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EXPLORING THE RELATIONSHIP BETWEEN ARTIFICIAL INTELLIGENCE ATTITUDE, SOCIAL CONNECTEDNESS & LOCUS OF CONTROL AMONG COLLEGE STUDENTS IN COIMBATORE

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Abstract: This quantitative, correlational study examined the relationship between attitude toward artificial intelligence, social connectedness, and locus of control among college students in Coimbatore. The primary objective was to explore how levels of social connectedness and locus of control influence individuals' attitudes toward artificial intelligence. A convenience sample of 150 young adults aged 18 to 23 years, predominantly postgraduate and female, was selected from PSG College of Arts and Science. Data were collected using the Artificial Intelligence Attitude Scale, the Social Connectedness Scale–Revised, and Rotter's Locus of Control Scale. Since the data were not normally distributed, nonparametric statistical analyses, including the Mann Whitney U test and Spearman's rank order correlation, were used. Results showed that ChatGPT was the most frequently used artificial intelligence tool, reported by 96 percent of participants. No significant gender differences were found for artificial intelligence attitude, social connectedness, or locus of control. However, a weak positive correlation was found between attitude toward artificial intelligence and social connectedness, and a very weak positive correlation was observed between attitude toward artificial intelligence and locus of control. No significant relationship was found between social connectedness and locus of control. These findings suggest that students who report stronger feelings of social connection and a greater sense of control over their lives tend to hold slightly more positive attitudes toward artificial intelligence. The study highlights the psychological dimensions underlying artificial intelligence acceptance among youth, contributing to the growing discussion on human and artificial intelligence interaction within social and educational contexts.

IndexTerms - artificial intelligence attitude, social connectedness, locus of control, college students, psychological factors

INTRODUCTION

1.1 ARTIFICIAL INTELLIGENCE

Artificial intelligence's (AI) explosive growth in recent years has been a major turning point in technological history, drawing interest from the general public as well as the scientific community. People are discussing the possible effects of AI language models like ChatGPT on several facets of human life, which has generated a lot of interest and conversation. Artificial intelligence (AI) tools like ChatGPT have the potential to transform the way people work by performing complex tasks like problem-solving, language translation, writing, and data analysis. (Krägeloh et al., 2025)

The branch of computer science known as artificial intelligence (AI) aims to improve human performance in science and technology by teaching computers to behave like humans. AI's specific objectives include replicating human intellect, resolving knowledge-intensive tasks, developing computers that can carry out jobs that call for human intelligence, and developing some sort of self-learning system. The field of computer science known as artificial intelligence (AI) focuses on creating intelligent computer systems that can recognize, comprehend, and respond to inputs. (Ghosh et al., 2021)

Artificial Intelligence (AI) may include Natural Language Processing (NLP), which enables machines to understand human language. Creating systems that can comprehend text and carry out automatic activities like translation, spell checking, and topic classification is its aim. In order to computationally represent and analyze human language, natural language processing or NLP,

has attracted a lot of interest lately. Applications for it have expanded across a number of domains, including question-answering, medical, information extraction, email spam detection, computational linguistics, and summarization. (Ali & Shandilya, 2021)

ChatGPT can generate text that is akin to that of a human because of its exceptional natural language comprehension skills. It has become an excellent substitute for Google and Wikipedia, eliminating the need for numerous websites. This is essential for efficient communication because it enables concise justifications and logical answers to questions. ChatGPT constantly solicits user input and makes constant improvements to the model in response to it, guaranteeing its accuracy and utility over time. Similar to other industries, ChatGPT has rapidly become popular in classrooms. A pre-trained language model called ChatGPT is a useful tool for the higher education industry because of its extensive dataset and adaptability. Although ChatGPT has greatly improved learning environments, stakeholders have been debating its drawbacks for a long time. Experts and academicians disagree; some are enthusiastic about its possibilities, while others are opposed. The accuracy and dependability of ChatGPT, along with the inconsistent and variable quality of its material, may be impacted by possible data-driven patterns. Additionally, relying too much on ChatGPT can stifle critical thinking, thus organizations need to protect data for privacy. Students who utilize ChatGPT without fully comprehending it raise ethical use and plagiarism issues. (Baig & Yadegaridehkordi, 2024)

1.1.1 Attitude towards AI

An attitude is a general, comparatively persistent assessment of a thing, a person, a group, a problem, or an idea on a scale from negative to positive. Assumed to be based on particular beliefs, feelings, and previous actions related to the target object, attitudes offer concise assessments of that object. (*APA Dictionary of Psychology*, n.d.)

