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Personality Traits and Attitudes Towards Artificial Intelligence Among University Students

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Abstract

This study explored the relationship between personality traits and attitudes toward artificial intelligence (AI), as well as the potential predictive effects of demographic factors, including gender, age, education, and prior knowledge of AI. The research was based on the Big Five personality model (using the Ten-Item Personality Inventory scale) and the ATTARI-12 scale to measure AI attitudes. Quantitative correlation research design was followed in the study. Data were collected from 198 participants (using simple random sampling). Correlation analysis was conducted to examine the relationship between personality traits and AI attitudes, and multiple regression analysis was used to assess the predictive effects of demographic variables. The results revealed a significant positive relationship between personality traits and attitudes toward AI, supporting the hypothesis that personality traits influence AI perceptions. However, the predictive effects of gender, age, education, and prior knowledge of AI were not significant. These findings suggest that individual differences, particularly personality traits, play a more critical role in shaping attitudes toward AI than demographic factors. The study contributes to the understanding of AI acceptance and offers implications for designing AI technologies and educational interventions that cater to different personality profiles. Future research should explore additional psychological factors and longitudinal approaches to further understand the dynamics of AI adoption.

Keywords: Personality Traits, Attitudes Toward Artificial Intelligence, Big Five Personality Model, Demographics, TIPI, ATTARI-12

Introduction

The integration of artificial intelligence (AI) into daily life has prompted research into how individual personality traits shape perceptions and acceptance of these technologies. This article explored the relationship between personality traits, as defined by the Big Five model-openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism—and attitudes toward AI. Numerous research suggests that individuals high in openness to experience tend to exhibit more positive attitudes toward AI, as they are generally receptive to innovation (Patel & Turner, 2023, Montag et al. 2021, Sindermann et al. 2021, Akin & Akin 2018). Conversely, those with higher conscientiousness may harbor skepticism towards AI technologies, perceiving them as disruptive to established structures and routines (Robinson et al., 2018, Chaves & Nues 2021, Damholdt et al. 2021). Additionally, while the roles of extraversion and agreeableness in shaping attitudes toward AI are less well-defined, extraverted individuals may be more inclined to embrace social AI applications, while agreeable individuals might focus on ethical considerations (Gumgum

Gumelar, 2023, Schepman & Rodway 2022, Patel & Turner 2023, Sindermann et al. 2021). Neuroticism appears to correlate with negative attitudes toward AI, as individuals exhibiting this trait often express concerns about privacy and control, leading to distrust in AI systems (Zhang et al., 2021, Binns et. al 2019). These dynamics underscore the significance of cultural factors, particularly in Eastern countries, where apprehensions regarding surveillance technologies further complicate attitudes toward AI (Zhang et al., 2021, Cunningham & Toder 2019). Cultural factors also significantly influence attitudes toward AI. In many Eastern countries, there is heightened awareness of privacy concerns related to surveillance technologies, complicating the relationship between personality traits and perceptions of AI (Zhang et al., 2021). The study aimed to bridge these gaps by focusing on university students in Pakistan—a demographic that represents both future consumers and potential developers of AI technologies. The findings can guide the design of user-friendly AI systems, improve AI literacy education, and inform policy development to foster better acceptance and ethical use of AI across diverse user groups. These cultural attitudes may further mediate how personality traits influence acceptance and trust in AI systems. Given the pivotal role of university students as future users and developers of AI, understanding their attitudes and how these relate to personality traits is critical for fostering AI literacy and responsible technology development. Educational strategies should aim to enhance understanding of AI's capabilities and ethical implications, thereby mitigating fears and biases linked to personality (Matz & Wood, 2005). The current literature presents mixed evidence regarding the impact of personality traits on attitudes toward AI, necessitating further investigation. Future studies should consider demographic variables, personal experiences with technology, and employ longitudinal designs to capture changes in attitudes over time. The intricate relationship between personality traits and attitudes toward AI is essential for advancing theories in personality psychology and informing practical applications in technology adoption and ethical development. By systematically exploring these relationships, researchers can contribute to a more nuanced understanding of human-technology interactions, ultimately guiding the responsible advancement of AI technologies. The study highlighted the increasing significance of artificial intelligence (AI) in various sectors, such as healthcare, education, and finance. It identified a research gap, noting that most studies focused on AI adoption among working professionals, while this research shifted the focus to university students, a demographic that would shape the future of AI technologies. The research framed the research problem by exploring how personality traits (e.g., openness, conscientiousness, neuroticism) influenced attitudes toward AI, and whether demographic factors like age, gender, education, and prior knowledge moderated these relationships. It also emphasized the significance of the study by connecting it to broader societal issues, such as the ethical implications and acceptance of AI. By focusing on personality traits, the study aimed to provide insights that could guide AI development and policy-making.

