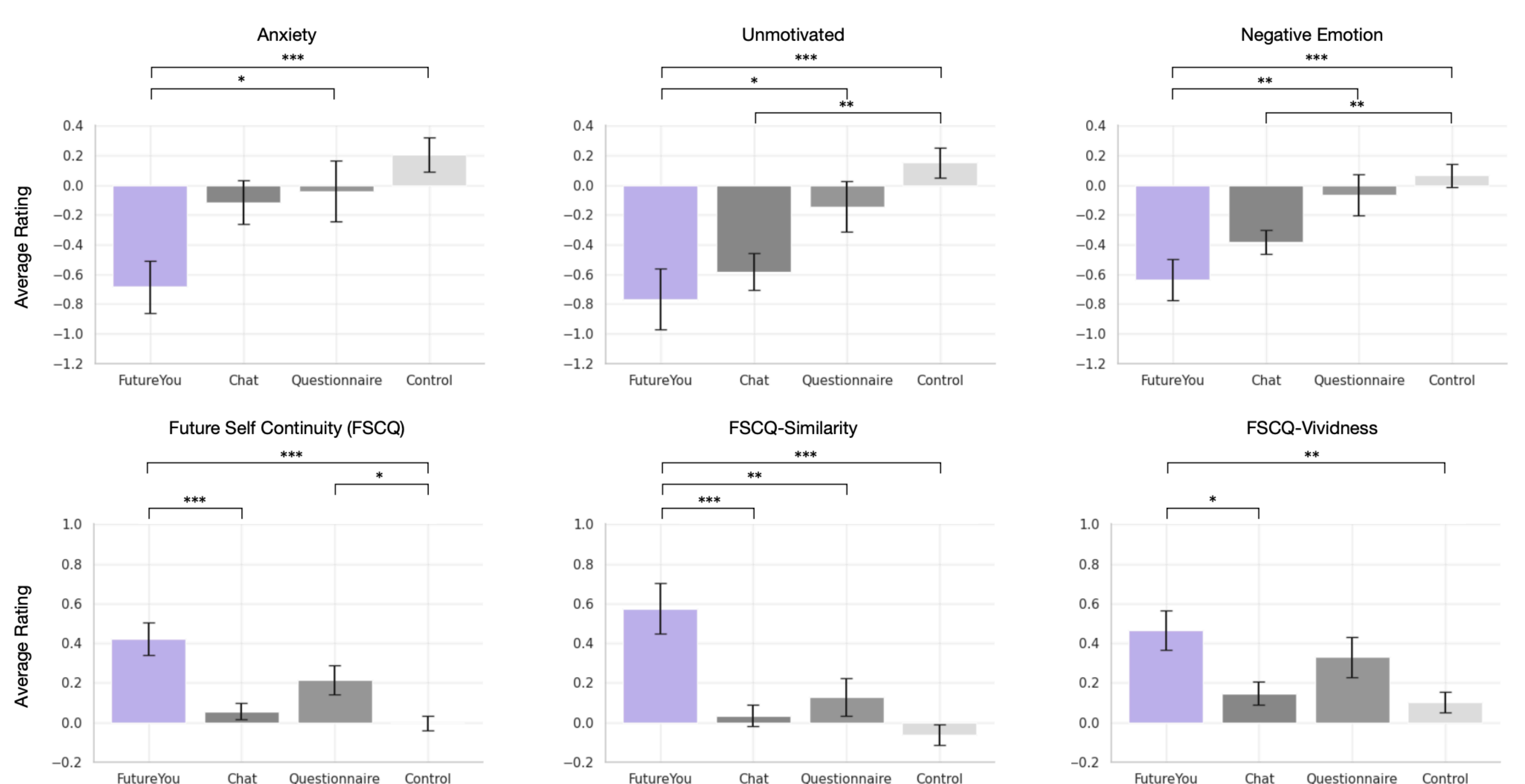
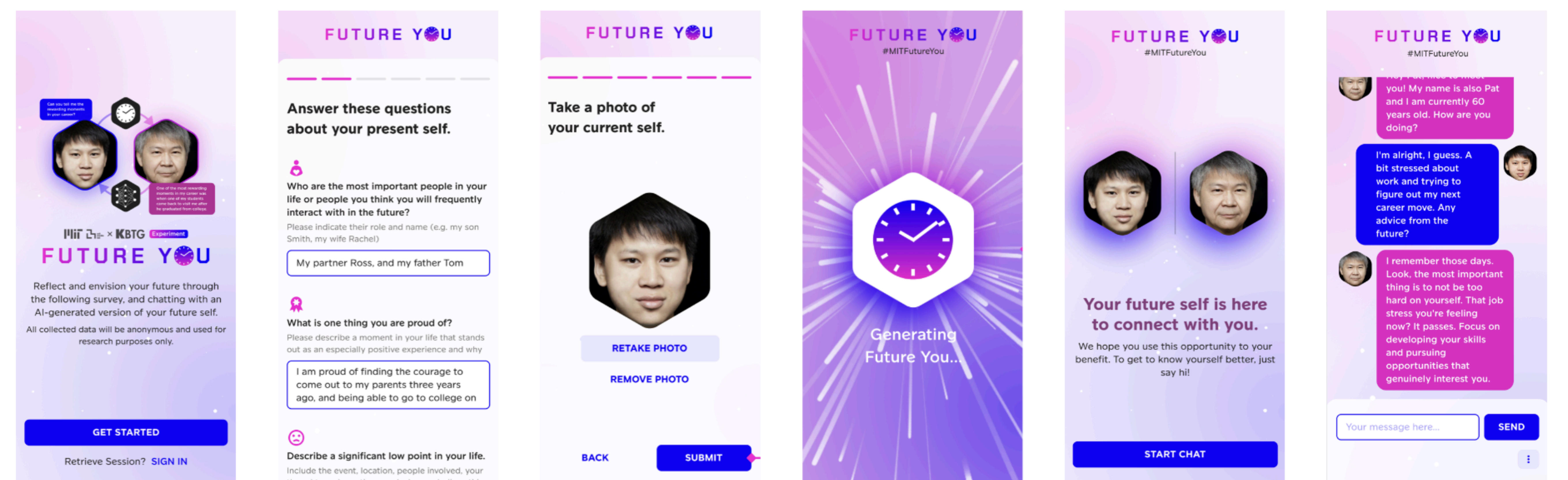
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## Background/Introduction

