

Next-Gen Workforce Meets AI: Navigating Career Paths in a Tech-Driven World

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ABSTRACT

Artificial Intelligence (AI) is rapidly transforming the global world of work, raising important questions about how younger generations perceive its impact on their future careers. This study investigates the perceptions of Generation Y (Gen Y) S. A., Ruicen, S., Danning, S., ..., & Kee, D. and Generation Z (Gen Z) university M. H. (2025). Next-gen workforce meets AI: students toward AI and its influence on Navigating career paths in a tech-driven employment opportunities. A quantitative world. *Journal of the Community Development in Asia*, 8(3), 430-444. survey was conducted with 153 respondents from universities in China and Malaysia, examining three key variables: AI awareness, attitudes toward AI, and perceptions of employment prospects. The regression model explains 59.9% of the variation in students' perceptions ($R^2 = 0.599$). Both awareness ($\beta = 0.400$, $p < 0.05$) and attitude ($\beta = 0.521$, $p < 0.01$) significantly shape students' views, with attitude exerting the stronger influence and mediating the effect of awareness on perception. These findings underscore the importance of higher education institutions in enhancing AI literacy, cultivating adaptive mindsets, and integrating technology-oriented curricula to prepare students for the demands of an AI-driven labor market. By fostering proactive and confident engagement with emerging technologies, universities can empower future professionals to navigate challenges and leverage opportunities in the evolving digital economy.

Keywords: AI Awareness; Artificial Intelligence; Career Readiness; Employment Opportunities; Future Employment; Gen Y; Gen Z

INTRODUCTION

The term artificial intelligence (AI) describes computer programs that are capable of reasoning, learning, making decisions, and solving problems—tasks that are usually considered for human intelligence, as described by [May \(2024\)](#). [May \(2024\)](#) further explains that these systems are made to think, learn, and behave similarly to humans and can be either software or robots. Machine learning and other AI techniques enable computers to do cognitive tasks like pattern recognition, language comprehension, and decision-making.

Concern about AI's capacity to replace human employees is growing as the technology grows, especially in professions requiring repetitive or rule-driven tasks ([Oh et al., 2025](#)). Even while AI systems are getting better at automating these kinds of tasks, it raises the question of what employment will still exist as AI develops. Some once-secure jobs, such as data entry, customer service, and even more complicated professions like software development and law, are now in danger of becoming automated. This change drives workers to adjust and analyze the kinds of jobs and abilities that will be valued in an employment environment driven by AI.

Despite concerns about employment loss, AI is viewed as a catalyst for job creation. According to the [World Economic Forum \(2020\)](#), machines will be able to do more work than people, yet this change will also result in the creation of 58 million new jobs worldwide. This draws attention to a disagreement where new employment candidates might cancel out job displacement caused by AI, especially in domains like data analysis, AI development, and robotics maintenance. But in order to succeed in this changing environment, employees will need to retrain and adjust to jobs that require more creativity, emotional intelligence, and sophisticated problem-solving abilities—skills that AI is less likely to replicate ([Cann, 2018](#)).

Preparing this workforce requires education systems to evolve and support youth in acquiring relevant competencies. Recent studies highlight the importance of course quality and digital skills in shaping young people's perceived employability. [Kee et al. \(2023b\)](#) found that high-quality courses improve perceived employability through increased course effectiveness and satisfaction among Malaysian youth. Similarly, digital skill acquisition positively impacts employability perceptions, mediated by course quality, underscoring the need for robust educational frameworks that respond to technological advances ([Kee et al., 2023a](#)). Moreover, bridging the gap between academia and industry is critical to equip the next-gen workforce for Industry 4.0 challenges. Enhancing industry-academia collaboration promotes innovation and ensures that education remains relevant to market demands ([Kee, 2024](#)). Work-based learning initiatives implemented in Malaysian higher learning institutions provide practical exposure and help align theoretical knowledge with real-world applications, further supporting youth readiness for a tech-driven labor market ([Lim et al., 2024](#)).

