

Christian Worldview and AI Literacy: Promoting Responsible AI Use in Higher Education

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Abstract

The integration of artificial intelligence in higher education requires not only technical competence but also ethical discernment among students. While secular frameworks for AI ethics are prevalent, a significant research gap remains concerning how faith-based perspectives might inform AI literacy. This study examined the relationship between Christian worldview and AI literacy among 307 undergraduate students at a Christian university. The research investigated correlations between religious values and AI engagement using established measures, including a Christian Worldview Scale and Digital Literacy Scale, alongside a custom AI Use Experience measure. Results revealed that students' Christian worldview significantly correlates with critical comprehension ability and ethical behavior in AI contexts. Hierarchical multiple regression analysis identified Christian worldview as a significant predictor of ethical AI behavior, alongside AI risk awareness, agreeableness regarding faith's impact on AI usage, and formal AI training. Despite 58.2% of students utilizing AI for academic purposes, only 15.6% had received formal AI training, highlighting a significant educational gap. Furthermore, 42% of students expressed neutrality about their faith's influence on AI usage, suggesting opportunities for more intentional integration of religious perspectives in technology education. These findings provide valuable insights for Christian educational institutions to develop comprehensive AI literacy programs that explicitly address the intersection of faith and technology.

Keywords: AI literacy, Christian worldview, higher education, ethical AI behavior

Artificial Intelligence (AI) has emerged as a transformative force in higher education, fundamentally altering traditional teaching, learning, and assessment approaches. While AI offers unprecedented opportunities for personalized learning experiences, it simultaneously raises complex ethical questions regarding its use (Mujtaba, 2024). As students increasingly engage with generative AI tools (artificial intelligence systems that can create new content such as text, images, or code based on patterns learned from training data) like ChatGPT and other AI-powered platforms, educational institutions face the challenge of developing appropriate ethical frameworks to guide this technological integration (Chen et al., 2024; Folmeg et al., 2024). This challenge is particularly significant for Christian universities, which operate at the intersection of technological advancement and faith-based values.

AI Literacy and Ethical Considerations

Recent studies indicate that despite growing AI adoption rates among university students, many lack comprehensive understanding of AI's capabilities, limitations, and ethical implications—highlighting a critical gap in AI literacy (Hornberger et al., 2023; Wang et al., 2024). AI literacy, defined as the knowledge, skills, and attitudes necessary to critically evaluate, responsibly use, and ethically engage with AI technologies, has become increasingly essential in preparing students for a technologically advanced future (Hwang et al., 2023; Tzirides et al., 2024). Salhab (2024) found that integrating AI literacy across curriculum design not only enhances students' technical competencies but also their ability to navigate the ethical complexities associated with AI implementation. General moral principles surrounding AI use in education, such as transparency, fairness, accountability, and privacy, provide

valuable guidance for institutional policies. However, Christian institutions are uniquely positioned to extend these considerations through faith-informed perspectives that emphasize stewardship of technology, human flourishing, and moral responsibility (Koch, 2023).

Christian Worldview and AI Literacy

The Christian worldview offers distinctive resources for addressing AI's ethical challenges through its emphasis on core values such as human dignity, stewardship of creation, and moral responsibility (Huizinga, 2022). These foundational principles can profoundly influence how students understand, engage with, and implement AI technologies in their academic and professional endeavors (Koch, 2023). Human dignity, rooted in the belief that humans are created in God's image, affirms that AI should augment rather than diminish human creativity and agency. The concept of stewardship encourages responsible development and application of technological tools that serve the common good rather than narrow self-interests. Moral responsibility acknowledges that technological decisions carry ethical weight and should be guided by justice, compassion, and integrity considerations. Research suggests that embedding these faith-based ethical principles into AI instruction can foster more thoughtful technological discernment among students (Harris & Armstrong, 2023).

Research Gap

Despite the growing body of literature on AI literacy and ethics in higher education, a significant research gap exists in understanding how faith-based perspectives, particularly Christian worldviews, might inform and enhance AI literacy development. Previous research has predominantly focused on secular ethical frameworks for AI implementation (Feldman & Cherry, 2024), with limited attention to how religious values might provide distinctive resources for ethical AI engagement. Some studies, such as Harris and Armstrong (2023), have begun to explore faith-based approaches to technology ethics, but comprehensive empirical investigations examining the intersection between Christian worldviews and AI literacy remain notably scarce. This gap is particularly concerning given the significant number of students educated at faith-based institutions who will need to navigate AI technologies in their future careers. As AI integration in higher education accelerates, there is an urgent need for research examining how faith-informed approaches might cultivate technical proficiency and ethical discernment among students engaging with these technologies.

