

## Original Paper

# Ethical Awareness of Artificial Intelligence Use Among Chinese University Students

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### **Abstract**

*Artificial intelligence (AI) tools—particularly generative AI such as ChatGPT—have seen rapid adoption among university students globally, prompting growing concern about their ethical implications. This paper investigates the ethical awareness of AI use among Chinese university students by analyzing recent survey data and applying theoretical frameworks from behavioral and moral psychology. Findings suggest that while many students are actively using AI tools in their academic work, ethical awareness varies considerably, often in the absence of clear institutional guidelines. Key factors influencing ethical behavior include students' attitudes, social norms, AI literacy, and the presence of academic integrity policies. Although educational interventions have shown some potential in improving students' ethical reasoning, external pressures such as peer influence and academic competition may still lead to misuse. The study underscores the importance of integrating AI ethics into higher education curricula and establishing supportive environments to promote responsible AI use. These findings offer guidance for universities and policymakers seeking to foster a culture of ethical engagement with AI in academia.*

### **Keywords**

*artificial intelligence, ethical awareness, Chinese university students, AI literacy, academic integrity, AI ethics education, UTAUT2, Theory of Planned Behavior, Rest's Four Component Model*

## **1. Introduction**

The emergence of powerful generative artificial intelligence (AI) tools has created both excitement and concern in higher education. Applications like OpenAI's ChatGPT—capable of producing human-like text, code, and other content—have been rapidly embraced by students for tasks ranging from

brainstorming and tutoring to writing assignments (Hung & Chen, 2023; Nguyen et al., 2023). In China, as elsewhere, this “AI revolution” in academia holds great promise for enhancing learning efficiency and personalization. At the same time, it raises critical ethical questions about academic integrity, proper use, and the preparedness of students to navigate AI’s challenges (Hung & Chen, 2023; Jennings & Cox, 2023). Chinese researchers and educators have cautioned against the “blind worship” of AI, emphasizing that AI technologies must be used ethically and responsibly (Hung & Chen, 2023; Morales-García et al., 2024). The tension between AI’s benefits and its ethical pitfalls is especially pronounced in university settings, where students may be tempted to misuse AI for academic gain (Swidan et al., 2025; Fošner, 2024). High-profile cases of students using AI to generate entire essays or solve exams have fueled debate over what constitutes cheating and how to uphold ethical standards in the age of AI (ECNS.cn, 2025; Jennings & Cox, 2023). In response, stakeholders are increasingly calling for improved ethical awareness among student users of AI (Nguyen et al., 2023; Jennings & Cox, 2023). Ethical awareness refers to an individual’s recognition and understanding of the moral issues and implications of a situation or action. In the context of AI use, ethical awareness means students can identify potential ethical problems (e.g., plagiarism, bias, privacy violations) arising from using AI tools and appreciate the importance of adhering to ethical norms (Zhu et al., 2024).

According to Rest’s Four Component Model of moral behavior, being aware of an ethical issue is the first crucial step in ethical decision-making, followed by making a moral judgment, establishing moral intent, and ultimately taking moral action (Zhu et al., 2024). If students lack this initial component of moral awareness regarding AI, they are unlikely to check unscrupulous behavior such as passing off AI-generated content as their own (Zhu et al., 2024). Even if they are aware something might be wrong, they must also possess the judgment and motivation to act ethically. This paper examines to what extent Chinese university students possess ethical awareness about AI use, and how effectively that awareness is translating into ethical behavior. Preliminary evidence suggests a mixed landscape. On one hand, Chinese university students demonstrate considerable knowledge of AI’s ethical dimensions. A recent study in Zhejiang Province found that among various facets of AI literacy, students scored highest on AI ethical cognition literacy (awareness of AI’s ethical implications) (Wang et al., 2024). This indicates students are not oblivious to issues like fairness, transparency, or academic honesty when using AI. On the other hand, the same study found their practical awareness of AI—such as understanding AI capabilities and limitations—was comparatively low (Wang et al., 2024). In practice, many students still engage in ethically questionable uses of AI. Surveys reveal that a substantial share of Chinese students admit to using AI tools for assignments in ways that breach academic integrity (e.g., submitting AI-written content with minimal or no modification) (ECNS.cn, 2025; Morales-García et al., 2024). For example, an independent survey reported by Chinese media found nearly 60% of university faculty and students in China use generative AI at least weekly, and about 30% of students have used AI primarily to write papers or homework – with some openly copy-pasting AI-generated text into their work (ECNS.cn, 2025). These patterns raise concerns that high ethical awareness in theory may not be