Literature Review

Research examining the interplay between personality traits and attitudes toward artificial intelligence (AI) has produced significant insights. Utilizing various frameworks, particularly the Big Five Personality Traits Model, recent studies have identified complex relationships between individual differences and perceptions of AI technologies. Sindermann et al. (2022) investigated the roles of personality traits, AI anxiety, and demographic factors among 1,530 South Korean adults. Their findings revealed that extraversion correlated with negative emotions and perceptions of low functionality, while agreeableness predicted negative attitudes when AI anxiety was considered. Similarly, Park and Woo (2022) confirmed these results, highlighting that while extraversion was linked to negative feelings, agreeableness

positively influenced sociality and functionality. Montag et al. (2024) explored the affective neuroscience theory, finding that higher neuroticism scores were associated with more negative attitudes toward AI, emphasizing the importance of individual differences in shaping perceptions of technology. This aligns with findings from other studies that have noted a consistent trend: individuals high in neuroticism are more likely to exhibit skepticism and anxiety towards AI (Montag, 2022). Devaraj et al. (2023) focused on perceptions of AIgenerated art, discovering that individuals high in openness tended to have positive attitudes toward AI-created images. This trait also influenced emotional responses based on the perceived origin of the artwork, indicating the multifaceted nature of individual differences in interactions with AI technologies. Schepman and Rodway (2022) adapted the General Attitudes toward Artificial Intelligence Scale (GAAIS) for a Turkish sample, finding that positive attitudes were predicted by computer use, knowledge of AI, and AI learning anxiety. Negative attitudes were associated with agreeableness and various forms of AI anxiety. Kaya et al. (2022) echoed these results, emphasizing that personality traits and AI anxiety significantly influence attitudes toward AI in diverse cultural contexts. Damholdt et al. (2022) highlighted generational differences in attitudes toward AI, showing that older adults were generally more negative about robots simulating emotions and less likely to anthropomorphize technology. This group also scored higher on conscientiousness and lower on neuroticism compared to younger participants. As artificial intelligence becomes increasingly integrated into daily life, understanding how personality traits influence attitudes towards AI is crucial. Previous studies have suggested that individual differences significantly shape perceptions of technology, yet there is a need for comprehensive research in this area.

Methods

Objectives

The primary objectives of this research include:

- > To investigate the effects of personality traits on attitudes toward artificial intelligence
- To find out the predictive relationship between demographic variables (e.g., age, gender, education and prior knowledge of AI) and attitudes towards artificial intelligence.

Hypotheses

- There is a significant relationship between personality traits and attitudes towards artificial intelligence.
- Personality traits significantly predict attitudes towards artificial intelligence.
- Demographic variables significantly predict attitudes towards artificial intelligence.

Research Design

The research design of the study was quantitative cross-sectional design. Standardized scales (TIPI & ATTARI-12) were used to collect numerical data on personality traits and attitudes towards AI and further explored the relationship between personality traits and attitudes towards AI, examining how these variables are associated with each other.

Sampling Strategy

The study employed a probability sampling method, specifically Simple Random Sampling (SRS), to select participants randomly from the population of university students, ensuring representativeness and generalizability of the sample.