Future self-continuity - the degree of connection one feels with their future self - promotes better saving behavior, academic performance, mental health, and quality of life. Current interventions helping people connect with their future selves use methods like letter writing, method acting, and virtual reality simulations. However, these approaches often require specialized equipment or training, making them inaccessible to many people. The "Future You" system offers an innovative, accessible alternative using AI-generated conversations.

## Objectives

To develop and evaluate an interactive, web-based intervention that allows users to chat with an AI-generated version of their future self, aiming to improve future self-continuity and reduce anxiety through natural conversation rather than embodiment exercises.



## Results/Major Findings

The Future You intervention produced significant improvements across multiple measures:

- 18% reduction in anxiety compared to control condition
- 16% reduction in feeling unmotivated compared to control condition
- 15% stronger overall connection with future self

The intervention was particularly effective at improving future self similarity and vividness scores, though future-oriented behavioral variables like agency, optimism, and future consideration were not significantly impacted.

## Methodology

The study involved 344 participants aged 18-30 who were randomly assigned to four conditions: Future You (experimental), Control, Chat (generic chatbot), and Questionnaire. The Future You system combines age-progressed AI imagery, personalized "future memories," and natural language processing to create realistic conversations between users and their future selves. Participants completed pre- and post-intervention psychological assessments measuring emotions, future self-continuity, and other variables.

## Results/Major Findings

The Future You intervention successfully demonstrates that brief interactions with an AI-generated future self can reduce anxiety and increase future self-continuity. The study shows promise for using AI-powered conversational agents to help people build stronger connections with their future selves in an accessible, scalable format.

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