University students, many of whom are getting ready to enter the industry, are starting to wonder how AI might affect their future job prospects as this technological revolution takes place. Prospects reports that students are especially worried about how AI would affect the need for their abilities, yet some are hopeful about how AI could lead to the development of new sectors and employment prospects. Others, however, are more concerned, believing that changes brought about by AI may result in fewer employment openings, particularly for fresh graduates or those working in non-technical professions. [Attewell \(2023\)](#) suggests that students need to reevaluate their career plans as generative AI advances, stressing the value of characteristics that enhance AI

capabilities, like creativity, adaptability, and interpersonal skills—qualities that AI will be unable to automate in the near future.

Although the discussion over AI's impact on the labor market is not new, the present rate of technological improvement makes it more vital to address. As highlighted by [Onyeze et al. \(2023\)](#), rapid digitization and the integration of AI across industries challenge both workers and institutions to keep up. [Chris et al. \(2024\)](#) argue that educational systems play a critical role in preparing students for this scenario by incorporating AI-related skills into their curriculum. As students manage an unstable job market, assessing their awareness and perceptions of AI is critical for developing education, policy, and workforce development measures.

This study aims to evaluate university students' awareness, perceptions, and attitudes concerning the impact of AI on their future jobs, thereby offering a focused understanding of how the next generation of workers anticipates and prepares for technological disruption. The significance of this research lies in addressing a gap in the existing literature, which has largely emphasized the perspectives of current professionals while overlooking the voices of students who will soon enter the workforce. Unlike previous studies that focus primarily on professionals or organizational adoption of AI, this research emphasizes university students as future workers in an AI-driven labor market. By examining how awareness, perception, and attitudes interact to influence employment readiness, the study contributes a nuanced perspective to the literature. Its novelty lies in showing that it is not awareness alone, but students' perceptions and attitudes, that critically determine their preparedness for AI integration in future workplaces.

LITERATURE REVIEW

Positive Impacts of AI on Employment

AI has significantly influenced the current job market, frequently serving as a driver for innovation and productivity. As noted by [Shen and Zhang \(2024\)](#), AI automates monotonous work, allowing humans to concentrate on higher-value activities. For example, AI-powered solutions, such as Chat AI Assistant in e-commerce platforms like Shopee, react to buyer queries automatically 24 hours a day, seven days a week, minimizing the need for manual customer support interactions and increasing operational efficiency. This AI-enabled assistant can answer common inquiries, walk buyers through the purchasing process, and even recommend products, all of which contribute to better customer service and a more efficient user experience ([Shopee, 2025](#)). In the healthcare sector, according to Statista, the AI healthcare market, which was valued at USD 11 billion in 2021, is expected to expand to \$187 billion by 2030. According to [IBM Education \(2023\)](#), AI's rising significance is altering healthcare through advances in machine learning algorithms, increased data access, and enhanced hardware. AI and machine learning technology can handle massive amounts of health data, such as medical records and clinical trials, considerably faster than people, increasing the efficiency and accuracy of healthcare operations.

[Farrell \(2023\)](#) highlights that AI improves job roles by automating repetitive tasks, boosting productivity, and allowing employees to focus on more significant responsibilities. It also generates new career opportunities, such as data analysts, AI programmers, and machine learning specialists, which require a combination of technical and creative abilities. For example, as reported by [ProcureCon \(2024\)](#), companies such as McDonald's use AI and data analytics to better understand client preferences and market trends, resulting in more personalized and efficient service. This AI integration

improves operations and frees up staff to focus on higher-value duties, resulting in increased business efficiency and customer satisfaction.

H1: Students with higher awareness and understanding of AI are more likely to perceive AI as having a positive impact on future employment.