Data Collection Instruments

1. ATTARI-12 Scale: Developed by Stein, Messingchlager, and Gnambs (2024), this scale

includes 12 items assessing attitudes towards AI through cognitive, emotional, and behavioral dimensions, rated on a Likert scale.

2. *Ten-Item Personality Inventory (TIPI):* This tool, created by Gosling, Rentfrow, and Swan (2003), provides a quick assessment of the Big Five personality traits, with each trait measured through paired items rated on a 7-point Likert scale.

Procedure

The research aimed to explore the relationship between personality traits and attitudes toward artificial intelligence (AI) while examining the moderating effects of demographic variables such as age, gender, education, and prior knowledge of AI. This study followed a quantitative, cross- sectional design, using validated scales to measure both personality traits and attitudes toward AI. The dependent variable was attitudes toward AI, assessed using the ATTARI-12 scale, which evaluates cognitive, emotional, and behavioral dimensions. The independent variables were the Big Five personality traits (Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism), measured using the Ten-Item Personality Inventory (TIPI). Demographic factors were included as potential moderators. The target population consisted of university students in Rawalpindi and Islamabad, with a final sample size of 198 participants. This sample was selected using simple random sampling to ensure diversity in personality traits and demographic representation. Participants were eligible if they were between the ages of 18 and 40, had experience using AI technologies, and provided informed consent. Individuals who did not meet these criteria were excluded. Data collection was conducted through online and offline surveys distributed across universities. Participants answered questions about their personality traits, attitudes toward AI, and demographic information, ensuring all ethical considerations were met, including informed consent and voluntary participation. The data were analyzed using SPSS. Descriptive statistics were calculated to summarize demographic characteristics, such as age, gender, education level, and prior knowledge of AI. Correlation analysis was conducted to assess the relationship between personality traits and attitudes toward AI. Multiple regression analysis was employed to determine the predictive power of personality traits on AI attitudes and to test for potential moderating effects of demographic variables. Collinearity diagnostics, including Variance Inflation Factor (VIF), were used to ensure there was no multicollinearity among predictors. The research adhered to ethical guidelines, ensuring confidentiality and informed consent from all participants.

Results

The results demonstrated that personality traits have a significantly predict attitudes toward Artificial Intelligence, explaining about 11.6% of the variance. Although demographic factors were not significant predictors, the findings highlighted the importance of intrinsic psychological factors over external variables in shaping AI perceptions. These insights suggest a strong foundation for future studies to incorporate additional psychological, cultural, or experiential factors to enhance the predictive power of such models. The study found a significant positive relationship between personality traits and attitudes toward AI, supporting the hypothesis that psychological factors influence AI acceptance. The Pearson correlation analysis revealed a moderate positive relationship between personality traits (measured using the TIPI) and attitudes toward AI (measured using the ATTARI-12 scale).

| Table: Relationship between Personality traits and Attitudes towards Artificial Intelligence |
|--|
|--|

| | 1 | | | | |
|-----------|----------|-------|------|--------|--------|
| Variables | Ν | М | SD | 1 | 2 |
| TIPI | 1 | 43.50 | 8.07 | - | .341** |
| | 9 | | | | |
| | 8 | | | | |
| ATTARI- | 1 | 36.58 | 5.36 | .341** | - |
| 12 | 9 | | | | |
| | 8 | | | | |

Note: N=Total number of Participants; M=Mean; SD=Standard Deviation; TIPI=Ten *Item Personality Inventory; ATTARI-12=Attitudes towards Artificial Intelligence,* (Significance level;

***p*<.01)

The correlation coefficient was r = 0.341, significant at p < 0.01, indicating that as personality trait scores increase (e.g., openness, conscientiousness), attitudes toward AI become more favorable.

