

: Incorporating AI in mental health Mobile app development & empirical study of AI perceptions

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Project Goals

1. To improve users' mental well-being & integrating daily acts of self-care
2. To create an intuitive UI/UX encouraging users to engage with the *Buddy* mobile app regularly
3. To integrate The Gemini Large Language Model API through a chatbot companion: *Sofia*
4. To conduct an empirical study investigating the perceptions of AI

Research questions

1. Is familiarity with LLM correlated with perceptions incorporating AI in the mental health field?
2. Is familiarity with any sort of AI technology correlated with perceptions of incorporating AI in the mental health field?

Methods

Quantitative survey made on Qualtrics distributed through CloudResearch

Participants & Design:

87 adults from the United States, average age: 37.21
"MyAI" vs "Sofia" framing manipulation

Materials & Procedure:

We measured:

- Familiarity with technology
- Perceptions of AI in mental health
- Personality (Openness to experience)
- Demographics

Mediation analysis

The overall mediation model was statistically significant between openness/ familiarity and positive perception of AI ($\beta = .49, p < .001$)

- Openness was a mediating variable between familiarity with AI and positive perception ($\beta = .09, p = .39$)
- Familiarity with AI was not, as the model stayed significant when controlling this variable ($\beta = .47, p < .001$)

Moderation analysis





- Chatbot name: myAI vs Sofia had no moderating effect ($\beta = .10, p = .85$)

Correlation Results

Table 6.4: Bivariate Correlations Between Main Study Variables

	1	2	3	4	5	6
1. Familiarity:AI	—					
2. Familiarity:LLM	.54**	—				
3. Openness_score	.28**	.09	—			
4. PositivePerception	.22*	.18*	.22**	—		
5. NegativePerception	-.12	-.10	-.10	-.10	—	
6. Age	-.01	-.01	-.01	-.01	-.01	—

Initial Hypotheses:

1. Familiarity with AI will be positively associated with positive perceptions of AI. 
2. Familiarity with LLMs will be positively associated with positive perceptions of AI. 
3. Age will be negatively correlated with the positive perception of AI subscale. 
4. Openness will be positively associated with both positive perceptions of AI. 

Fields of study: Mobile App development

- Prompt engineering: instructing a model
- Generative AI
- Accessing an LLM
- User Interface/ User Experience design