A person's attitude toward an object is a multifaceted construct that necessitates the analysis of various elements, including emotive, cognitive, and behavioral components. Although they are connected, the three primary elements of attitudes each have a distinct role in determining a person's overall attitude toward an item. Attitudes about a specific entity include both positive and negative assessments of the thing. A person's current knowledge or representations of AI, which are influenced in part by their dispositions, form the basis of their attitudes about AI. (Park & Woo, 2022)

1.1.2 Characteristics of AI

A person's attitude toward an object is a multifaceted construct that necessitates the analysis of various elements, including affective, cognitive, and behavioral components. Although they are related, the three primary elements of attitudes each have a distinct role in determining a person's overall attitude toward an item. Potential opinions regarding a specific entity can be either favorable or unfavorable. Emotional, cognitive, and behavioral assessments are all part of attitudes toward AI. These attitudes are formed using the information or representations of AI that are currently available, which are influenced in part by dispositions. Therefore, we selected several attitudinal constructs that address behavioral, cognitive, and affective attitudes regarding AI. An individual's feelings, whether favorable or unfavorable, toward an object are referred to as affective evaluation. Generalized mood states like positive and negative affect as well as specific emotions (like joy and terror) are included in affective evaluation. Both cognitive and non-cognitive processes are used to generate affective evaluation, which is formed by past experiences that form a mental residue. A new agent or technology's initial impressions can be significantly shaped by affective attitudes, especially unfavorable ones, which frequently have a price. (Park et al., 2022)

1.1.3 Factors affecting AI

Deep use of AI technology is sometimes called cognitive absorption, which is a form of loss of awareness or control that can have both positive and negative effects. Cognitive absorption plays a critical role for AI users, particularly when developing technologies to meet their specific requirements. It takes a high level of concentration, cognitive engagement, and absorption to influence someone's creativity. AI self-efficacy the conviction that one can use AI products and technologies to accomplish tasks is another problem. It's the belief that one can successfully complete a novel, technologically challenging task. AI learning is closely related to AI self-efficacy. AI learning is a more structured approach to learning how to perform tasks that require the use of AI-enabled tools. (Bai, 2024)

1.1.4 Significance of AI

AI is a computer-based approach to education that offers personalized, dynamic, and perceptive instruction. This includes Apple's Siri, Google Assistant, Microsoft's Cortana, and Amazon's Alexa. Without the assistance of their teacher, students can engage directly with the educational materials on the internet and on their installed devices thanks to these voice assistants. It is expected that the use of this technology will lead to rapid generation. Given how quickly AI is evolving, it makes sense that the educational system is working to keep up with the need to hire more talent in order to maintain AI's growth. (Jayadurga & Rathika, 2023)

1.2 Locus of Control

The concept of locus of control is used to classify people's fundamental motivational orientations and their sense of control over their life circumstances. Individuals who have an external locus of control often act in ways that are consistent with their environment and believe that events outside of their control determine how their lives turn out. Individuals who have an internal locus of control often act in accordance with their own internal goals and states and believe that their actions are the result of their own use of their own free will and skills. (*APA Dictionary of Psychology*, n.d.)

1.2.1 Theory of Locus of Control

Rotter's social learning theory served as the foundation for the psychological idea of LOC. It describes a person's perception of their level of control over circumstances that impact them. While those with a dominant external LOC are more likely to think that outside forces determine how their lives turn out, those with a higher internal LOC credit events in their life to their own choices and actions. LOC in the context of technology refers to how people view their control over the tools they use and how those tools impact their life. This can affect how individuals use technology, how satisfied they are with it, and how they behave

in general when using technology. Previous studies have shown that LOC affects people's technology use and adoption intentions. (Cvetkovic et al., 2025)

1.2.2 Characteristics of Locus of Control

Artificial intelligence (AI) algorithms are being incorporated into more and more applications, and people generally assume that they can trust any AI-based product or service without doubt. This study examined the relationship between trust behavior and personality qualities locus of control (LOC) and Big Five Inventory (BFI) attributes. It was discovered that trust ratings and concordance are connected and that LOC affects both. Specifically, beyond the trust concordance of the BFI components, LOC adversely predicted. Both human and AI recommendations were less likely to be followed by people as LOC levels. Neuroticism was a poor predictor of trust. Only for recommendations from prior participants did openness predict reaction time. People self-reported that they believed the AI recommendations more, but they also selected them more often than the human recommendations. (Sharan & Romano, 2020)