Challenges and Concerns: Job Displacement

While AI improves efficiency and creativity, it also raises serious issues, particularly around job displacement. A major concern voiced by [Zirar et al. \(2023\)](#), is the danger of job loss as workplace AI takes over duties previously performed by humans. According to studies, AI systems can fully eliminate the need for human engagement in mundane or repetitive jobs, leaving many people unclear about their duties. According to studies, AI systems can fully eliminate the need for human engagement in basic or repetitive jobs, leaving many people unclear about their duties. For example, in the transportation industry, companies such as Waymo and Nuro are testing self-driving delivery cars, which will replace the need for human drivers. Waymo became the first service provider to offer driverless taxi trips to the general public in December 2020, in a Phoenix, Arizona neighborhood. Nuro launched autonomous commercial delivery operations in California in 2021. DeepRoute.ai began its robotaxi service in Shenzhen in July 2021. This move puts entry-level delivery jobs at risk, as they are frequently occupied by students and part-time workers. Furthermore, as noted by [Yu et al. \(2023\)](#), when employees do not grasp how AI applications work or how they impact their employment, discomfort, and resistance frequently follow.

In addition to job loss fears, the move to AI-driven workplaces frequently causes people to feel unsure and anxious, particularly when the inner workings of AI systems are unknown. According to [Msjag \(2025\)](#), the integration of AI into sectors may result in the displacement of human workers who lack clear knowledge or communication about how AI may augment or replace their roles. For example, in the retail industry, AI-powered checkout systems, such as those utilized by Amazon Go, are gradually displacing cashier jobs. [Krey \(2016\)](#) points out that, while these systems increase operational efficiency, they minimize the need for human interaction at checkout counters, which has historically been filled by part-time workers or students searching for flexible work. This trend of automation poses serious concerns for those in low-skilled, entry-level occupations, who may struggle to find new work possibilities as AI takes over more tasks. The pressure to adapt to AI technology, along with a lack of awareness and readiness, exacerbates job insecurity and emphasizes the need for more inclusive AI adoption tactics.

H2: Students with a more negative attitude towards AI in the workplace are more likely to perceive AI as a threat to future employment opportunities.

Students' Perceptions and Preparedness for AI in the Workforce

As AI reshapes the employment landscape, the preparedness of students entering the job market becomes increasingly crucial. While universities have made progress by integrating AI-related topics into their curricula, many students—especially those from non-technical or humanities backgrounds—report feeling underprepared for AI-enabled workflows. The lack of hands-on training in AI ethics, interdisciplinary application, and soft-AI tools contributes to anxiety and uncertainty about future employment prospects.

For example, research by [Zawacki-Richter et al. \(2019\)](#) highlights that although awareness of AI is growing among university populations, few programs offer experiential learning or career-aligned AI training. This educational gap is especially pronounced in Southeast Asia, where disparities in digital infrastructure and access to

resources further complicate readiness. Cultural attitudes toward job stability and unfamiliarity with AI-powered systems cause many students to view AI either as a disruptive force or as an elite-only opportunity, widening the preparedness divide.

Additionally, psychological factors play a significant role. As noted by [Baek et al. \(2024\)](#), students in non-STEM disciplines often experience higher levels of anxiety regarding AI's impact on employability, citing fears of job displacement and a lack of institutional guidance. Emotional readiness, therefore, is as important as technical literacy in navigating AI transitions. Institutions that incorporate not only technical skill-building but also mental wellness and career coaching are more likely to produce graduates who can adapt confidently to AI-driven environments.

H3: Attitudes towards AI in the workplace mediate the relationship between awareness of AI and perception of AI's impact on employment.

The Role of Education and Training in Preparing Students for an AI-Driven Future

To better prepare students for an AI-driven workforce, educational institutions are increasingly incorporating AI-related subjects into their curricula. For instance, Stanford University introduced an "AI + Ethics" program to help students explore both the technical and ethical dimensions of AI, as noted by [Zhang and Clark \(2022\)](#). Similarly, the Ministry of Education in Singapore has implemented AI literacy modules in secondary schools to enhance students' digital competencies and readiness for future careers. These initiatives aim to equip students with foundational knowledge in programming, data science, and machine learning, enabling them to participate confidently in AI-influenced job markets.