The Current Research Study

This research explores the relationship between Christian worldview and AI literacy among college students,

examining how faith-informed approaches might enhance responsible AI engagement (thoughtful, ethical, and informed use of AI). The significance of this research lies in its potential to develop educational approaches that align AI use with Christian values and ethical standards, preparing students to become technologically proficient yet ethically grounded professionals. This study addresses two primary research questions. First, what is the relationship between the Christian worldview and AI literacy in college students? We hypothesize that a Christian worldview would be positively related to AI literacy. Second, what are the key factors contributing to the cultivation of responsible AI ethical behavior? By addressing these questions, this research aims to provide insights that can inform the development of AI education approaches that foster ethical use of AI in Christian educational institutions.

Methods

Research Design and Participants

This study employed a quantitative research design to examine the relationship between Christian worldview and AI literacy among undergraduate students at a Christian university. Data was collected through an online survey during the 2024-2025 academic year. Recruitment occurred through Sona systems and classroom announcements. The total of 307 samples included students across various academic years, majors, and demographic backgrounds.

Measures

AI Use Experience

A 19-item scale developed specifically for this study by the authors measured various dimensions of students' engagement with AI technologies. This measure assessed usage patterns in both daily life and academic contexts, comfort level with AI in academic work, perceived effectiveness of AI for academic tasks, prior AI training, faculty communication about AI, institutional guidelines, experiences with AI-related assignments, attitudes toward AI in academic and future career contexts, awareness of AI benefits and risks, experiences with AI limitations, exposure to faculty sharing AI experiences, discussions connecting faith and AI use, agreeableness regarding faith's impact on AI usage, and alignment between Christian values and AI applications.

Digital Literacy Scale

This 19-item measure (Hwang et al., 2023) assessed participants' overall digital literacy, with one factor specifically examining AI ethical behavior capabilities. This established scale validated students' ability to navigate digital technologies responsibly, including artificial intelligence applications. The scale consists of four subscales: (a) Critical comprehension ability ($\alpha = .71$), (b)

Recognition of AI’s social impact ($\alpha = .51$), (c) Use of artificial intelligence technology ($\alpha = .86$), and (d) Ethical behavior ability ($\alpha = .76$). Critical comprehension ability assesses the ability to evaluate AI-generated content critically (e.g., I can critically analyze content recommended by AI). Recognition of AI’s social impact measures awareness of AI’s broader influence on society (e.g., I’m worried that AI could have a bad influence on humans). Use of AI technology captures practical skills in using and verifying AI tools (e.g., ...know how to make sure that what is presented by artificial intelligence is believable). Ethical behavior evaluates considerations of fairness, legality, and responsibility when engaging with AI (e.g., When using AI-based big data, I think about whether the information obtained is illegal or reliable). All items use a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

Christian Worldview Scale

The 20-item scale developed by Knabb et al. (2022) measured participants’ adherence to core Christian beliefs and values. The scale consists of five subscales—Theology, Epistemology, Anthropology, Axiology, and Teleology—with four items each, capturing key dimensions such as beliefs about God, human nature, moral values, knowledge, and life purpose. This instrument assessed the strength and characteristics of students’ Christian worldview, enabling analysis of its relationship with AI literacy and ethical usage patterns. Cronbach’s alpha of this scale was .98.

Data Analyses

Data analysis employed descriptive and inferential statistical methods to address the study’s research questions. Initial analysis included calculation of frequencies (percentage) for all key variables to understand the general characteristics of the sample and distribution patterns in AI usage. A correlation was conducted to examine the first research question. For the second research question, a hierarchical multiple regression analysis was performed to identify significant predictors of AI ethical behavior ability. As this was an exploratory research question, several potential predictor variables were examined, including demographic factors, prior AI experience, and Christian worldview. All statistical analyses were conducted using SPSS.