1.2.3 Significant in Locus of Control

Research has been conducted on the idea of the locus of control. A scale was created in 1957, marking the beginning of the measurement of the locus of control. It is acknowledged that the idea of the locus of control, which comes from Rotter's Social Learning Theory, is an extension of personality and it is examined from a variety of angles by scholars, particularly psychologists and those involved in teacher preparation programs. From early childhood, we began to gather rewards, penalties, and reinforcements from the surroundings. These are crucial learning stimuli. Our actions will lead to the development of an expectation of reward or punishment due to the stimuli we have access to and gather from our surroundings. The way in which we interpret these reinforcements and the significance we assign to them will influence which pole of the locus expansion we are in or near. According to this information, people fall somewhere between internal control and external control. It demonstrates that Rotter's locus of control, which describes our expectations as belief in an internal or external control source, is the point where powers that influence positive and negative results (punishments and reinforcements) in an individual's life are concentrated. (Serin et al., 2010)

1.3 Social Connectedness

The term "social connectedness" describes an individual's subjective perception of having a close contact with the social environment overall. With connection, a steady, safe sense of belonging is formed. Although they are related, loneliness and isolation are not the same as social connectedness. According to psychological research, social connectivity is associated with social competence, interpersonal trust, attachment security, less interpersonal issues, and group identification. Extraversion has drawn a lot of interest in personality and well-being studies due to its correlation with psychological adjustment, positive affect, and life satisfaction. Less is known, though, about the psychological processes underlying this association between extraversion and wellbeing. Social connectivity as separate from extraversion and as a mediator of the association between extraversion and subjective well-being, based on the notion that the self-system acts as a psychological mediator. (Lee et al., 2008)

1.3.1 Characteristics of Social Connectedness

Although social connectedness and extraversion both focus on an individual's social experiences, a closer look at each construct's salient characteristics reveals conceptual distinctions. Sociability and agency, or the drive to build relationships with others, be warm and kind, and seek out excitement and attention, are the main sources of extraversion. Conversely, social connectivity is a self-assessment of the degree of intimacy one has with others, the community, and society as a whole. In contrast to extraversion, it excludes motives and aggressive acts. (Lee et al., 2008)

One of the most important components of empathy and compassion for nature is feeling linked to it, which fosters positive attitudes and behaviors related to the environment. Furthermore, a person's connection to nature predicts their environmental behavior and subjective well-being, and their likelihood of acting in an ecologically conscious manner increases as their identity broadens to include them. Environmental ethics is centered on understanding the relationships between humans and the natural world. Because of the imagined symbiotic relationship between humans and nature, we have a responsibility to maintain the environment. (Drosinou et al., 2025)

1.3.2 Factors Affecting in Social Connectedness

In addition to being associated with nature, environmental behavior is a form of prosocial behavior that can emerge when an individual feels connected to others. Environmental behavior is a type of prosociality that may be fostered via group action and human identity. The prosocial aspect of environmental behavior is highlighted by the importance of altruistic concerns for the well-being of others in motivating people to act in an environmentally conscious manner. Those that adopt environmental behaviors have stronger altruistic or self-transcendent ideals, and they are driven by a particular kind of altruism—caring about the greater community. Sustainable behavior has also been connected to caring for others. Moreover, a diminished psychological distance from climate change and environmental behaviors has been associated with a sense of connection to mankind as a whole. According to other research, the relationship between a person's prosocial tendencies (such altruism) and pro-environmental behaviors is mediated by their sense of community, humanity, and nature. People with a strong sense of global identity that is, a sense of belonging to humanity are more likely to be worried about environmental issues, care about the well-being of others, feel accountable for their activities, and have a sense of community. (Drosinou et al., 2025)