fully preventing unethical conduct in practice (Zhu et al., 2024). Understanding why ethically aware students might still misuse AI requires examining various influencing factors. Technology adoption models like the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) and the Theory of Planned Behavior (TPB) provide useful frameworks. UTAUT2 highlights factors such as performance expectancy (perceived usefulness), effort expectancy (ease of use), social influence, facilitating conditions, hedonic motivation, and habit as drivers of technology usage behavior. TPB centers on how attitudes, subjective norms (peer/social pressures), and perceived behavioral control influence behavioral intentions and actions. Recent research has adapted these models to the context of student AI use, integrating ethical variables. For instance, Zhu et al. (2024) extended UTAUT2 with constructs for ethical awareness, perceived ethical risk, and AI-related anxiety to predict Chinese students' intentions to use generative AI. Wang et al. (2024) combined TPB with AI literacy measures to study generative AI adoption among Chinese students, using surveys and interviews. These studies underscore that students' decisions to use AI are not purely technical or academic – they are also ethical and social. A student might fully understand that using ChatGPT to write an essay uncredited is wrong, yet still do so due to factors like academic pressure, lack of enforcement, or the perception that “everyone is doing it.” Other contextual influences in Chinese higher education merit consideration. Institutional policies (or the lack thereof) play a significant role in shaping ethical AI use. Until recently, many Chinese universities had ambiguous or no rules on AI-assisted academic work, leaving students uncertain about what is allowed. In such a vacuum, even well-intentioned students may err, whereas clear guidelines can set normative standards. Furthermore, Chinese cultural and educational norms—such as strong emphasis on exam performance—might inadvertently incentivize expedient uses of AI unless ethics are equally emphasized. Peer influence is another factor: if classmates share tips on using AI to finish assignments faster, an individual student may feel pressure to follow suit or risk falling behind. According to TPB, these subjective norms can significantly sway one's intention to behave in a certain way. Indeed, empirical data suggests social influence is a meaningful predictor of students' intention to use AI tools. Academic and workload pressures also cannot be ignored; heavy workloads or high stakes assessments may push students toward unethical AI use as a form of coping or academic “survival”, especially if they lack confidence in their own abilities or time management. Research in the UAE, for example, found that academic stress indirectly increased students' intentions to adopt AI, particularly when coupled with peer pressure normalizing AI use (Swidan et al., 2025). While the cultural context differs, Chinese students similarly face competitive academic environments that might drive pragmatic, if unethical, decisions.

In light of these complexities, this paper aims to provide a comprehensive analysis of Chinese university students' ethical awareness in AI use and the surrounding factors. We integrate findings from six recent research studies—including surveys in China and abroad—to answer several key questions: (1) How extensively are Chinese students using AI in their studies, and for what purposes? (2) What is their level of ethical awareness regarding AI (e.g. understanding issues of academic integrity, fairness,

privacy)? (3) What factors influence their decisions to use or not use AI in ethically responsible ways? We pay particular attention to AI literacy (students' knowledge and skills related to AI), institutional and instructor guidance, peer/social norms, and personal attitudes such as perceived usefulness or anxiety. (4) What is the role and effectiveness of AI ethics education initiatives in raising ethical awareness and guiding behavior? (5) Based on these insights, what can universities and policymakers do to foster a culture of responsible AI use in academia? By addressing these questions, our study contributes to both theory and practice. Theoretically, it applies and extends frameworks like UTAUT2, TPB, and Rest's model to a timely issue at the intersection of education and AI ethics. Practically, it offers evidence-based recommendations at multiple levels: for individual students (e.g., improving their AI literacy and moral reasoning skills), for instructors and universities (e.g., designing better AI usage policies and ethics training), and for policymakers (e.g., developing regulations that encourage innovation while curbing misuse). Ultimately, ensuring that the next generation of graduates can harness AI's power responsibly is crucial not only for academic integrity, but for the broader ethical development of AI in society.