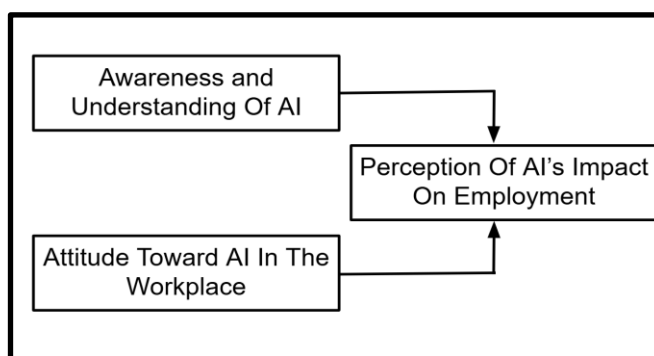
In addition to formal education, vocational training and upskilling programs are essential in preparing students for careers in AI-related fields. For example, the Microsoft Global Skills Initiative, launched during the COVID-19 pandemic, provided free training resources in areas such as AI and data analysis to more than 30 million people worldwide ([Microsoft, 2020](#)). These programs are particularly beneficial for students from non-technical backgrounds, offering accessible pathways into AI-driven industries. Such initiatives align with the findings of the [World Economic Forum \(2020\)](#), which estimated that by 2025, around 50% of all employees will require reskilling due to rapid technological advancements.

H4: Educational exposure and training in AI positively influence students' perceptions of AI's impact on future employment.

Conceptual Framework

The study framework model is depicted in [Figure 1](#).

Figure 1. Research Framework



RESEARCH METHOD

Sampling

This study focuses on undergraduates getting ready to start working in the near future. The awareness, perception, and attitude of students about the impact of AI on future employment prospects is the primary goal of the research context. Individual students now enrolled in undergraduate or graduate programs act as the unit of analysis. Respondents will be chosen using a non-probability convenience sampling technique that emphasizes availability and accessibility. To guarantee a range of viewpoints, a survey will be conducted with a total of 153 students from different faculties, including business, engineering, and information technology. Demographic details such as age, gender, year of study, field of study, and prior exposure to AI technologies will be included in the profiles of the respondents.

Data Collection

Data was collected via an online structured questionnaire and distributed via social media, student portals, and university email lists. The survey asked closed-ended and Likert-scale questions about students' understanding, perspectives, and attitudes toward AI. To encourage honest and objective responses, participation was optional and anonymous. The data collection period lasted about three weeks.

Measures

The structured questionnaire used in this study has three key components: awareness, perception, and attitude toward AI. All items in the questionnaire were scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). To better reflect the context of university students, the items were adapted from previously validated scales used in prior research, particularly those developed by [Kharroubi et al. \(2024\)](#) in their study on knowledge, attitudes, and practices toward AI among university students in Lebanon.

Ethical Considerations

Ethical concerns will be addressed in the study to guarantee that participants' rights are protected. The measures listed below will be implemented.

Informed Consent

Before completing the survey, participants will get an informed consent form describing the study's goal, confidentiality rights, and voluntary participation. The form will also inform participants that they can withdraw from the study at any moment with no consequences.

Data Privacy

The poll will not collect any personally identifiable information (PII). All comments will remain anonymous, and data will be securely saved in password-protected files. The data will only be used for research purposes, and any published results will include aggregated data to protect the participants' identities.

Bias in AI Systems

While this study focuses on students' opinions, it is crucial to recognize that AI systems can be biased, particularly in employment-related applications. For example, AI systems used for employment or job matching may exhibit gender or racial prejudices if trained on biased data. The study will encourage participants to consider these potential biases and how they may influence the future of employment. The survey questions will be aimed at encouraging critical thinking about AI's ethical implications, notably in terms of fairness and equality in the workplace.

RESULTS

The findings of this study are based on data obtained from 153 respondents and evaluated with Statistical Package for the Social Sciences (SPSS) software. Descriptive statistics were utilized to assess students' awareness, attitudes, and perceptions about AI, and regression analysis was performed to investigate how these variables influence their comprehension. The detailed findings are presented in the tables below.