1.3.3 Significance in Social Connectedness

Children today negotiate a social environment that is very different from that of their parents, one that is influenced by their interactions with both artificial and human agents. Our knowledge of how many and why young people look to chatbots software programs created to have real-time text conversations with human users for company. Despite being around for a while, chatbots have only now advanced to the point where they can carry on social discussions with such fluidity that they can be mistaken for human-to-human communication. The importance of social connections are some lonely people look to artificial beings for

company. It is widely accepted that the quality of social relationships whether conceived as belongingness, attachment, or social connectedness is an essential human need that is worthwhile to pursue independently. Humans have higher mental and physical health and a lower risk of all-cause mortality when they feel connected to others. On the other hand, there are serious health hazards linked to a feeling of social disconnection. Surprisingly, loneliness has a mortality risk comparable to that of alcohol, cigarettes, obesity, and physical inactivity. This emphasizes how crucial it is to comprehend the causes and effects of human-AI interactions, especially for the benefit of the groups most affected by loneliness. (Herbener & Damholdt, 2024)

1.4 People Attitude towards AI, Locus of Control and Social Connectedness

Artificial Intelligence (AI) is becoming increasingly prevalent in many aspects of life, and its application in education is not an exception to this trend. In addition to being a branch of computer science that attempts to solve various cognitive issues, like learning or problem-solving, artificial intelligence (AI) can also be defined as a theoretical framework that can provide practical guidelines for the development and application of intelligent computer systems that replicate human-like abilities. (Katsantonis & Katsantonis, 2024)

All three of the fundamental psychological demands of language learners are met by chatbots. A social robot that helps adult learners in difficult learning settings was discovered to increase learners' intrinsic motivation and willingness to engage with it when it met their basic need for relatedness. Interestingly, there was no correlation found between students' intention to accept a chatbot adviser and their perception of autonomy in an academic setting. Studies on the fundamental psychological requirements of technology use have also been carried out using chatbots for customer service. For instance, it has been noted that when basic needs are satisfied when interacting with an airline chatbot, more favorable attitudes, experiences, and chatbot satisfaction are the outcomes. (Cvetkovic et al., 2025)

NEED OF THE STUDY.

Understanding how humans view and react emotionally to artificial intelligence (AI) is crucial in an era where AI is increasingly incorporated into social systems, healthcare, education, and the workplace. Technical usability and AI trust have received more attention than psychological and social factors, particularly people's sense of social connectivity and their sense of control over life events. The study addresses the following gaps among the attitude towards AI, Locus of control and Social connectedness.

RESEARCH METHODOLOGY

3.1Population and Sample

The study employed a Quantitative, Correlational design. It was conducted as a Cross-sectional and Survey based study, examining the relationships among the main Variables: Artificial Intelligence Attitude, Social Connectedness, and Locus of Control. A convenience sample of 150 young adults aged between 18 to 25 years was selected. Participants were recruited from colleges, universities, and youth communities, primarily consisting of students from PSG College of Arts and Science in Coimbatore.

3.2 Data and Sources of Data

Participants were required to be currently enrolled as undergraduate (UG) or postgraduate (PG) students at PSG College of Arts and Science, Coimbatore. Aged between 18 and 23 years. Have prior exposure to or familiarity with AI tools (such as ChatGPT, Siri, Grammarly, or Canva AI). Provide informed consent and possess sufficient English language proficiency. Individuals were excluded if they had no prior experience with AI tools.

3.3 Theoretical framework

In 1989, Davis developed the technology acceptance model (TAM), which was founded on the psychology research notion of reasoned action. According to the Theory of Reasoning (TRA), an individual's behavior is determined by their behavioral purpose, which is influenced by their attitude toward the behavior and the subjective standards that surround its accomplishment. Put another way, it asserts that a person's attitude toward and perceptions of their behavior determine both their behavior and their intention to behave. As a result, attitudes and beliefs both influence behavior. According to TAM, a user's attitude toward utilizing technology, their subsequent behavioral intentions, and their actual usage are all predicted by how easy and helpful they believe the technology to be. Technology's perceived usefulness was also thought to be influenced by perceived simplicity of use. Perceived usefulness in TAM refers to the extent to which the user thinks that utilizing the technology would enhance his or her performance at work, whereas perceived ease of use relates to the perceived simplicity of use. Though perceived simplicity of use is also thought to affect perceived utility and attitude toward using the technology, these are thought to be separate elements impacting the user's attitude toward utilizing the technology. Lastly, a person's behavioral intention to utilize a technology is determined by their perception of it. (Masrom, 2007)

3.4 Statistical tools

This section elaborates the proper statistical/econometric/financial models which are being used to forward the study from data towards inferences. The detail of methodology is given as follows. The statistical analyses were performed using SPSS IBM 27. Frequency and descriptive statistics of sociodemographic details were examined and tabulated. A normality test was performed using Kolmogorov-Smirnov tests. Due to the violation of the normality assumption, non-parametric tests were utilized for subsequent analysis. Mann Whitney U Test used to examine significant associations or differences between groups (e.g., gender differences in attitude, connectedness, and locus of control). Spearman’s rank order correlation: Used to examine the associations and relationships among the study variables.