Results

Descriptive Findings

Demographic information of 307 undergraduate students was collected, including age, gender, ethnicity, academic year, major field of study, first-generation college student status, and living arrangements (Table 1). The age distribution indicated that most participants were of traditional college age, with 49.2% falling within the 18-19 year range and 31.6% in the 20-21 year range. The gender

composition demonstrated an uneven distribution, with females representing approximately two-thirds of the participants (67.8%) compared to males (32.2%). Regarding ethnicity, the sample exhibited considerable diversity. Hispanic participants constituted the largest ethnic group at 39.7%, closely followed by Caucasian participants at 39.1%. In terms of academic standing, freshmen and sophomores account for 30.0% and 30.3%, respectively. The study also captured information on first-generation college student status, revealing that approximately one-third of participants (34.2%) identified as first-generation college students.

Table 1
Sociodemographic Characteristics of Participants

	<i>n</i>	<i>%</i>
Age		
17 or younger	3	1.0
18-19	151	49.2
20-21	97	31.6
22-23	27	8.8
24 or older	29	9.4
Gender		
Female	208	67.8
Male	99	32.2
Race		
Hispanic	122	39.7
Caucasian	120	39.1
Asian	26	8.5
Black or African American	21	6.8
Others	18	5.9
Major		
College of Architecture,	8	2.6
College of Arts and	27	8.8
College of Behavioral and Social Sciences	124	40.4
College of Engineering	15	4.9
College of Health Science	31	10.1
College of Nursing	14	4.6
School of Business	39	12.7
School of Christian	5	1.6

School of Education	14	4.6
School of Performing Arts	7	2.3
The school year		
Freshman	92	30.0
Sophomore	93	30.3
Junior	75	24.4
Senior	43	14.0
Other	4	1.3
First-generation		
Yes	105	34.2
No	202	65.8
Living Situation		
Live in my own or my	139	45.3
Live in a campus dorm	156	50.8
Live in an off-campus	6	2.0
Temporarily staying with	1	.3
Others	5	1.6

Note. N = 307

Artificial Intelligence Use Experiences

The integration of artificial intelligence (AI) into academic contexts revealed varied adoption and perceptions among students (Table 2). While approximately half of students (49.2%) reported rarely or never using AI in daily life, a notable portion (51.4%) incorporated AI at least a few times weekly. For academic purposes specifically, 62.4% of students never or rarely used AI tools, while 37.6% utilized them at least occasionally, with 9.5% reporting daily or very frequent academic use. Students primarily employed AI for research and information gathering (51.1%), studying and learning new concepts (47.2%), and writing and editing (44.3%). Despite this usage, only 15.6% of students had received formal AI training, potentially explaining why 42.0% expressed neutral comfort levels with these technologies. Regarding academic impact, 82.7% of students perceived at least a slight improvement in their performance due to AI use.

Results also show 28.4% of students experienced limited or no communication from faculty regarding AI use expectations. Although a substantial majority (74.6%) of students had reviewed institutional guidelines on AI, a much smaller proportion (29.3%) had completed AI-specific assignments, suggesting a gap between awareness and practical application. Student attitudes toward AI remained predominantly neutral in academic contexts (55.2%), and

similarly, the largest group held neutral views about AI's role in their future careers (45.9%). Most students demonstrated moderate to extreme awareness of AI's potential risks (85%) and usefulness (80.4%). Faculty engagement with AI was evident, with 56.4% of instructors sharing AI experiences, though faith-based discussions on AI were less common (15.0%). A majority held a neutral attitude about whether Christian faith influences their approach to using AI technologies (42%) and whether Christian values can be better integrated into AI practices in classes (57%).

Table 2
AI Use Experiences

	<i>n</i>	%
How often do you use AI-powered tools or applications (e.g., ChatGPT) in your <u>daily life</u> ?		
Never	50	16.3
Rarely	98	31.9
Occasionally (a few times a week)	110	35.8
Frequently (daily)	39	12.7
Very frequently (multiple times a day)	9	2.9
How often do you use AI-powered tools or applications (e.g., ChatGPT) in your <u>academic work</u> ?		
Never	63	20.6
Rarely	128	41.8
Occasionally (a few times a week)	86	28.1
Frequently (daily)	26	8.5
Very frequently (multiple times a day)	3	1.0
In which areas of your academic life do you use AI-powered tools or applications?		
Research and information gathering	157	51.1
Writing and Editing	136	44.3
Studying and learning new concepts	145	47.2
Time management and organization	0	0

