INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 15, Issue 3, (2025) E-ISSN: 2222-6990

Assessing Faculty and Administrative Preparedness for AI Integration in Chinese Higher Education

Zhang Hao

City Graduate School, City University Malaysia, Jiangxi University of Software Professional Technology

Email: 1921877033@qq.com

Dr. Chng Lay Kee

City Graduate School,City University Malaysia

Email: chng.lay@city.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v15-i3/25113 DOI:10.6007/IJARBSS/v15-i3/25113

Published Date: 24 March 2025

Abstract

This study examines the readiness for artificial intelligence (AI) adoption among faculty and administrative staff in Chinese higher education institutions, employing the Theory of Planned Behaviour (TPB) as the guiding framework. Initiated by progressive governmental policies such as the 'New Generation Artificial Intelligence Development Plan' (AIDP), China has rapidly embraced AI to stimulate economic growth and technological innovation. Despite substantial investments and infrastructural enhancements, a notable gap remains in the preparedness of academic professionals to integrate AI tools into their daily practices. This research investigates how key TPB variables—attitude, subjective norms, and perceived behavioural control—influence the behavioural intentions toward AI adoption. A cross-sectional survey design was utilized, with structured questionnaires distributed among faculty and administrative staff, and the data analyzed using regression models and analysis of variance. The findings reveal that a positive attitude toward AI adoption is the strongest predictor of behavioural intention, followed by the influence of subjective norms, while perceived behavioural control exerts a moderate effect. Additionally, demographic analysis indicates that work experience significantly moderates AI adoption intentions, whereas gender and institutional role do not yield statistically significant differences. These findings support the recommendation for targeted digital literacy programs and technical training, while emphasizing the need for further research to continuously adapt AI integration strategies in evolving educational environments.

Keywords: AI Adoption, Higher Education, Theory of Planned Behaviour, Digital Transformation, China

Introduction

Initial measures by the Chinese governmental body began in 2013 through several published policy documents highlighting the country's intention to embrace artificial intelligence as a major stakeholder for its economic growth (Roberts et al., 2019). This is exemplified through the State Council's release of "Internet+" in 2015, which was a guideline to integrate AI into various sectors of the country, signifying their commitment to cultivate emerging AI industries and future investments (State Council, 2015). The same year further brought forth a ten-year plan 'Made in China 2025' aiming to transform China into a dominant figure of global AI investment and high-tech manufactures (McBride and Chatzky, 2019). This endeavour was extensively executed through with the aforementioned strategy in July 2017, the 'New Generation Artificial Intelligence Development Plan' (AIDP). The core outline of this strategy envisions China fully harnessing AI's monetary and economic potential to its fullest by 2030, permanently redefining local ethical norms and standards revolving around the tool (Roberts et al., 2019). As the first national-level legislative effort, China's development of AI can be categorized into four strategic fronts which also serve as their long-term goals: international competition, economic growth, social governance, and ethical norms and standards for AI. Below illustrates the stages of progression as derived from the AIDP, condensed into three stages.