3.5 Descriptive Statistics

The sample consisted of 150 participants. The average age was 20.59 years (Mean = 20.59, SD =1.55), with age ranging from 18 to 23. In the descriptive statistics the higher usage for AI tool is ChatGPT (Mean = 0.96, SD = 0.197), indicating that 96% of participants reported using it. The Usage of other tools was considerably lower, Siri (Mean = 0.21, SD = 0.406) indicating 21% of participants reported using it, Grammarly (Mean = 0.20, SD = 0.401) indicating 20% of participants using it and Canva AI (Mean = 0.13, SD = 0.334) indicating 13% of participants.

3.6 Test of Normality

Based on the Kolmogorov-Smirnov test results, none of the variables are normally distributed. The p-value (Sig.) for all three variables is less than the standard significance level of 0.05, leading to the rejection of the null hypothesis of normality. The Significance value of Artificial Intelligence Attitude is (Sig. = .016) which is less than 0.05, the Significance value of Social Connectedness is (Sig. = .020) which is less than 0.05 and the Significance value of Locus of Control is (Sig. = .014) which is less than 0.05. Therefore the assumption of normality is violated, so we use non-parametric tests for subsequent analyses to compare groups or assess relationships.

3.7 Mann Whitney U Test

A Mann-Whitney U test was conducted to compare scores on Artificial Intelligence Attitude, Social Connectedness and Locus of Control between males and females. The results showed no statistically significant difference between males and females for Artificial Intelligence Attitude (U = 2501.00, Z = -0.093, p = 0.926), Social Connectedness (U = 2293.00, Z = -0.919, p = 0.358) and Locus of Control (U = 2430.50, Z = -0.375, p = 0.708). The mean ranks indicate that the two groups had similar distribution across all three variables.

3.8 Spearman Correlation Test

The correlation coefficient between Artificial Intelligence Attitude and Social Connectedness is .238** means there is a weak positive correlation between AI attitude and social connectedness. As a person's attitude toward AI becomes more positive, their social connectedness scores tend to be higher. The correlation coefficient between Artificial Intelligence Attitude and Locus of Control is .168* very weak positive correlation between AI attitude and locus of control. The relationship is not as strong as the one with social connectedness, but it is still statistically significant. The correlation coefficient between Social Connectedness and Locus of Control is .060 there is no statistically significant relationship between social connectedness and locus of control. The p-value for this correlation is likely greater than .05, indicating that the correlation observed is likely due to chance.

IV. RESULTS AND DISCUSSION

4.1 Results of Descriptive Statistics of Study Variables

Table 4.1: Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Standard Deviation
Age	150	18	23	20.59	1.551
Gender	150	1	2	1.66	.475
Education	150	1	2	1.69	.463
ChatGPT	150	0	1	.96	.197
Siri	150	0	1	.21	.406
Filters	150	0	1	.07	.262
Grammarly	150	0	1	.20	.401
Canva AI	150	0	1	.13	.334
Google Nest	150	0	1	.05	.225

Table 4.1 the sample consisted of 150 participants. The average age was 20.59 years (Mean = 20.59, SD =1.55), with age ranging from 18 to 23. In the descriptive statistics the higher usage for AI tool is ChatGPT (Mean = 0.96, SD = 0.197), indicating that 96% of participants reported using it. The Usage of other tools was considerably lower, Siri (Mean = 0.21, SD = 0.406) indicating 21% of participants reported using it, Grammarly (Mean = 0.20, SD = 0.401) indicating 20% of participants using it and Canva AI (Mean = 0.13, SD = 0.334) indicating 13% of participants.