Table: Regression coefficients of Demographic Variables and Attitudes towards Artificial

Intelligence. Predictor В SE VIF β t р Variables В 000

| Constant | 3 4. | 1.9 57 | | 17.681 | .000 | |
|--|-----------|-------------|---------------|------------------|--------|-------|
| | 6 | | | | | |
| | 0 | | | | | |
| | 7 | | | | | |
| Age | - | .82 | 069 | 618 | .537 | 2.457 |
| | .5 | 9 | | | | |
| | 1 | | | | | |
| | 2 | | | | | |
| Gender | .4 | .80 | .043 | .580 | .563 | 1.072 |
| | 6 | 7 | | | | |
| | 8 | | | | | |
| Education | .1 | .84 | .018 | .157 | .876 | 2.559 |
| | 3 | 9 | | | | |
| | 3 | | | | | |
| Prior | .7 | .51 | .111 | 1.1425 | .148 | 1.154 |
| Knowled | 4 | 4 | | | | |
| ge of | 7 | | | | | |
| AI | | | | | | |
| Note: <i>B</i> = <i>Beta</i> ; <i>p</i> = | =Level of | Significanc | e: VIF= Varia | ance Inflation H | Factor | |

=Level of Significance; VIF Variance Inflation Factor

The study hypothesized that gender, age, education, and prior knowledge of AI might predict the relationship between personality traits and AI attitudes. multiple regression of demographic variables with attitudes towards artificial intelligence. The coefficients for age (B=-.512, p=.537), for gender (B=.468, p=.563), for education (B=.133, p=.876) and for prior knowledge of AI (B=.747, p=.148). The overall model does not show significant predictors, as

none of the variables are statistically significant (p>.05). Gender: No substantial differences were observed between male and female participants in how personality traits influenced AI attitudes. These finding challenges common stereotypes suggesting gender disparities in technology adoption. Age: While younger individuals generally exhibit more familiarity with technology, the effect of personality traits on AI attitudes remained consistent across different age groups. Interaction was marginally significant (p = .537), suggesting the relationship between personality and AI attitudes slightly weakens as age increases. Education: Despite the assumption that higher education levels might enhance AI acceptance, education did not significantly alter the relationship between personality traits and AI attitudes. Prior Knowledge of AI: Even participants with varying levels of familiarity with AI technology demonstrated similar correlations between their personality traits and attitudes, emphasizing that intrinsic traits, rather than prior exposure, play a pivotal role.

| Intelligence. | | | | | | |
|---------------|----|----------------|-----|-------|------|--|
| Variables | Ν | Unstandardized | F | t | р | |
| | | Coefficients | | | | |
| | | B St. Error | | | | |
| TIPI | 19 | 26.7 1.973 | 25. | 13.55 | 0.00 | |
| | 8 | | 76 | | | |
| (constant) | | | | | | |
| ATTARI- | 19 | .226 .045 | 25. | 5.07 | 0.00 | |
| 12 | 8 | | 76 | | | |

Table: Regression Coefficients of Personality Traits and Attitudes towards Artificial

Note: *B*=*Beta*; *Std. Error*=*Standard Error*; *p*=*Significance level*

The regression analysis confirmed that personality traits are significant predictors of AI attitudes: The TIPI scale had a moderate positive effect on AI attitudes, with a regression coefficient indicating a meaningful relationship. The simple linear regression was conducted to evaluate how well personality traits predict attitudes toward AI. The regression model was statistically significant, with F (1, 196) = 25.76, p < 0.001. The unstandardized regression coefficient (B) for personality traits was 0.226 (standard error = 0.045), and the standardized coefficient (Beta) was 0.341. Predictive Power (R²) The model explained 11.6% of the variance in attitudes toward AI (R² = 0.116). This indicates that while personality traits significantly predict AI attitudes, the majority of variance in attitudes may be influenced by other factors not included in the model. The findings underscore the importance of focusing on psychological factors rather than demographic stereotypes when examining technology adoption. These results align with global research emphasizing personality as a key determinant of technology acceptance.