Table 1. Respondents' Profile Summary (N=153)

Response	Category	Frequency	Percentage (%)
Gender	Female	93	60.8
	Male	55	35.9
	Prefer no to say	5	3.3
Age Group	18-21	63	41.2
	22-25	50	32.7
	26-30	34	22.2
	Over 30	6	3.9
Nationality	Malaysian	119	77.8
	Non-Malaysian	34	22.2
Level/Year of Study	Year 1	23	15
	Year 2	65	42.5
	Year 3	45	29.4
	Year 4	16	10.5
	Postgraduate	4	2.6
Faculty	Science and Technology	25	16.3
	Business and Management	56	36.6
	Social Sciences	28	18.3
	Art and Humanities	21	13.7
	Health Sciences	7	4.6
	Other	16	10.5

The demographic profile of the respondents, as indicated in [Table 1](#), includes 153 individuals. The majority were female (60.8%), followed by males (35.9%), and 3.3% chose not to declare their gender. The majority of responders (41.2%) were between the ages of 18 and 21, with others aged 22 to 25 (32.7%), 26 to 30 (22.2%), and over 30 (3.9%). In terms of nationality, 77.8% were Malaysian, while 22.2% were not Malaysian. The majority of responders (42.5%) were second-year students, followed by third-year (29.4%), first-year (15%), fourth-year (10.5%), and postgraduate students (2.6%). Participants came from a variety of faculties, with Business and Management having the biggest percentage (36.6%), followed by Social Sciences (18.3%), Science and

Technology (16.3%), Arts and Humanities (13.7%), Health and Sciences (4.6%), and other faculties (10.5%). This variant presents a comprehensive picture of student perceptions across demographics and academic backgrounds.

Table 2. Descriptive Statistics, Cronbach's Coefficient Alpha, and Zero-order Correlations for All Study Variables

Variables	1	2	3
Awareness	0.871		
Attitude	0.400**	0.800	
Perception	0.609**	0.681**	0.779
Number of Items	5	5	5
Mean	3.9137	3.8967	3.8810
Standard Deviation	0.81298	0.71896	0.67840

Note. Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows the descriptive statistics, reliability coefficients, and zero-order correlations for the study's three primary variables: awareness, attitude, and perception of AI. Cronbach's alpha was used to examine the internal consistency of each construct. The results show that all three variables have good dependability, with values of 0.871 for awareness, 0.800 for attitude, and 0.779 for perception. These results indicate that the measurement scales utilized in the questionnaire were consistent and trustworthy in the sample of university students.

In terms of correlations, the table demonstrates that all relationships between variables are positive and statistically significant at the 0.01 level. Awareness has a moderate correlation with attitude ($r = 0.400$, $p < 0.01$) and a higher correlation with perception ($r = 0.609$, $p < 0.01$). Attitude is significantly linked with perception ($r = 0.681$, $p < 0.01$). These findings suggest that students who are more aware of AI have more positive views and perceptions about its potential impact on future jobs.

The descriptive statistics provide additional evidence for this conclusion. The mean ratings for awareness ($M = 3.91$), attitude ($M = 3.90$), and perception ($M = 3.88$) show that students have a generally positive opinion of AI and its role in shaping future job opportunities. The standard deviations, which vary between 0.68 and 0.81, indicate substantial heterogeneity in student responses across all three variables.

Table 3. Regression Coefficients for Forecasting Understanding

Source	Sum of Squares	dF	Mean Square	F	Sig.
Regression	41.902	2	20.951	112.023	< 0.001 **
Residual	28.053	150	0.187		
Total	69.955	152			

Coefficients

Predictor	B	SE B	β	t	Sig.
(Constant)	0.657	0.218		3.008	0.003**
Awareness	0.334	0.047	0.400	7.096	< 0.001 **
Attitude	0.492	0.053	0.521	9.244	< 0.001 **

Note. $R^2 = 0.599$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The results presented in **Table 3** provide solid empirical backing for the proposed hypotheses. Both awareness ($\beta = 0.400$) and attitude ($\beta = 0.521$) emerged as significant predictors of students' perceptions of AI's impact on future employment, confirming H1

and H2. The stronger effect of attitude highlights its dual role: not only does it directly shape perceptions, but it also mediates the relationship between awareness and perception, thereby supporting H3. This finding resonates with the broader argument that students with more positive attitudes toward AI are better positioned to view it as an opportunity rather than a threat, while awareness alone has a comparatively weaker but still meaningful effect. Although H4 could not be explicitly tested in this model, the results suggest its relevance, as awareness and attitudes are often reinforced by educational exposure and training. Taken together, these findings demonstrate that both awareness and attitude significantly influence how students interpret AI's implications, with attitude serving as the more dominant driver of perception.