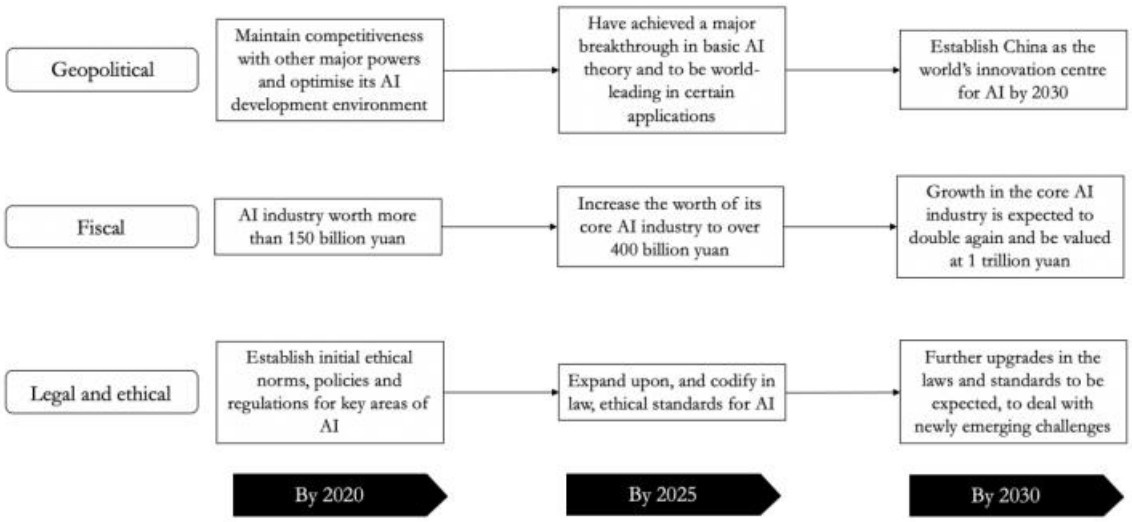

Figure 1.0: AIDP roadmap
Note: From "The Chinese Approach to Artificial Intelligence: an Analysis of Policy, Ethics, and Regulation", by H. Roberts et al., SSRN, 2019, p. 5 (http://dx.doi.org/10.2139/ssrn.3469784). Copyright 2023 by Elsevier Inc.

Stage 1: By 2020, China aims to maintain and increase the competitiveness of its AI development environment with other major powers and optimizations. In monetary terms, China intends to create an AI industry worth more than 150 billion yuan (ca. 21 billion dollars) while seeking to establish initial ethical norms, policies and regulations for vital areas of AI for public exposure and familiarization.
Stage 2: By 2025, China hopes to achieve a 'major breakthrough' in basic AI theory and to be world-leading in some structural applications of AI. The governmental body also targets an increase in its core AI industry's net worth to over 400 billion yuan (ca. 58 billion dollars),

expanding upon its laws and codify legal aspects of ruling policies to uphold ethical standards for AI.

Stage 3: By 2030, China seeks to become the world's innovation centre for AI. The growth in the core AI industry is expected to more than double again and be valued at 1 trillion yuan (ca 147 billion dollars), further optimizing legislative codices. The laws and standards are also to be expected for a more in-depth revision in order to deal with newly and prevailing challenges.

These stages reflect China's achievement of normalizing public reception towards AI through their policies, increasing overall AI readiness among the people. To further heighten public awareness on AI usages, the local government offers a system of incentives to its people for supporting or achieving its aims. These include short-term limits for provincial politicians and promotions based on economic performance for enacting governmental initiatives (Li & Zhou, 2015). Consequently, most of China's influential companies have picked up on experimenting and developing AI technology within their own structural organizations. This incentive was well received as it allowed the administration of Tianjin city to reserve a $5 billion fund investment for the development of AI, suggesting that the AIDP has facilitated a mindset in which local practitioners of AI will still endorse any research and development projects even if they fail, landing in a boost of large-scale building initiatives in the East coast provinces and a spike in the competitive spheres (Zhu, 2019).

In recent years, artificial intelligence (AI) has been extensively adopted by various professionals across numerous industries due to its capabilities beyond summarizing content and recalling key meeting points, thus extensively optimizing the workforce's competence in respective fields (Hamdar, Massally, & Peiris, 2023). In line with this, the Chinese government has further implemented policies encouraging higher education institutions to incorporate AI into their workflows, aiming to align themselves with the other industries of research such as sciences and business sectors and enhance long-term operational efficiency. According to Yang (2019), there is a focus among administrative staffs in devising a comprehensive strategy that integrates AI across different levels of education, including basic, higher, and civic education, which by itself presents a challenge in terms of planning and execution.

Recognizing the transformative potential of Artificial Intelligence (AI) in various industries, the Chinese government has invested billions in establishing multiple AI research centres at high-priority higher education institutions. These centres are intended to advance AI utilization and optimization, ultimately driving innovation and progress across the provinces in China.

According to Yang (2019), China is undertaking efforts to popularize AI education. Since AI technology has been garnering more attention in 2021, it has been observed that technical staff with strong engineering or programming backgrounds have primarily embraced digital transformation. In contrast, the majority of faculty and administrative staff continue to rely on traditional methods in their daily work routines. Hence, this study aims to identify the factors contributing to this gap by investigating the current circumstances and influences on AI adoption in daily work practices. By examining the push and pull factors of AI adoption, the study aims to seek the answers from analysing the attitudes, preferences, and needs of faculty and administrative staff to hopefully ease the process of adoption within universities in China.

As proposed by Jöhnk, Weißert & Wyrtki (2021), organizations must navigate technical and managerial challenges for successful AI adoption, emphasizing the need for AI readiness. This involves assessing and enhancing organizational preparedness for AI integration, considering technical capabilities and leadership support. In light of this, the research seeks to address the government's concerns regarding obstacles to digital transformation and provide insights on how to facilitate broader AI integration. As the core force of higher education, university teachers' understanding, acceptance, and application of AI not only affect their teaching quality and work efficiency (Alnasib, 2023), but may also deliver a profound impact on the development of the entire field of higher education.