## 2. Literature Review

### 2.1 AI Use by University Students: Global and Chinese Perspectives

AI tools have quickly become embedded in student life across the world. Surveys in various countries consistently show a high prevalence of AI use among university students. For example, a nationwide survey in Germany found nearly two-thirds of students had used AI-based tools (with OpenAI's GPT models being the most common) to support their studies. In the United States, a 2023 BestColleges poll reported that about 50% of students had used ChatGPT for a portion of their assignments, and 17% admitted to submitting assignments written entirely by ChatGPT. A recent study in Slovenia similarly noted that "a majority of students are engaging with AI tools" in their academic work, though usage patterns vary by field and level of study (Fošner, 2024). These findings underscore that AI has arrived in higher education, not as a marginal novelty but as a widespread aid leveraged by students across disciplines. Chinese university students are no exception to this trend. In fact, due to China's strong push in AI development and tech-savvy student population, AI tool usage may be comparably high despite certain access barriers (e.g., ChatGPT is not officially available in China, but students often access it via VPN or use domestic generative AI platforms). Recent data from China are illuminating. A 2023 content analysis by Hung and Chen found Chinese media discussions reflecting polarized views on student use of ChatGPT—with some educators optimistic about AI's educational benefits, and others voicing alarm over academic cheating (Hung & Chen, 2023). On the ground, evidence suggests significant uptake. According to a survey by the research firm MyCOS (reported by CCTV News), nearly 60% of Chinese university faculty and students use generative AI tools on at least a daily or weekly basis. This indicates routine use, not just occasional experimentation. The same report noted that around 30% of students primarily use AI for writing papers and assignments. Common uses

include drafting essays, solving programming exercises, summarizing articles, and generating presentation content. Chinese students also use AI chatbot tools for language learning and coding assistance, and platforms like DeepSeek (a domestic AI writing assistant) have gained traction on campuses. However, the current state of AI use among students is not without issues. While many uses are benign or even pedagogically beneficial (e.g., using AI to get hints on a problem or to improve one's writing through grammar suggestions), misuse and overreliance are emerging concerns. Chinese instructors report instances of students copying AI-generated content verbatim into assignments. In more egregious cases, entire theses or project reports have been found to be AI-authored. A large survey of 8,000+ students across 20 Chinese universities (conducted by Zhejiang University's School of Education) confirmed that improper AI usage is widespread, with some students admitting they have become dependent on AI to complete academic tasks. This improper use spans beyond just writing; students have used AI to fabricate research data, edit experimental images, or bypass original design work. Such behaviors plainly violate academic ethics and signal an urgent need to address students' understanding of integrity in the AI era.

### *2.2 Ethical Awareness of AI Applications Among Students*

Ethical awareness refers to the ability to recognize the ethical implications of one's actions with AI and discern right from wrong in those contexts. In educational use of AI, key ethical issues include plagiarism and academic integrity, data privacy, bias/fairness, transparency, and accountability for AI-generated content. A student with high ethical awareness would, for instance, realize that submitting AI-generated text as original work constitutes plagiarism, or that feeding sensitive personal data into an AI tool might infringe privacy norms. Conversely, a student lacking this awareness might see AI outputs as just "another source" to copy from, or might trust AI answers blindly without considering misinformation or bias. Research suggests that today's university students possess uneven ethical awareness regarding AI. On one hand, young people are digital natives often attuned to issues like privacy and online plagiarism. On the other hand, the capabilities of generative AI are so novel that students may not fully grasp the ethical nuances. Surveys measuring AI-related literacies in China provide insight. In Wang et al. (2024)'s study of 421 students in Zhejiang, four dimensions of "AI literacy" were assessed: (1) AI ethical cognition (understanding ethical issues of AI), (2) AI consciousness (general awareness of AI in society), (3) AI technical knowledge, and (4) AI application skills. Notably, students scored highest on AI ethical cognition (mean  $\approx 5.74$  on a 7-point scale) and lowest on AI consciousness (mean  $\approx 4.58$ ). In plain terms, these Chinese students tended to be aware of ethical principles (they know AI can be double-edged and have moral implications), yet their overall awareness of AI technologies and applications was relatively limited. The high ethics score is encouraging—it implies that many Chinese students conceptually understand that using AI ought to be bounded by fairness, honesty, and responsibility. This finding aligns with Zhu et al. (2024), who defined ethical awareness about AI as a student's recognition of ethical issues in using generative AI and why those issues matter. Zhu et al. argue, citing Rest's model, that such awareness is analogous to

the “moral recognition” stage of ethical decision-making. Their survey of 226 Chinese undergraduates found that students’ self-rated ethical awareness was a significant factor influencing their intentions with AI (discussed further below).

Despite reasonable ethical awareness in principle, there is evidence of ethical blind spots and rationalizations. Qualitative interviews with Chinese students reveal that some view AI output as fundamentally different from “copying someone’s work”, rationalizing that using AI isn’t as bad as plagiarizing a peer or an author since “the AI is not a person”—a flawed justification that underestimates the ethical breach (the work is still not one’s own). Furthermore, students might be aware that AI usage can be unethical, yet misjudge where the line is. For example, many know outright plagiarism is wrong, but might not appreciate that even heavy reliance on AI for ideas can be problematic if not acknowledged. A survey of students in the UAE found a subset of respondents were unsure about what constituted acceptable use of AI in coursework and explicitly wanted clearer guidelines. Similarly, Swidan et al. (2025) reported that students in the UAE “raised concerns about the lack of guidance on using AI tools” from their professors or institutions (Swidan et al., 2025). This indicates a form of ethical awareness—students recognize a normative gap and desire direction to ensure they use AI appropriately. Internationally, students also voice ethical concerns about AI. (Farhi et al., 2023) In the Slovenian study (Fošner, 2024), students “recognized the efficiency of AI” but also expressed concerns about AI’s impact on learning quality and academic honesty. They emphasized the need for a balanced, responsible integration of AI in education so that learning outcomes are enhanced without undermining ethical standards or skill development.