Communication and Collaboration	38	12.4
How comfortable are you with using AI-powered tools or applications for your academic work?		
Very uncomfortable	41	13.4
Uncomfortable	46	15.0
Neutral	129	42.0
Comfortable	74	24.1
Very comfortable	17	5.5
To what extent do you believe AI-powered tools have improved your academic performance?		
Not at all	56	18.2
Slightly	98	31.9
Moderately	110	35.8
Significantly	34	11.1
Extremely	9	2.9
Have you received any formal training or education on using AI technologies?		
Yes	48	15.6
No	259	84.4
To what extent do you feel that your faculty communicates expectations regarding AI use early in the semester?		
Not at all	26	8.5
To a small extent	61	19.9
To a moderate extent	127	41.4
To a large extent	73	23.8
To a very large extent	20	6.5
Have you had assignments specifically involving AI tools or applications?		
Yes	90	29.3
No	216	70.4
Have you reviewed CBU's guidelines on the use of AI technologies?		
Yes	229	74.6
No	78	25.4

How would you describe your attitude towards the use of AI technologies in your academic work?

Very negative	17	5.5
Negative	47	15.3
Neutral	169	55.0
Positive	60	19.5
Very positive	13	4.2

How would you describe your attitude towards the use of AI technologies in your future career?

Very negative	26	8.5
Negative	65	21.2
Neutral	141	45.9
Positive	66	21.5
Very positive	9	2.9

How aware are you of the potential usefulness associated with AI technologies?

Not aware at all	9	2.9
Slightly aware	51	16.6
Moderately aware	143	46.6
Very aware	91	29.6
Extremely aware	13	4.2

How aware are you of the potential risks associated with AI technologies?

Not aware at all	12	3.9
Slightly aware	34	11.1
Moderately aware	87	28.3
Very aware	132	43.0
Extremely aware	42	13.7

Have you experienced any limitations or challenges when using AI technologies?

Not at all	57	18.6
To a small extent	117	38.1
To a moderate extent	108	35.2
To a large extent	23	7.5

To a very large extent	2	.7
Have your faculty shared their experiences using AI technologies during class?		
Yes	172	56.4
No	133	43.6
Have you participated in classroom discussions about how Christian faith influences your approach to using AI technologies?		
Yes	46	15
No	261	85
Christian faith influences my approach to using AI technologies.		
Strongly disagree	43	14
Somewhat disagree	44	14.3
Neutral	129	42
Somewhat agree	65	21.2
Strongly agree	26	8.5
Have you experienced discussions about how Christian values can be better integrated into AI practices in your classes?		
Yes	37	12.1
No	270	87.9
Christian values can be better integrated into AI practices in my classes.		
Strongly disagree	20	6.5
Somewhat disagree	28	9.1
Neutral	175	57.0
Somewhat agree	63	20.5
Strongly agree	21	6.8

Note. $N = 307$

Correlation Between Christian Worldview and AI Literacy

Pearson correlation coefficients were computed to examine the relationships between the Christian worldview and AI literacy (Table 3). Results indicated significant positive correlations among all components of AI literacy. Specifically, critical comprehension ability was significantly correlated with recognition of the social impact of AI ($r = .45$, $p < .001$), ability to use AI ($r = .38$, $p < .001$), and ethical behavior ability ($r = .59$, $p < .001$). The Christian worldview was significantly associated with critical comprehension

ability ($r = .13$, $p < .05$) and ethical behavior ability ($r = .13$, $p < .05$), but not significantly correlated with other subscales.

Table 3

Correlations Between AI Literacy and Christian Worldview

Variable	1	2	3	4	5	6
1. Critical Comprehension Ability	—					
2. Recognizing the Social Impact of AI	.45**	—				
3. Ability to Use AI Technology	.38**	.66**	—			
4. Ethical Behavior Ability	.59**	.46**	.35**	—		
5. Overall AI Literacy	.77**	.82**	.79**	.74**	—	
6. Christian Worldview	.13*	.08	.02	.13*	.11	—