In a study conducted by Quy et al. (2023) at a university in Vietnam, it was found that adopting AI is challenging due to the associated infrastructure and investment costs. Therefore, it is clear that implementing AI adoption is not a simple task; it requires careful planning particularly in developing countries or provinces. Therefore, it is important to assess the readiness for AI adoption among both administrative and faculty staff. Proceeding with mass implementation in higher education without understanding their readiness poses a risk, as it could lead to wasted time and effort.

AI in Chinese education varies at different levels. At present, it is situated within the earlier stages in elementary education, more prevalent in higher education, and most common in civic education (Yang, 2019). Despite the widespread use of AI in higher education and significant support and investment from the Chinese government in AI innovation and research, questions remain about the readiness of key stakeholders in higher institutions, such as whether they are sufficiently equipped with the knowledge and internal manpower to implement these changes, indirectly gauging their ability to adapt themselves to latest trends and information. More importantly, it is also a testament to whether the individuals working in higher education are personally comfortable to these changes considering its scale and organizational differences moving forward. Given the aforementioned concerns on the moral and ethical considerations of artificial intelligence, the fact that these questions as critical proves Jöhnk et als (2021) research which noted that AI readiness and proper research revolving around it is still in its infancy stage, with many people among professionals lacking guidance on its application and execution.

Recent studies predominantly focus on utilizing AI and exploring the potential of AI tools across various sectors, including their economic impact, furthering beyond educational sectors (Sharma et al., 2022; Pelletier et al., 2022; TeachAI et al., 2023; Hamdar et al., 2023). All of them come to a consensus of emphasizing the possibilities AI offers for widespread sectoral growth rather than examining the preparedness of higher education institutions for AI adoption. China is seeking the optimal balance between top-down system design and bottom-up applications in AI education, indicating a complication in unifying these two approaches for effective AI integration. Moreover, there is a call for caution against overemphasizing the potential short-term effects of AI in education without considering its longer-term implications, suggesting another obstacle in maintaining a balanced perspective on AI's impact (Yang, 2019). At present, there is not much research on these especially in Shanxi Province and it requires in-depth exploration and analysis because the attitudes of university members towards AI adoption are complex and diverse. This study attempts to fulfil that role, providing fresh insight into the academic sphere by lending credence on past

researches' methodologies and implementing them in a geographical demographic that is yet to be fully scrutinized.

While the impact of AI is profound, there is a concern that society is moving forward without adequately addressing the necessary issues and challenges. As Chan (2023) indicates, readiness for AI in education entails assessing infrastructure, training educators, and ensuring ethical AI practices. Yang (2013) and Chatterjee & Bhattacharjee (2020) also pointed out that the readiness of educators to incorporate AI into their teaching is crucial and there are challenges reflect the complexities involved in integrating AI into the educational framework, emphasizing the need for strategic planning, educator preparedness to adoption and implementation.

By focusing on these key areas, educational institutions can effectively leverage AI to improve teaching and learning experiences. Some university staff including teachers have limited understanding of AI technology and hold a conservative attitude towards its value and application prospects (Kuleto et al., 2021). The same may also apply to the students; without the students' collaboration and approval, the implementation of AI would not yield the substantial benefits it was expected to. Therefore, when adopting AI, it involves various levels of challenges which are organizational, technical, and individual (Jöhnk, Weißert & Wyrtki, 2021). Incidentally, there are also significant differences in readiness based on gender, age, and work experience (Alnasib, 2023), so it is essential for the study to explore how these demographic factors specifically impact faculty members' willingness and ability to integrate AI into their teaching and working practices. Understanding this can help tailor professional development programs to fully encompass the prerequisite needs of both teacher and student alike. In addition, understanding and addressing the identified factors can facilitate smoother adoption and integration of AI technologies in educational settings (Chatterjee & Bhattacharjee, 2020). In Crompton and Burke's review from 2016-2022, the study found that 11% of the AI applications in higher education were focused on managers, indicating a significant but not primary focus on this group compared to students (72%) and instructors (17%).

All these researches conclusively point toward a demand for clearer understanding of societal perceptions towards AI, rather than the technology itself which have received plenty academic attention over the years. With a more robust view on the people's AI attitudes in China, policymakers and educational authorities stand to promote a better grasp of existing societal and economical needs, enabling them to make informed decisions for the betterment of the country. That said, utilising the Theory of Planned Behaviour (TPB) is this study's direct contribution towards that effort – each variable in the TPB model (namely attitude, perceived behavioural control, subjective norms, and intention) addresses a facet of human behaviour which dictates their decisions to enact certain behaviours, which in this case is their acceptance or rejection of the use of AI within higher education. However, given the subjectivity of human intentions, the study of AI readiness among people must be separately conducted on each region of China in order to attain an all-inclusive comprehension on AI readiness of its people. Applying this model within this study curbs the research gap to an extent by covering the Shanxi Province specifically, while providing future researches with a reliable frame of reference when attempting to conduct studies with similar-scaled objectives or theoretical frameworks. To that end, the study purposely breaks down the perception of

AI adoption particularly among the faculties and administrative staffs within higher education institutions in Shanxi Province.