DISCUSSION

This study looked into how awareness, perception, and attitude influence university students' perspectives on the potential effects of AI on their future jobs. The findings show that, among these characteristics, perception, and attitude have the greatest influence on students' opportunities for employment in an increasingly digital labor market. Students who see AI as a catalyst for efficiency and innovation are more likely to see it as a source of opportunity rather than a threat, as highlighted by [Bessen \(2018\)](#). Students who have negative impressions of AI, on the other hand, frequently define it with job displacement, uncertainty, and decreased work security.

Attitude was discovered to perform a dual role: it serves as both a direct predictor of employment outlook and an indirect variable between awareness and perception. As [Cocchiarella \(2019\)](#) points out, students who have a positive attitude toward technology innovation are more open to reskilling and upskilling, which improves their adaptability in a changing work market.

Although awareness has a weaker direct influence, it remains an important element. Students who are more aware of AI breakthroughs and labor market trends are more likely to make informed career decisions ([Koay et al., 2023](#)). The [World Economic Forum \(2020\)](#) emphasizes that such knowledge provides individuals with the cognitive tools needed to critically assess AI's multifaceted impact on future work environments.

Importantly, the findings put into question the commonly held view that students are mostly unaware of or fearful of AI. While some fear continues, particularly among students in non-technical areas, many respondents displayed a comprehensive knowledge of both the benefits and hazards of AI adoption ([Organisation for Economic Co-operation and Development \[OECD\], 2019](#)). This indicates a greater complexity in student discourse about technological development.

However, the study found that students frequently perceive AI in terms of automation and labor replacement, with little emphasis placed on its ability to generate new vocations or supplement existing roles. This narrow approach may mask the broader paradigm shifts possible by AI, such as the development of hybrid human-machine collaboration models, a concept advanced by [Zhang and Zhou \(2025\)](#).

Another crucial component was one's disciplinary background. Students engaged in technology-related studies had more positive opinions regarding AI and were better prepared to integrate it into the workplace. This [McKinsey & Company \(2023\)](#) emphasizes the significance of domain-specific experience in shaping AI-related job expectations.

Finally, the combination of awareness, perception, and attitude has a substantial impact on how students interpret the implications of AI for their future careers. As [Anderson and Rainie \(2018\)](#) suggest, students are better positioned to consider AI as a strategic partner in career development when institutional engagement and consistent communication from both academics and industry are in place. Future studies could benefit from looking into how demographic variables like academic discipline, socioeconomic level, and cultural background influence these beliefs, informing targeted educational and policy interventions.

Research Implication

The findings of this study have significant implications for understanding how awareness, perception, and attitude determine university students' perspectives on the impact of AI on their future jobs. The findings emphasize the importance of students' beliefs and attitudes, demonstrating that positive impressions of AI as a source of innovation and efficiency can encourage optimism about future jobs. This shows that colleges and policymakers should focus on changing students' attitudes toward AI through education and outreach programs that stress its potential benefits rather than its concerns. Furthermore, students' attitudes serve not only as direct indicators of their future prospects but also as mediators between awareness and perception, stressing the necessity of developing favorable attitudes about technological progress. While awareness alone has a weaker direct influence, enhancing students' knowledge of AI and labor market trends enables them to make more informed career choices. Importantly, the findings call into question the assumption that students are generally unaware of or scared of AI; many students, particularly those in technology-related disciplines, demonstrate a nuanced awareness of both the potential and problems presented by AI. This shows that focused academic exposure and communication methods can help improve preparation and adaptability. Future efforts should strive to integrate AI literacy across disciplines and address varied student backgrounds, allowing all students to see AI as a strategic partner in their career growth rather than a threat.