* $p < .05$, ** $p < .001$

Significant Predictors of AI Ethical Behavior Ability

A hierarchical multiple regression found awareness of AI risks, agreeableness regarding faith's impact on AI usage, formal AI use training, and Christian worldview were key factors predicting the ability of AI ethical behaviors. Table 4 showed awareness of AI risks ($\beta = .20$, $p < .001$), agreeableness regarding faith's impact on AI usage ($\beta = .13$, $p < .05$), and formal AI training ($\beta = .11$, $p = .048$) significantly predicted ethical behavior ability, $F(3, 303) = 7.20$, $p < .001$, accounting for approximately 6.7% of the variance ($R^2 = .067$). In the second model, the addition of the Christian worldview significantly improved the model, $F(4, 302) = 6.46$, $p < .001$, with a small but significant increase in explained variance ($\Delta R^2 = .012$, $p < .05$). In this model, awareness of AI risks ($\beta = .20$, $p < .001$), formal AI training ($\beta = .11$, $p < .05$), and Christian worldview ($\beta = .12$, $p < .05$) were significant predictors, while agreeableness regarding faith's impact on AI usage was no longer significant ($\beta = .10$, $p = .103$).

Table 4

Hierarchical Regression Results for AI Ethical Behavior Ability

Variable	B	SE	β	95% CI		p	R^2	ΔR^2
				LL	UL			

Step 1							.067
Constant	2.11	.26		1.61	2.61	<.001	
Risks	.16	.05	.20	.08	.26	<.001	
Christian Faith	.10	.04	.13	.02	.18	<.05	
Training	.25	.13	.11	.002	.50	<.05	
Step 2							.079
Constant	1.56	.37		.83	2.30	<.001	
Risks	.17	.05	.20	.08	.26	<.001	
Christian Faith	.07	.04	.10	-.01	.16	.103	
Training	.26	.13	.11	.01	.51	<.05	
Christian Worldview	.11	.06	.12	.002	.22	<.05	

Note. Risks = How aware are you of the potential risks associated with AI technologies?
Christian Faith = Christian faith influences my approach to using AI technologies.
Training = formal training or education on using AI technologies?
CI = confidence interval; LL = lower limit; UL = upper limit.

Discussion

This study investigated the relationship between Christian worldview and AI literacy among undergraduate students, revealing several significant findings about how religious perspectives influence technological engagement. The results demonstrated that students’ Christian worldview significantly correlates with certain dimensions of AI literacy, particularly critical comprehension ability and ethical behavior ability. This correlation implies that faith-based ethical frameworks can serve as valuable resources for developing responsible AI engagement practices.

Our analysis of 307 undergraduate students from diverse backgrounds revealed varied engagement with AI technologies. While approximately half of the students reported rarely or never using AI in daily life, a majority (58.2%) utilized AI tools at least occasionally for academic purposes, primarily for research, studying new concepts, and writing tasks. This pattern of use aligns with Chen et al. (2024), who found similar utilization patterns of AI in learning among college students. Despite this engagement, our finding that only 15.6% of students had received formal AI training indicates a significant educational gap, consistent

with concerns raised by Hornberger et al. (2023) about university students’ AI literacy levels. The finding that 28.4% of students experienced limited or no communication from faculty regarding AI use expectations reflects a need for faculty to establish clearer AI-related guidelines at the beginning of courses to reduce student uncertainty and prevent potential academic integrity issues.

The predominantly neutral student attitudes toward AI in academic contexts (55.2%) suggest that many students are still forming their perspectives on these technologies. This tentative stance may reflect both the rapidly evolving nature of AI and the limited formal guidance students have received. Wang et al. (2024) identified similar patterns in their study of factors influencing university students’ behavioral intention to use generative AI, noting that knowledge and familiarity significantly impacted attitudes. Our research adds the dimension of religious perspective as an additional factor influencing these developing attitudes. While a majority of students held neutral to positive views about AI’s role in their future careers (45.9%), nearly one-third (29.7%) expressed negative perspectives on this topic. Christian faculty might be able to lessen students’ fears about how AI will impact their future careers. For example, faculty can remind students that they have been created for a unique purpose by God and are fearfully and wonderfully made (Psalm 139:14).