To address the problem of uncovering readiness regarding the adoption of AI in higher education institutions from the aspects of motivation, perception, and attitudes, the study will achieve the following research objectives:

1. To examine whether independent variables within the Theory of Planned Behaviour (TPB) (Attitude, Subjective norm and Perceived Behavioural Control) are significant predictors of the behavioural intention on AI adoption in higher education institutions
a. To examine the attitude towards AI adoption among faculties and administrative staff as a significant predictor of the behavioural intention on AI adoption in higher education institutions
b. To examine the subjective norm towards AI adoption among faculties and administrative staff as a significant predictor of the behavioural intention on AI adoption in higher education institutions
c. To examine the perceived behavioural control towards AI adoption among faculties and administrative staff as a significant predictor of the behavioural intention on AI adoption in higher education institutions
2. To explore any statistical differences of behavioural intentions on AI adoption due to gender, roles, or work experience in higher education institutions
a. To explore any statistical differences of behavioural intentions on AI adoption with gender as a moderator in higher education institutions
b. To explore any statistical differences of behavioural intentions on AI adoption with assigned roles as a moderator in higher education institutions
c. To explore any statistical differences of behavioural intentions on AI adoption with work experience as a moderator in higher education institutions
3. To explore the opportunities in AI tool Adoption in higher education institutions
4. To explore the challenges in AI tool Adoption in higher education institutions

Literature Review

Quy et al. (2023) mentioned that in the field of general education, especially in higher education, digital transformation is focused on reducing traditional lectures and knowledge dissemination. Instead, the emphasis is placed on developing learners' capacity, promoting self-study, enabling learning opportunities at any time and place, personalised learning, fostering a society that values learning, and encouraging lifelong learning. The proliferation of the Internet of Things (IoT), cloud computing, Artificial Intelligence (AI), and large data-processing technology is impacting the growth of the digital education infrastructure. Consequently, numerous sophisticated instructional models are being developed using IT tools. These models efficiently facilitate personalised learning, wherein individual students pursue distinct curricula and methodologies. In addition, they provide a convenient and direct means to access the extensive information available on the internet, while also enabling instant communication between schools, families, students and teachers. The digital transformation within the education field can be categorized into two primary domains: educational administration and the realms of teaching, learning, evaluation, and scientific investigation. In terms of educational management, digital transformation includes converting management information into digital form, establishing interconnected large-scale database systems, providing online public services, and utilizing advanced technologies

like artificial intelligence, blockchain, and data analysis to effectively and precisely aid in management, administration, forecasting, and decision-making processes.

With the aid of AI, personalized learning becomes possible to meet the unique requirements of each student from respective backgrounds, which is primary in unveiling their potential in academia. Every student stands to gain from an education that is both contemporary and captivating. Nevertheless, the existing AI technology might not be entirely equipped to deliver such an experience and could necessitate further refinement. Chatbots have the potential to offer personalized support, tackling common problems and delivering customized solutions to meet individual demands, but at present lack a long-lasting memory for their discussions which may slightly hinder the educational process of students. As the technology advances, AI-enabled chatbots are and will become more accurate in answering queries. These AI-powered chatbots can also provide answers to students' questions beyond the scope of regular classes.

Additionally, this type of AI-powered system can assist with student admissions inquiries, administrative decision-making. In the near future, AI technology is speculated to possess the capability to be highly beneficial in the development of top-notch educational materials, including digitized textbooks and adaptable digital learning interfaces for students at every educational level. In many ways, AI appears to be beneficial in higher education (Chatterjee & Bhattacharjee, 2020). Therefore, addressing students' adoption of AI is relevant as it will better prepare them for a world where AI technologies will be ubiquitous. Using these tools with utmost efficiency will enhance one's capacity for critical thought, problem-solving, and digital literacy, all of which are highly sought after critical skills in the quickly evolving employment market of today.