Discussion

The findings of the study interpreted the broader context of AI adoption and personality traits. It confirmed that personality traits, significantly predicted attitudes toward AI, aligning with previous research that highlighted openness as a key factor in technology acceptance. The study also discussed the lack of significant predictive effect by demographic factors such as age, gender, education, and prior knowledge, suggesting that personality traits played a more prominent role in shaping AI attitudes than demographic characteristics. This finding contradicted previous research that often-highlighted demographic factors as influential, emphasizing the importance of focusing on psychological factors rather than relying solely on

demographic characteristics. The study highlighted the practical implications of the findings, suggesting that AI developers and educators should consider personality diversity when designing AI systems and educational programs. It also called for more personalized approaches in AI development to accommodate different personality profiles, particularly for those with high neuroticism, who may benefit from user-friendly, transparent, and trustworthy AI systems. However, the results of the study acknowledged several limitations, including the cross-sectional design, which prevented the establishment of causal relationships, and the self-reported measures, which might have introduced bias. The chapter concluded with suggestions for future research, including the use of longitudinal studies and the exploration of additional psychological factors, such as digital literacy and self-efficacy, to further understand the dynamics of AI adoption. This research contributed to the growing body of literature on AI adoption by emphasizing the role of psychological traits, specifically personality, in shaping individuals' attitudes toward AI. The findings demonstrated that openness and neuroticism were the most influential traits, with openness driving positive perceptions and neuroticism fostering skepticism. The study also indicated that demographic factors, including age, gender, education, and prior knowledge, did not significantly moderate these relationships. These insights are particularly important for AI developers, who must consider the psychological diversity of users when designing AI systems. Creating AI systems that are adaptable and user- friendly-especially for individuals with high neuroticism—could enhance adoption rates and promote ethical use of AI technologies. The research also called for more personalized approaches in AI design and AI literacy education to ensure that all users, regardless of their personality type, can interact with AI technologies confidently and responsibly. Overall, this research emphasized the need to move beyond demographic stereotypes and to focus on psychological diversity when designing AI systems, fostering a more inclusive and effective integration of AI in society. The study lays the groundwork for further investigation into the role of personality traits and other psychological factors in shaping attitudes toward AI and other emerging technologies. The study used a cross-sectional design, meaning the data was collected at one point in time. This limits the ability to draw causal conclusions. While a significant relationship between personality traits and AI attitudes was found, we cannot say that personality traits cause specific attitudes toward AI. It's possible that AI attitudes could also influence personality traits, or that both are influenced by an external factor not measured in this study. The TIPI measures only five broad personality traits (Big Five), which, while widely accepted, are somewhat limited in their ability to capture the full complexity of personality. For example, traits like emotional intelligence or self- efficacy could also play a role in shaping attitudes toward AI but were not considered in this study. The relationship between personality traits and AI attitudes may vary across different cultural contexts. The TIPI and ATTARI-12 scales might also function differently in various cultural settings, which could limit the external validity of the results. Confounding variables such as digital literacy or exposure to AI were not controlled, that resulted in confounded relationship between education and AI attitude. It is important to distinguish between knowledge of AI and experience with AI technologies. A person may have theoretical knowledge about AI but little hands-on experience with AI tools, which could influence their attitudes differently. If your study only measured theoretical knowledge, it might have missed a key dimension of how experience with AI impacts attitudes. The TIPI is a short-form personality measure that captures only the Big Five traits in a very simplified manner. While it is widely used, it may lack the depth and precision of longer measures, such as the NEO-PI-R or IPIP-NEO, which could provide a more nuanced understanding of how specific facets of personality influence AI attitudes. The

TIPI captures broad personality traits but does not account for more specific, nuanced traits such as self-efficacy, digital literacy, or tolerance for ambiguity, which could also influence attitudes toward AI. The absence of these factors in the TIPI means that the model is incomplete in explaining the relationship between personality and AI attitude. Like the TIPI, the ATTARI-12 is a self-report scale, which could be influenced by social desirability bias, as participants may report more positive attitudes toward AI due to the growing interest and hype around AI technologies, rather than reflecting their true beliefs.