4.2 Results of Test of Normality

Variable	Kolmogorov-Smirnov	df	Sig.
Artificial Intelligence Attitude	.082	150	.016
Social Connectedness	.080	150	.020
Locus of Control	.083	150	.014

Table 4.2 shows the Kolmogorov-Smirnov test results, none of the variables are normally distributed. The p-value (Sig.) for all three variables is less than the standard significance level of 0.05, leading to the rejection of the null hypothesis of normality. The Significance value of Artificial Intelligence Attitude is (Sig. = .016) which is less than 0.05, the Significance value of Social

Connectedness is (Sig. = .020) which is less than 0.05 and the Significance value of Locus of Control is (Sig. = .014) which is less than 0.05. Therefore the assumption of normality is violated, so we use non-parametric tests for subsequent analyses to compare groups or assess relationships.

4.3 Results of Mann Whitney U Test

Variable	Gender	N	Mean Rank	Mann - Whitney U	Z	p
Artificial Intelligence Attitude	Male	51	75.96	2501.00	-0.093	0.926
	Female	99	75.26			
Social Connectedness	Male	51	80.04	2293	-0.919	0.358
	Female	99	73.16			
Locus of Control	Male	51	77.34	2430.50	-0.375	0.708
	Female	99	74.55			

Table 4.3 shows the Mann-Whitney U test was conducted to compare scores on Artificial Intelligence Attitude, Social Connectedness and Locus of Control between males and females. The results showed no statistically significant difference between males and females for Artificial Intelligence Attitude (U = 2501.00, Z = -0.093, p = 0.926), Social Connectedness (U = 2293.00, Z = -0.919, p = 0.358) and Locus of Control (U = 2430.50, Z = -0.375, p = 0.708). The mean ranks indicate that the two groups had similar distribution across all three variables.

4.4 Results of Spearman Correlation Test

Variable	Artificial Intelligence Attitude	Social Connectedness	Locus of Control
Artificial Intelligence Attitude	-	.238**	.168*
Social Connectedness	.238**	-	.060
Locus of Control	.168*	.060	-

Table 4.4 shows the correlations between Artificial Intelligence Attitude, Social Connectedness, and Locus of Control. The correlation coefficient between Artificial Intelligence Attitude and Social Connectedness is .238** means there is a weak positive correlation between AI attitude and social connectedness. As a person's attitude toward AI becomes more positive, their social connectedness scores tend to be higher. The correlation coefficient between Artificial Intelligence Attitude and Locus of Control is .168* very weak positive correlation between AI attitude and locus of control. The relationship is not as strong as the one with social connectedness, but it is still statistically significant. The correlation coefficient between Social Connectedness and Locus of Control is .060 there is no statistically significant relationship between social connectedness and locus of control. The p-value for this correlation is likely greater than .05, indicating that the correlation observed is likely due to chance.

Discussion

Table 4.1 demographic data of the population studied, there are 150 participants are selected based on convenience sampling technique from PSG College of Arts and Science in Coimbatore. The majority of the sample were pursuing Postgraduate (PG) studies (69.3%) and were female (66.0%). The students are from young adult phase, with the largest age group being 21 years old (35.3%). The usage of Artificial Intelligence is high with ChatGPT, as 96.0% (144 participants) reported using it, resulting in the highest mean usage score (Mean = 0.96) among the collected survey report. In contrast, engagement with other digital and AI-powered tools is minimal only about one-fifth of students use Siri (20.7%) or Grammarly (20.0%), while specific creative or embedded technologies like Canva AI (12.7%), Filters (7.3%), and Google Nest (5.3%) are barely used at all.

The pervasive use of ChatGPT is consistent with existing literature on technology adoption in higher education. High adoption rates align with the Technology Acceptance Model as studies have found students are more inclined to use GenAI like ChatGPT if they believe it to be practical and user-friendly. Students' attitudes toward AI are strongly influenced by perceived usefulness and ease of use. (Davis, 1989)

The high usage reflects the findings of the Unified Theory of Acceptance and Use of Technology (UTAUT), which says that social influence is a crucial element. Research confirms that social influence and outside motivation have a significant impact on students' behavioral intentions to use ChatGPT. (Venkatesh et al., 2003)

Table 4.2 shows that the Kolmogorov-Smirnov test is used to test the normality of the data. The Kolmogorov-Smirnov test results the rejection of the null hypothesis of normality, given that the Significance (Sig.) values for Artificial Intelligence Attitude (.016), Social Connectedness (.020), and Locus of Control (.014) were all consistently below the conventional 0.05 threshold. So based on the results non-parametric tests would be required to compare groups and finds relationship in the statistical analysis. The distribution of scores are deviates significantly from a normal bell-shaped curve within this sample.