Despite the possible benefits, there are still barriers to AI adoption in higher education. There has been little focus on the uses of AI chatbots with an intermediate focus on education, despite the fact that previous literature reviews have given an overview of pertinent studies in the larger context of technological (Mohsin, Isa, Ishak, & Salleh, 2024). This restriction may be caused by a variety of factors such as worries about data and user privacy, the requirement for appropriate training, and the potential replacement of traditional learning which have raised concerns over the digital divide among both faculties and students, indicating that certain persons may have greater access to AI tools than others. Utilizing modern AI to substitute outdated technologies and manual procedures is crucial in higher education. This facilitates the adaptation and enhancement of curriculum inside higher education institutions. ChatGPT and ChatPDF are platforms that fall under the category of educational resources which have become prominent instruments that assists pupils in studying through many means from personalized problem solving to interpretation of curriculum. Additionally, this invention not only facilitates academic duties but also promotes interactive learning and facilitates collaboration.

Theoretical Framework

TAM is an information systems theory proposed by Fred Davis in the 1980s, specifically designed to explain the acceptance and usage of technology by individuals. Similar to TPB, it is an extension of the Theory of Reasoned Action (TRA), originally established to contend the pervading issue at the time of performance impacts being lost whenever people lose interest

to use informational systems. This is realized through how people form attitudes and intentions toward trying to learn to use the new technology prior to initiating efforts directed at using (Mokhsin et al., 2011). To simplify this statement, people tend to make cognitive decisions or create a sense of preconceived bias towards a piece of technology without interacting with it personally. TAM strives to not only elucidate why that technology is being unused by people but also understand how to increase use acceptance through the design of the system (Davis, 1989).

Conceptual Framework

Below shows a diagram of the conceptual framework:

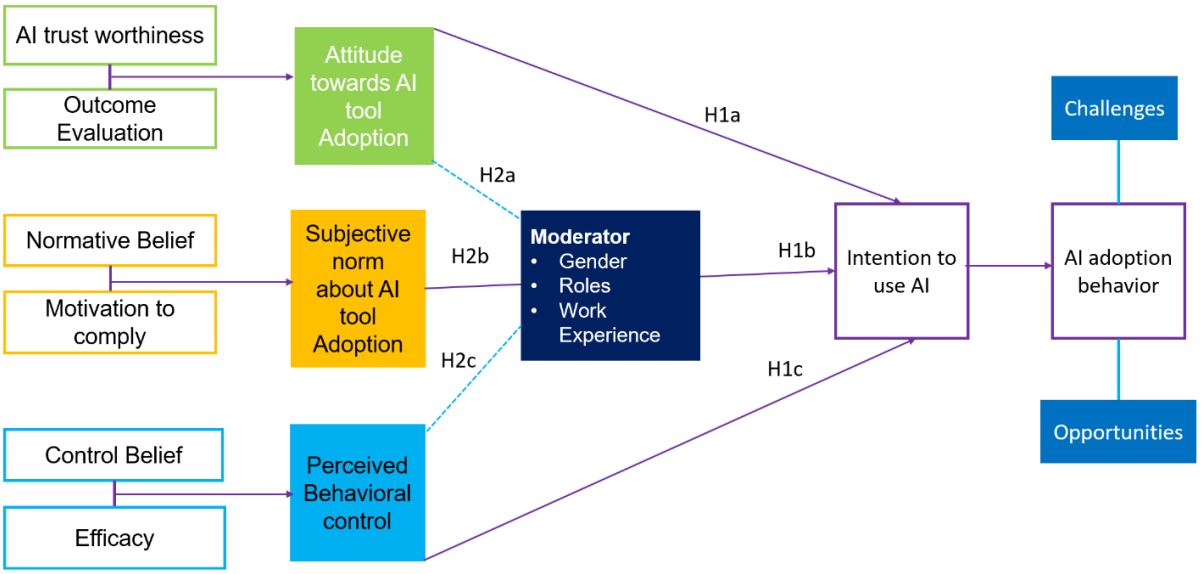

Figure 2.0: Conceptual Framework

Methodology

The study uses a cross-sectional survey design where data are collected at one point in time from a sample representing the entire population (Coe, et al., 2021). According to Kelly et al. (2018), this design is particularly suited for assessing the current state of AI adoption readiness among the target population. The study adopts a structured questionnaire with closed-ended questions. The questionnaire will include items that measure various aspects of AI adoption readiness, such as AI trustworthiness, Outcome Evaluation, Normative Belief, Motivation to Comply, Control Belief, and Efficacy, which affect the intention to use AI and hence the AI adoption behaviour (George, 2004; Chatterjee & Bhattacharjee, 2020).

By employing this formula, the study has arrived at a recommended sample size of 622 individuals. A sample size of approximately 400 individuals would be required to ensure a 99% confidence level with a 5% margin of error when conducting a study on a population of 900 administrative and faculty staff members, considering a population variability of 50%.