One of the most significant findings from our study is the positive correlation between Christian worldview and both critical comprehension ability and ethical behavior ability in AI contexts. This relationship suggests that religious frameworks may enhance specific aspects of AI literacy, particularly those involving ethical evaluation and critical thinking. The hierarchical multiple regression analysis identified Christian worldview as a significant predictor of ethical AI behavior, alongside other factors including AI risk awareness, agreeableness on the impact of Christian faith on AI usages, and formal AI training. This finding suggests that a deep-rooted ethical framework based on Christian values contributes to responsible AI use. This aligns with Huizinga’s (2022) findings, which highlight the importance of deepening awareness in the field of AI ethics, particularly by exploring how faith in and fear of God could influence the design and implementation of artificial intelligence. Interestingly, the inclusion of the Christian worldview significantly improved the model, but the agreeableness regarding faith’s impact on AI usage was no longer significant. This may indicate that while agreeableness on the impact of Christian faith on AI usage is important, the broader Christian worldview (which encompasses more comprehensive ethical principles) plays a more critical role in predicting ethical behavior. This suggests that a deep-

rooted ethical framework based on Christian values contributes to responsible AI use.

Our study also identified that awareness of AI risks serves as the strongest independent predictor of ethical behavior in AI-related contexts. This finding underscores the critical role that understanding potential harms, limitations, and unintended consequences of AI technologies plays in guiding individuals toward responsible and ethical use. It suggests that fostering a deep, practical awareness of these risks may be more influential in shaping ethical decision-making than general familiarity with AI systems alone. Moreover, the significant role of formal AI training in predicting ethical behavior highlights the value of structured educational initiatives in enhancing AI literacy. Usher & Barak (2024) found that the use of the intervention resulted in increased knowledge of AI ethics among students.

Lastly, our findings that a large proportion of students (42%) expressed neutral attitudes about whether their Christian faith influences their approach to using AI technologies suggest there is substantial room for growth and engagement. Rather than indicating resistance, this neutrality may reflect uncertainty or a lack of exposure to frameworks that connect faith with technology. It presents a valuable opportunity to more intentionally integrate faith perspectives into discussions about AI, helping students explore how their beliefs might inform ethical and responsible technology use. This need is further underscored by the relatively low frequency of faith-based discussions on AI in the classroom (15.0%).

Implications

For Christian educational institutions, these findings carry significant implications. The demonstrated relationship between the Christian worldview and the ethical dimensions of AI literacy suggests valuable opportunities for intentionally integrating discussions of technology within religious education frameworks. Our research suggests that Christian educators have unique opportunities to guide students in responsible AI use by drawing on faith-based ethical principles. Christian schools should consider developing comprehensive AI literacy programs that explicitly address the intersection of faith and technology. Such programs could build on frameworks proposed by Ng et al. (2021), who conceptualized AI literacy through domains of knowledge and competence, while incorporating theological and ethical perspectives specific to Christian traditions. Our finding that 57% of students believed Christian values could be better integrated into AI practices in classes indicates student receptiveness to such approaches.

Strengths and Limitations

This study had several notable strengths. The diverse sample included students from various ethnic backgrounds, academic levels, and fields of study, enhancing the generalizability of findings. The use of validated measures for AI literacy and Christian worldview provided a robust assessment of key variables. Additionally, the hierarchical regression approach allowed for a nuanced analysis of how Christian perspectives relate to the ethical dimensions of AI literacy specifically.

Despite these strengths, several limitations must be acknowledged. The cross-sectional design prevents causal inferences about the relationship between the Christian worldview and AI literacy. The sample had notable demographic limitations, including uneven gender distribution (approximately two-thirds female) and overrepresentation of students from the College of Behavioral and Social Sciences (40%), which may limit generalizability across genders and academic disciplines. The reliance on self-reported measures introduces potential biases, particularly regarding AI literacy levels. Lastly, the explained variance in our regression model (7.9%), while statistically significant, was relatively modest, suggesting other essential factors influence ethical AI behavior beyond those captured in our study.

Future Directions

The relationship between the Christian worldview and AI literacy revealed in this study suggests promising avenues for future research. Longitudinal studies could examine how faith-based approaches to technology evolve over time as students mature in both their religious understanding and technological engagement. Intervention studies could test the effectiveness of faith-integrated AI literacy programs compared to secular approaches. Additionally, qualitative research could explore the specific mechanisms through which religious frameworks inform ethical technology use, building on the correlational patterns identified in our study.

Conclusion

This study demonstrates that the Christian worldview significantly contributes to the ethical dimensions of AI literacy among undergraduate students. The observed relationships suggest that religious frameworks provide valuable resources for engaging responsibly with artificial intelligence technologies. These findings highlight the importance of considering religious perspectives in broader discussions of AI literacy and technology education. By intentionally addressing the intersection of faith and technology, Christian educators can help students develop approaches to AI that are both technically competent and ethically grounded.