There is an existing research finding compared the power of various formal tests of normality, including the Kolmogorov-Smirnov test, which was used in this study. Their findings, derived from generating 10,000 samples across various distributions,

noted that the power of all four tests they examined (Shapiro-Wilk, Anderson-Darling, Lilliefors, and Kolmogorov-Smirnov) is modest, particularly given a small sample size. While the study sample of 150 participants is moderate, the ROL confirms that the Kolmogorov-Smirnov test itself has limitations in its statistical power, justifying the subsequent methodological discussion regarding the reduced power of the non-parametric tests that were ultimately chosen for analysis. (Razali & Yap, 2011)

Table 4.3 shows the analysis of gender differences using the Mann-Whitney U test. It is a Non Parametric Test used due to the non-normal distribution of the data. This test compared scores on Artificial Intelligence Attitude, Social Connectedness, and Locus of Control between the male and female participants. The results demonstrated a consistent finding across all variables: there was no statistically significant difference between males and females for Artificial Intelligence Attitude (p = 0.926), Social Connectedness (p = 0.358), or Locus of Control (p = 0.708). The mean ranks indicated that the two groups shared a similar distribution across all three measures. This lack of significance led to the interpretation that gender does not play a role in influencing these psychological variables within the student sample. However, the study could potentially be influenced by the limited representation of the male group in comparison to the female majority.

The finding of no statistical difference in AI attitudes is supported by other descriptive research on college students, which also concluded that male and female university students opinions toward AI did not differ significantly. Conversely, this finding contradicts results from studies involving other populations, where gender differences were noted, such as a study that found men in a UK sample had more positive opinions and fewer negative attitudes about AI than women (Naiseh et al., 2025). Furthermore, while overall attitude scores were similar, existing literature suggests differences in the *focus* of AI concern: men are reportedly more interested in GenAI chatbots as tools related to potential career paths, whereas women express greater concern with critical and autonomous thinking and show a stronger need to learn how to trust GenAI chatbots (Møgelvang et al., 2024).

Regarding the two personality variables, the finding of no significant gender difference in Locus of Control aligns with existing research conducted on college-bound science students (Mohanty, 2021). The LOC framework is considered key for using control belief as an attitude toward AI predictor, and internal LOC is associated with holding more positive views on AI's use (Cvetković et al., 2025). The lack of a gender difference in LOC scores suggests a similar distribution of internal versus external control beliefs, which may explain the lack of gender difference in AI attitudes. Finally, while the quantitative scores for Social Connectedness were not statistically different by gender, the Review of Literature indicates that the foundational nature of closeness differs, with males prioritizing relationships based on social comparison and females prioritizing relationships based on intimacy and physical contact (Lee & Robbins, 2000).

Table 4..4 shows the Spearman's correlation was used between the three continuous variables. A Spearman's correlation analysis was conducted to examine the relationships between Artificial Intelligence Attitude, Social Connectedness, and Locus of Control, using a non-parametric test due to the data's non-normal distribution. The results revealed a weak, positive, and statistically significant correlation between Attitude Toward AI and Social Connectedness (r = .238), suggesting that as students' attitudes toward AI become more positive, their sense of social connectedness tends to be slightly higher. This finding aligns with literature suggesting that technology can foster "digital relatedness" (Latikka et al., 2024) and that engagement with social technologies is associated with favourable AI sentiments (Montag & Elhai, 2025). Additionally, a very weak but statistically significant positive correlation was found between Attitude Toward AI and Locus of Control (r = .168), confirming that control beliefs are a relevant predictor of AI attitudes. However, the positive direction of this correlation appears to contrast with several studies which found that a higher *internal* locus of control promotes AI acceptance (Babiker et al., 2024; Cvetković et al., 2025) and that a higher *external* locus of control can reduce trust in AI (Sharan & Romano, 2020). Finally, the analysis showed no statistically significant relationship between Social Connectedness and Locus of Control (r = .060), indicating these two constructs operated independently within the sample. This particular result is consistent with some research that found no significant link between social media use and locus of control (Hussin et al., 2021) but contradicts other work suggesting social resources are associated with a higher internal locus of control (Strong & Gore, 2020).

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