A non-probability sampling method, specifically convenience sampling, is used to select the sample of faculty and administrative staff across different higher education institutions in China. The questionnaire is distributed via the SurveyStar platform to ensure a high response rate and enhance the robustness of the research data. Demographic information such as gender, roles, and work experience are collected through the survey to enable further analysis

of its impact on the intention to use and adopt AI. The SPSS software is used to analyse the quantitative data.

Results and Discussion

This study examines the key factors influencing behavioural attention to adopt AI tools in higher education. By leveraging a regression model, the study evaluates the impact of three critical variables- Attitude, Subjective Norms, and Perceived Behavioural Control- on individuals' willingness to embrace AI technologies. The findings highlight the varying degrees of influence these factors exert, offering valuable insights into strategies for driving AI adoption.

- Attitude has the strongest impact on AI adoption, with a coefficient of 0.245, emphasizing the critical role of positive perceptions and trust in influencing behavioural intention.
- Subjective Norms are the second most influential factor (coefficient: 0.203), showcasing the importance of social influence, such as encouragement from peers, superiors, or colleagues.
- Perceived Behavioural Control, while having the smallest coefficient (0.144), still plays a significant role in fostering individuals' confidence to adopt AI tools.

The regression model confirms that all three factors—Attitude, Subjective Norms, and Perceived Behavioural Control—are significant predictors of behavioural intention, with varying degrees of influence.

Apart from that, ANOVA has been used to analyse the factors influencing behavioural intention to adopt AI tools within higher education institutions, focusing on effects of demographic and experiential variables such as gender, role and work experience. By using ANOVA, the study evaluates both main effects and interaction effects, providing insights into how these variables and their interplay shape attitudes toward AI adoption. The findings showing how the variables help in developing to foster AI adoption.

- *Model Significance:* The corrected ANOVA model is statistically significant ($F = 1.150$, $p = 0.048$), indicating the model's relevance in explaining behavioural intention to adopt AI tools in higher education.
- Intercept: A highly significant intercept ($F = 10{,}986.834$, $p < 0.001$) reveals a strong baseline inclination toward AI adoption, independent of demographic variables, suggesting broader institutional, societal, or technological influences driving AI adoption.
- *Gender:* The effect of gender on behavioural intention is not statistically significant ($F = 1.373$, $p = 0.242$), indicating similar AI adoption intentions among male and female participants, emphasizing inclusivity in higher education AI adoption.
- *Role:* The specific role within the institution (e.g., faculty, administration) does not significantly influence AI adoption intention ($F = 0.352$, $p = 0.553$).
- *Work Experience:* Work experience has a statistically significant impact ($F = 1.613$, $p = 0.046$), suggesting that years of experience influence behavioural intention to adopt AI, with potential variations across experience levels.
- *Model Fit:* An R-squared value of 0.64 indicates the model explains 6.4% of the variance in behavioural intention, while the adjusted R-squared value of 0.04 suggests a modest fit.

- *Implications:* While gender and role show no significant independent effects, work experience and interactions highlight the need for tailored strategies addressing specific role-based and experiential factors to promote AI adoption.

Conclusion

This study provides valuable insights into the readiness of Chinese higher education institutions for AI adoption among faculty and administrative staff. Utilizing the Theory of Planned Behaviour, the research demonstrates that attitudes and subjective norms significantly predict behavioural intentions to integrate AI, while perceived behavioural control plays a more moderate role. The findings further reveal that work experience, rather than gender or institutional role, is a key demographic factor influencing AI adoption intentions. These results underscore the importance of targeted digital literacy initiatives, comprehensive training programs, and supportive infrastructures to facilitate the successful integration of AI in academic settings. By addressing both psychological and practical dimensions of technology acceptance, the study offers actionable recommendations for policymakers and institutional leaders. Ultimately, enhancing AI readiness will not only improve teaching quality and operational efficiency but also position higher education institutions to meet the evolving demands of the digital age, fostering a dynamic and innovative educational environment across China.

References

Achruh, A., Rapi, M., Rusdi, M., & Idris, R. (2024). Challenges and opportunities of artificial intelligence adoption in islamic education in indonesian higher education institutions. *International Journal of Learning Teaching and Educational Research*, *23*(11), 423–443. https://doi.org/10.26803/ijlter.23.11.22

Ahmad, M. F., & Ghapar, W. R. (2019). *The Era of Artificial Intelligence in Malaysian Higher Education: Impact and Challenges in Tangible Mixed-Reality Learning System toward Self Exploration Education (SEE)* . https://www.sciencedirect.com/science/article/pii/S1877050919321179

Aideloje, P., & Uyouyou, U. S. (2023, August). *Influence of teaching methods, gender and school location on the academic achievement of secondary school students in mathematics in delta state*. Doi.org. https://doi.org/10.31219/osf.io/evsjz

Ajzen I. (2020). The theory of planned behaviour: Frequently asked questions. *Human Behaviour Emergency Technology 2020*; 2:314–324. doi: 10.1002/hbe2.195.