CONCLUSION

This study set out with the objective of evaluating how university students' awareness, perceptions, and attitudes toward AI shape their future employment prospects. By focusing on the next generation of workers, the research sheds light on how young people position themselves within the context of rapid technological change. The findings confirm that while awareness of AI remains an important foundation, it is students' perceptions and attitudes that exert the strongest influence on how they imagine their career futures. Statistical results demonstrated that perception ($\beta = 0.267$, $p < 0.1$) and attitude ($\beta = 0.272$, $p < 0.1$) are more significant predictors than awareness ($\beta = 0.173$, not significant), signaling that confidence and interpretation outweigh mere knowledge. In other words, being informed about AI is valuable, but it is how students feel about this technology and how they integrate it into their worldview that ultimately determines their preparedness for an evolving labor market.

One of the most meaningful insights drawn from this study is the beneficial effect of proactive and positive attitudes. Students who approach AI with adaptability and curiosity tend to view it as a source of advancement rather than an existential threat. This mindset contrasts with the widespread narrative that AI will only displace human labor. Instead, the findings suggest that students with favorable attitudes are more likely to recognize the potential of AI to create new opportunities, support human skills, and enhance career pathways. Such an outlook underscores the importance of resilience and adaptability as core competencies in the digital economy. By cultivating these qualities, students can shift from a posture of fear to one of readiness, transforming uncertainty into opportunity.

The study also draws attention to the central role of educational institutions in shaping these outcomes. Universities are not only responsible for providing technical literacy and theoretical knowledge but also for fostering adaptive mindsets and practical confidence. Integrating AI-related content into curricula, designing programs that emphasize critical thinking and problem-solving, and offering training in digital tools can help bridge the gap between classroom learning and real-world demands. Beyond formal instruction, supportive learning environments that encourage experimentation, collaboration, and openness to change can reinforce students' capacity to thrive in a fast-moving labor market. In this sense, universities act as both knowledge providers and enablers of career resilience.

Furthermore, the results carry implications for policymakers and industry leaders. As technological disruption continues to reshape labor structures, students must be equipped with accurate, balanced, and practical information. While fears about automation and job loss are common, this study demonstrates that attitudes rooted in confidence and adaptability are key to unlocking the opportunities that AI brings. Policymakers can therefore contribute by supporting educational reforms, promoting lifelong learning programs, and ensuring that students are exposed to the realities of technological change in a constructive manner. Industry stakeholders, too, have a responsibility to collaborate with educational institutions to align skills training with labor market needs, ensuring that students transition smoothly from education to employment.

In conclusion, this study successfully meets its research objective by showing that university students' future career confidence is shaped not only by their awareness of AI but more decisively by their perceptions and attitudes toward it. By highlighting the stronger role of perception and attitude over awareness, the study underscores the importance of shaping mindsets as well as delivering knowledge. For higher education institutions, the challenge is not simply to teach students about AI but to help them develop the capacity to adapt, innovate, and embrace change. For policymakers and educators alike, the task lies in creating frameworks that empower students to see AI as a collaborative tool rather than a threat. Ultimately, students who are confident, proactive, and resilient will be better positioned to navigate the challenges of technological disruption and seize the opportunities of the future. These insights not only enrich the existing literature but also lay a foundation for future studies that can explore differences across cultural, disciplinary, and generational contexts, deepening our understanding of how education can prepare graduates for the realities of the AI era.

LIMITATION

This study has several limitations that should be considered when interpreting the results. First, it employed a cross-sectional design, collecting data at a single point in time, which limits the ability to capture how students' perspectives may change as they gain more knowledge about AI. Second, the reliance on self-reported data from questionnaires introduces the possibility of inaccuracies, as participants may have provided socially desirable responses or misunderstood some AI-related questions. Third, the study did not differentiate between students in technical and non-technical fields, leaving potential variations in perceptions across disciplines unexplored. Finally, given the rapid evolution of AI, the findings may quickly become outdated as new technologies and ideas emerge. Nevertheless, despite these limitations, the study provides valuable insights into how students perceive AI and its potential impact on their future careers.

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The authors have declared no potential conflicts of interest concerning the study, authorship, and/or publication of this article.

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