References

- Chen, K., Tallant, A. C., & Selig, I. (2024). Exploring generative AI literacy in higher education: Student adoption, interaction, evaluation and ethical perceptions. *Information and Learning Sciences*, 126(1/2), 132–148. <https://doi.org/10.1108/ils-10-2023-0160>
- Feldman, U., & Cherry, C. (2024). Equipping first-year engineering students with artificial intelligence literacy (AI-L): Implementation, assessment, and impact. In 2024 ASEE Annual Conference & Exposition Proceedings. <https://doi.org/10.18260/1-2--47327>
- Folmeg, M., Fekete, I., & Koris, R. (2024). Towards identifying the components of students' AI literacy: An exploratory study based on Hungarian higher education students' perceptions. *Journal of University Teaching and Learning Practice*, 21 (06). <https://doi.org/10.53761/wzyrwj33>
- Harris, D. P., & Armstrong, F. (2023). Generative AI in Adventist education: Opportunities and ethical considerations. *The Journal of Adventist Education*, 85(2), 4–9. <https://doi.org/10.55668/jae0043>
- Hornberger, M., Bewersdorff, A., & Nerdel, C. (2023). What do university students know about artificial intelligence? Development and validation of an AI literacy test. *Computers and Education: Artificial Intelligence*, 5, 100165. <https://doi.org/10.1016/j.caeai.2023.100165>
- Huizinga, G. (2022). Righteous AI: The Christian voice in the ethical AI conversation (Doctoral dissertation, University of Washington). AI and Faith. <http://hdl.handle.net/1773/48925>
- Hwang, H. S., Zhu, L. C., & Cui, Q. (2023). Development and validation of a digital literacy scale in the artificial intelligence era for college students. *KSII Transactions on Internet and Information Systems*, 17(8). <https://doi.org/10.3837/tiis.2023.08.016>
- Knabb, J. J., Wang, K. T., Hall, M. E. L., & Vazquez, V. M. (2022). The Christian Worldview Scale: An emic measure for assessing a comprehensive view of life within the Christian tradition. *Spirituality in Clinical Practice*, 12(1), 1–19. <https://doi.org/10.1037/scp0000306>
- Koch, L. (2023). ChatGPT in the classroom: Uses, limitations, and student and teacher experiences. *The Journal of Adventist Education*, 85(3), 4–10. <https://doi.org/10.55668/jae0046>
- Mujtaba, B. (2024). Clarifying ethical dilemmas in sharpening students' artificial intelligence proficiency: Dispelling myths about using AI tools in higher education. *Business Ethics and Leadership*, 8(2), 107–127. [https://doi.org/10.61093/bel.8\(2\).107-127.2024](https://doi.org/10.61093/bel.8(2).107-127.2024)
- Ng, D. T. K., Leung, J. K. L., Chu, K. W. S., & Qiao, M. S. (2021). AI literacy: Definition, teaching, evaluation and ethical issues. *Proceedings of the Association for Information Science and Technology*, 58(1), 504–509. <https://doi.org/10.1002/prai.2.487>
- Salhab, R. (2024). AI literacy across curriculum design: Investigating college instructor's perspectives. *Online Learning*, 28(2). <https://doi.org/10.24059/olj.v28i2.4426>
- Tzirides, A. O. (Olnancy), Zapata, G., Kastania, N. P., Saini, A. K., Castro, V., Ismael, S. A., You, Y., Santos, T. A. dos, Searsmith, D., O'Brien, C., Cope, B., & Kalantzis, M. (2024). Combining human and artificial intelligence for enhanced AI literacy in higher education. *Computers and Education Open*, 6, 100184. <https://doi.org/10.1016/j.caeo.2024.100184>
- Usher, M., & Barak, M. (2024). Unpacking the role of AI ethics online education for science and engineering students. *International Journal of STEM Education*, 11(35), 1–14. <https://doi.org/10.1186/s40594-024-00493-4>
- Wang, C., Wang, H., Li, Y., Dai, J., Gu, X., & Yu, T. (2024). Factors influencing university students' behavioral intention to use generative artificial intelligence: Integrating the theory of planned behavior and AI literacy. *International Journal of Human–Computer Interaction*, 1–23. <https://doi.org/10.1080/10447318.2024.2383033>

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