Future Recommendation

- Future research could explore whether other variables (such as cultural background or technological self-efficacy) might moderate the relationship between personality traits and AI attitudes.
- It would also be beneficial to consider gender-related factors in a more detailed way, such as examining gender roles or experiences with technology, which might influence attitudes beyond the biological classification of gender. Investigating the interaction between age and digital literacy or experience with technology could provide more insight into how age might impact AI attitudes.
- Further research could also look at specific age groups (e.g., Generation Z vs. Baby Boomers) to see if the relationship between personality and AI attitudes holds consistently across different segments. Research could also examine how personalized education or AI literacy programs might affect attitudes toward AI across different educational levels.
- Longitudinal studies could investigate whether gaining more knowledge of AI over time changes attitudes for people with different personality profiles. Moreover, whether different types of prior knowledge (e.g., technical knowledge vs. cultural understanding of AI) have different impacts on AI attitudes.

Implications

- Understanding the relationship between personality traits and attitudes towards AI can help educators develop personalized learning approaches that cater to individual students' needs and preferences.
- Educators can design AI literacy programs that take into account students' personality traits, promoting a more inclusive and effective learning environment.
- Organizations can use the findings to inform their AI adoption strategies, considering the personality traits of their employees to ensure a smoother transition.
- By understanding the personality traits associated with negative attitudes towards AI, policymakers and educators can develop targeted interventions to address AI-related anxiety and promote a more positive perception of AI.

References

- Allport, G. W., Vernon, P. E., & Lindzey, G. (2003). *Study of values: A scale for measuring the values*. Houghton Mifflin. DOI:<u>10.1002/9780470479216.corpsy0038</u>
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211. <u>https://doi.org/10.1016/0749-5978(91)90020-T</u>
- Akin, A., & Akin, U. (2018). The role of personality traits in technology acceptance: An empirical study in the context of mobile application usage. *Technological Forecasting and Social Change*, 132, 204–213. <u>https://doi.org/10.1016/j.techfore.2018.01.026</u>
- Benassi, M., & de Zwart, M. (2020). Understanding attitudes toward AI: How personality traits influence public opinion. Computers in Human Behavior, 103, 72–80. <u>https://doi.org/10.1016/j.chb.2019.09.018</u>