Ajzen, I. (1991) The Theory of Planned Behaviour. *Organizational Behaviour and Human Decision Processes*, 50, 179–211.

Ajzen, I. (2006). Constructing a theory of planned behaviour questionnaire. https://people.umass.edu/~aizen/pdf/tpb.measurement.pdf

Akinwalere, S. N., & Ivanov, V. T. (2022). *Artificial Intelligence in Higher Education: Challenges and Opportunities*. https://www.researchgate.net/publication/340122885_ARTIFICIAL_INTELLIGENCE_IN_HIGHER_EDUCATION_CHALLENGES_AND_OPPORTUNITIES

Akram, H., & Li, S. (2024). Understanding the role of teacher-student relationships in students' online learning engagement: Mediating role of academic motivation. *Perceptual and Motor Skills*, *131*(4). https://doi.org/10.1177/00315125241248709

Aleru, G. E. (2024). View of impact of artificial intelligence on job performance of higher education managers in state-owned universities in south-south. *IJAAR Publishing*, *1*(3), 109–120. https://www.openjournals.ijaar.org/index.php/arjci/article/view/339/349

Algerafi, M. A. M., Zhou, Y., Alfadda, H., & Wijaya, T. T. (2023). Understanding the factors influencing higher education students' intention to adopt artificial intelligence-based robots. *IEEE Access*, *11*(1), 99752–99764. https://doi.org/10.1109/access.2023.3314499

Al-Mughairi, H., & Bhaskar, P. (2024). Exploring the factors affecting the adoption AI techniques in higher education: Insights from teachers' perspectives on chatgpt. *Journal of Research in Innovative Teaching & Learning*. https://doi.org/10.1108/jrit-09-2023-0129

Alnasib, B. N. (2023). Factors affecting faculty members' readiness to integrate artificial intelligence into their teaching practices: a study from the Saudi higher education context. *International Journal of Learning, Teaching and Educational Research*, 22(8), 465-491.

Alnasib, B. N. M. (2023). Factors affecting faculty members' readiness to integrate artificial intelligence into their teaching practices: A study from the saudi higher education context. *International Journal of Learning, Teaching and Educational Research*, *22*(8), 465–491. https://doi.org/10.26803/ijlter.22.8.24

Alotaibi, N. S., & Alshehri, A. H. (2023). Prospers and obstacles in using artificial intelligence in saudi arabia higher education institutions—the potential of ai-based learning outcomes. *Sustainability*, *15*(13), 10723. https://doi.org/10.3390/su151310723

Al-Shanti, A., Jebreel, M., Qabajeh, M., Nassoura, A., & Airout, R. (2023). The role of organizational antecedents in fostering accounting intelligence adoption: The mediating influence of organizational culture. *Human Systems Management*, 1–17. https://doi.org/10.3233/hsm-230194

Ananyi, S., & Somieari-Pepple. (2023). Cost-benefit analysis of artificial intelligence integration in education management: Leadership perspectives. *International Journal of Economics, Environmental Development and Society*, *2023*(3), 353–370. https://www.ijeeds.com.ng/assets/vol.%2C-4(3)-ananyi---somieari-pepple.pdf

Archie, T., Hayward, C. N., Yoshinobu, S., & Laursen, S. L. (2022). Investigating the linkage between professional development and mathematics instructors' use of teaching practices using the theory of planned behaviour. *PLOS ONE*, 17(4), e0267097. https://doi.org/10.1371/journal.pone.0267097

Arenal, A., Armuña, C., Feijoo, C., Ramos, S., Xu, Z., & Moreno, A. (2020). Innovation ecosystems theory revisited: The case of artificial intelligence in China. *Telecommunications Policy*, *44*(6), 101960. https://doi.org/10.1016/j.telpol.2020.101960

Ayanwale, M. A., Sanusi, I. T., Adelana, O. P., Aruleba, K. D., & Oyelere, S. S. (2022). *Teachers' readiness and intention to teach artificial intelligence in schools*. https://www.sciencedirect.com/science/article/pii/S2666920X22000546

