

Personality Predictors of Attitudes Toward Artificial Intelligence: A Replication Study in U.S. Undergraduates



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Background

- AI use is ubiquitous
- Positive attitudes toward AI are associated with several positive outcomes, including improved psychological availability, decreased work alienation, and increased self-reported creative autonomy (Sáez-Velasco et al., 2025; Liu & Li, 2025).
- However, positive attitudes towards AI are also associated with over-reliance on AI and skill loss (Arce et al., 2025; El Tarhouny & Farghaly, 2026).
- Because attitudes towards AI predict positive and negative outcomes, it is important to identify predictors of attitudes towards AI.
- Stein et al. (2024), found agreeableness was the only personality factor that predicted positive attitudes towards AI in German university students.
- The current study aimed to investigate if the big five personality factors predict AI attitudes among U.S. college students.

Method

Participants

- 89 Introductory Psychology students

Measures

- **Demographics** - Age in years, gender, ethnicity, and year in college.
- **Ten-Item Personality Inventory** - Measures the Big Five personality traits: openness, conscientiousness, extraversion, agreeableness, and neuroticism. Higher scores on a given subscale are more accurately described by the corresponding personality trait.
- **Attitudes Towards Artificial Intelligence Scale (ATTARI-12)** - Measures attitudes toward AI. Higher scores indicate positive attitudes towards AI.

Procedure

- **Recruitment** - Undergraduate introduction to psychology students were recruited via the Department's SONA system.
- **Data Collection** - Participants completed the online study and measures via Qualtrics after providing informed consent.
- **Compensation** - Participants received class credit upon debriefing and completion of the study.

Results

Multiple Regression Analysis

- A multiple regression analysis was performed to examine whether openness, conscientiousness, extraversion, agreeableness, and neuroticism predicted positive attitudes towards AI.
- The model explained 8% of the variance in positive attitudes towards AI ($R^2 = 0.08$, $F(5, 82) = 2.47$, $p = .04$).
- Openness negatively predicted attitudes towards AI ($\beta = -3.01$, $p = 0.01$).

Discussion

Findings

- Openness negatively predicted positive attitudes towards AI.
 - Individuals higher in openness may approach AI with greater skepticism due to perceived threats to creativity or authenticity
- We did not replicate Stein et al.'s (2024) findings that only agreeableness predicted positive attitudes towards AI.

Future Research

- Acquire larger and more diverse samples.
- Examine the underlying mechanisms linking openness to AI attitudes.
- Explore domain-specific AI use.

Higher levels of openness predicts lower positive attitudes towards AI



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