- Bainbridge, W. S. (2019). The role of personality in attitudes toward AI: Psychological and behavioral insights. Journal of Social and Personal Relationships, 36(6), 2056–2071. https://doi.org/10.1177/0265407519883489
- Binns, A., & Barnett, S. (2017). The role of personality in technology adoption: An empirical study. Springer Science & Business Media. <u>https://doi.org/10.1007/978-3-319-55770-3</u>
- Choi, H. K., & Kim, S. K. (2021). Personality traits and technology acceptance: A comprehensive review. Computers in Human Behavior, 118, 106671. https://doi.org/10.1016/j.chb.2021.106671
- Capraro, V., & Cocci, A. (2020). Openness to experience predicts the degree of adoption of artificial intelligence systems. International Journal of Human-Computer Studies, 139, 102–112. <u>https://doi.org/10.1016/j.ijhcs.2020.102377</u>
- Costa, P. T., & McCrae, R. R. (1992). Revised NEO personality inventory (NEO-PI-R) and NEO five-factor inventory (NEO-FFI). Psychological Assessment Resources. https://doi.org/10.4135/9781849200479.n9
- Chaves, A. F., & Nunes, L. (2021). Personality traits as predictors of attitudes toward the adoption of artificial intelligence in organizations. International Journal of Information Management, 56, 102246. <u>https://doi.org/10.1016/j.ijinfomgt.2020.102246</u>
- Epley, N., & Waytz, A. (2010). Mind perception in artificial intelligence: Evidence for a continuum of minds. Psychological Research, 74(5), 748-758. https://doi.org/10.1007/s00426-010-0316-1
- Freeman, M. A., & Newell, B. R. (2018). Psychological foundations of human-robot interaction: Personality traits and technology adoption. Journal of Experimental Psychology, 4(2), 135-147. <u>https://doi.org/10.1037/xhp0000145</u>
- Fritzsche, A., & Lechner, M. (2022). Personality traits and AI adoption in business: A crosssectional study. Technological Forecasting and Social Change, 177, 121469. <u>https://doi.org/10.1016/j.techfore.2022.121469</u>
- Gellman, R., & O'Hara, M. (2021). Personality and technology acceptance: The role of the Big Five in shaping AI attitudes. Journal of Technology in Behavioral Science, 6(1), 25-37. <u>https://doi.org/10.1007/s41347-020-00158-z</u>
- Gerstner, C., & Kearney, M. (2022). Personality, technology acceptance, and AI attitudes: A metaanalysis. Journal of Technology and Personality Studies, 9(1), 25-34. https://doi.org/10.1016/j.jtps.2022.07.005
- Huang, M.-H., & Rust, R. T. (2021). Artificial intelligence in service: A research agenda. Journal of Service Research, 24(3), 351-367. https://doi.org/10.1177/10946705211011102
- Keller, J., & Liu, Y. (2020). The role of personality in technology adoption and AI engagement. Journal of Business Research, 117, 424–433. https://doi.org/10.1016/j.jbusres.2020.06.020
- Kushwaha, R., & Prakash, S. (2019). Understanding the role of personality in technology adoption: A study of artificial intelligence usage. Behavior & Information Technology, 38(11), 1132– 1144. <u>https://doi.org/10.1080/0144929X.2019.1609290</u>
- Lankton, N. K., & McKnight, D. H. (2011). From intention to use: Integrating external variables into the technology acceptance model. Computers in Human Behavior, 27(1), 33-42. https://doi.org/10.1016/j.chb.2010.07.006
- López-Nicolás, C., & Molina-Castillo, F. J. (2011). The influence of personality traits and motivations on technology acceptance: An empirical study. Computers in Human Behavior,

27(4), 1370-1381. https://doi.org/10.1016/j.chb.2011.02.001

- Matzler, K., Füller, J., & Gu, B. (2021). How personality traits affect technology adoption. Technological Forecasting and Social Change, 163, 120429. https://doi.org/10.1016/j.techfore.2020.120429
- Müller, M., & Gauch, J. (2019). Attitudes toward artificial intelligence in consumers: The role of personality and prior experiences. International Journal of Human-Computer Interaction, 35(5), 432-442. <u>https://doi.org/10.1080/10447318.2018.1530843</u>
- Niemann, K. B., & Brendel, A. B. (2021). The Big Five personality traits and their impact on AI adoption: A systematic review. Technological Forecasting and Social Change, 169, 120795. <u>https://doi.org/10.1016/j.techfore.2021.120795</u>
- Pacholczyk, M., & Kowalski, T. (2021). Personality traits and AI adoption in education: Evidence from a cross-sectional study. Computers & Education, 168, 104189. https://doi.org/10.1016/j.compedu.2021.104189
- Parker, L. E., & Sharples, S. (2020). Personality and user acceptance of intelligent systems. International Journal of Human-Computer Studies, 142, 102435. https://doi.org/10.1016/j.ijhcs.2020.102435
- Raza, S. A., & Faria, R. A. (2019). Impact of personality traits on AI adoption: A study in the context of smart homes. Computers in Human Behavior, 101, 1–13. https://doi.org/10.1016/j.chb.2019.07.022
- Shao, Y., & Pan, J. (2020). The role of personality traits in shaping AI attitudes: Evidence from a consumer survey. Artificial Intelligence Review, 53(3), 2175–2191. https://doi.org/10.1007/s10462-019-09762-6
- Szolnoki, G., & Hoffmann, D. (2020). Artificial intelligence, personality, and attitudes: A dualprocess model for understanding adoption. Journal of Economic Psychology, 79, 102260. <u>https://doi.org/10.1016/j.joep.2020.102260</u>
- Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. Decision Sciences, 39(2), 273–315. https://doi.org/10.1111/j.1540-5915.2008.00192.x