Ayyoub, A., Khlaif, Z. N., Hamamra, B., Bensalem, E., Mitwally, M., Fteiha, A., Joma, A., Bsharat, T., Mousa Khaldi, & Mageswaran Sanmugam. (2024). Drivers of acceptance of generative ai through the lens of the extended unified theory of acceptance and use of technology. *SSRN*. https://doi.org/10.2139/ssrn.4969172

Bandura, A. (1994). Encyclopedia of mental health. *Self-Efficacy*, *4*(4), 71–81. https://happyheartfamilies.citymax.com/f/Self_Efficacy.pdf

Bhutoria, A. (2022). Personalized education and artificial intelligence in the United States, China, and India: A systematic review using a human-in-the-loop model. *Computers and Education: Artificial Intelligence*, 3, 100068.

Bin, Q., Zhao, X.-L., & Hu, Z.-L. (2011). Performance evaluation of technological innovation mode on the equipment manufacturing industry of shanxi province. *Procedia Engineering*, *15*, 4908–4911. https://doi.org/10.1016/j.proeng.2011.08.914

Blanco, M., Engelmann, D., Koch, A. K., & Normann, H.-T. (2010). Belief elicitation in experiments: Is there a hedging problem? *Experimental Economics*, *13*(4), 412–438. https://doi.org/10.1007/s10683-010-9249-1

Borger, J. G., Ng, A. P., Anderton, H., Ashdown, G. W., Auld, Blewitt, M. E., Brown, D. V., Call, M., Collins, P., Freytag, S., Harrison, L. C., Hesping, E., Jaci Hoysted, Johnston, A., McInneny, A., Tang, P. C., Whitehead, L., Jex, A. R., & Naik, S. H. (2023). Artificial intelligence takes centre stage: Exploring the capabilities and implications of ChatGPT and other ai-assisted technologies in scientific research and education. *Immunology and Cell Biology*, *101*(10). https://doi.org/10.1111/imcb.12689

Bostrom, N., & Cirkovic, M. M. (2025). *Global catastrophic risks*. Google Books. https://books.google.com.my/books?hl=en&lr=&id=sTkfAQAAQBAJ&oi=fnd&pg=PA308&dq=ai+is+inherently+neutral&ots=z4eg836NrC&sig=3tmb55Em1K8gou5C8G2pli4u_ck&redir_esc=y#v=onepage&q=ai%20is%20inherently%20neutral&f=false

Bowles, D. C., & Kruger, J. S. (2023). Generating employable, intelligent graduates in a world with generative AI: Thoughts for educators. *Pedagogy in Health Promotion, 9* (2), 75–77. https://doi.org/10.1177/237337992311751

Bu, Q. (2022). Ethical risks in integrating artificial intelligence into education and potential countermeasures. *Science Insights*, *41*(1), 561–566. https://doi.org/10.15354/si.22.re067

Bucea-Manea-Ţoniş, R., Kuleto, V., Gudei, S. C. D., Lianu, C., Lianu, C., Ilić, M. P., & Păun, D. (2022). Artificial intelligence potential in higher education institutions enhanced learning environment in romania and serbia. *Sustainability*, *14*(10), 5842. https://doi.org/10.3390/su14105842

Cardona, M. A., Rodríguez, R. J., & Ishmael, K. (2023). *Artificial Intelligence and the Future of Teaching and Learning*. https://www2.ed.gov/documents/ai-report/ai-report.pdf

Chai, C. S., Chiu, T. K. F., Wang, X., Jiang, F., & Lin, X.-F. (2022). Modeling Chinese secondary school students' behavioural intentions to learn artificial intelligence with the theory of planned behaviour and self-determination theory. *Sustainability*, *15*(1), 605. https://doi.org/10.3390/su15010605

Chai, C. S., Lin, P., & Jong, M. S. (2020). *Factors influencing students' behavioural intention to Continue artificial intelligence learning* (pp. 2020–2023). https://doi.org/10.1109/ISET49818.2020.00040

Chai, C. S., Lin, P.-Y., Jong, M. S.-Y., Dai, Y., Chiu, T. K. F., & Qin, J. (2021). Perceptions of and behavioural intentions towards learning artificial intelligence in primary school students. *Educational Technology & Society*, *24*(3), 89–101. https://www.jstor.org/stable/27032858

Chai, C. S., Wang, X., & Xu, C. (2020). An extended theory of planned behaviour for the modelling of Chinese secondary school students' intention to learn artificial intelligence. *Mathematics*, *8*(11), 2089. https://doi.org/10.3390/math8112089

Chaika, O. (2023). *Role of AI in higher education*. http://dx.doi.org/10.24919/2617-0825.6/214.2023