In China, the ethical discourse around AI in education is intensifying. Chinese academics note that AI ethics has gained such prominence that AI ethics education is being integrated into higher education curricula (Zhu et al., 2024). The emphasis on ethics is driven by high-profile incidents and the realization that today’s students, as future AI practitioners or informed citizens, must uphold ethical principles. Chinese scholars often highlight core principles such as fairness, justice, transparency, accountability, non-maleficence, and privacy when discussing AI ethics guidelines. Ethical awareness among students would ideally include understanding these principles in AI contexts. For instance, fairness might involve knowing that AI systems can perpetuate biases, so one should be cautious in accepting AI outputs at face value (an ethically aware student using an AI translation tool might cross-check for subtle biases or inaccuracies). Privacy awareness would mean students think twice before inputting personal or sensitive data into a third-party AI service. In summary, literature suggests that Chinese university students are not ethically “in the dark” about AI—many have a solid conceptual grasp that AI use comes with ethical strings attached. Yet, gaps in translating that awareness into concrete practice remain. Ethical awareness is a necessary condition, but perhaps not sufficient on its own to guarantee ethical behavior, as subsequent sections will explore. Factors such as perceived pressure, unclear rules, and attitudes toward AI utility can either reinforce or override one’s ethical awareness at the moment of decision (Zhu et al., 2024; Usher & Barak, 2024).

### 2.3 Influencing Factors: Literacy, Attitudes, and Social Pressures

Why do students choose to use AI tools, and what determines whether they use them ethically? A growing body of research has applied technology acceptance and behavior models to answer these questions. Two particularly relevant frameworks are UTAUT2 and TPB, which we adapt here to include ethical considerations.

*AI Literacy and Knowledge:* A fundamental factor is students' knowledge and skills related to AI. Students who are more literate in AI—i.e., who understand how AI works, its strengths and pitfalls—are likely to use AI more effectively and discerningly. In TPB terms, higher knowledge can shape more positive yet realistic attitudes toward using AI (e.g., seeing AI as useful for learning but also knowing its limits). Wang et al. (2024) found that “knowledge about AI tools” had a significant positive effect on perceived benefits of AI, which in turn increased perceived usefulness of AI for academic tasks. In that study, knowledge indirectly boosted students' intention to use AI through improving their outlook on AI's advantages (mediation effect). This suggests that AI literacy can encourage adoption—students comfortable with AI will integrate it into their studies. But how does literacy tie to ethical use? On one hand, a knowledgeable student may be more aware of ethical issues (for example, knowing that AI can sometimes fabricate information, they would verify facts and cite sources, thus acting ethically). On the other hand, knowledge without ethical conscience could simply make a student a more skillful cheater (e.g., knowing how to evade detection by mixing AI text with human text). Encouragingly, in the Chinese context, the aspect of AI literacy that was highest—ethical cognition—implies that many students' AI knowledge is imbued with an ethical lens.

*Attitudes and Perceived Usefulness:* According to TPB, a student's attitude toward using AI (whether they view it as a good or bad idea) will strongly influence their intention to use it. UTAUT2's analogue is performance expectancy—the extent to which a student believes AI will help them achieve better outcomes. Research consistently finds that perceived usefulness of AI is a top driver of intention. Zhu et al. (2024) observed that among standard UTAUT2 factors, performance expectancy was a key positive predictor of Chinese students' behavioral intention to use generative AI. In practical terms, students use AI because they think it will save time or improve their work quality. Wang et al. (2024) similarly found that students' attitudes (shaped by both their literacy and the social environment) positively and significantly influenced their intention to adopt generative AI. In their model, combining TPB with AI literacy explained a substantial 59.3% of variance in behavioral intention—highlighting the strong role of these cognitive factors. If a student believes “AI will make my assignment easier and better,” they are inclined to use it. The ethical dimension enters when considering what the student is willing to use AI for. A positive attitude toward AI could mean they enthusiastically use it within ethical bounds (e.g., as a study aid or for generating ideas but still doing their own analysis). Alternatively, it might embolden them to use AI in place of their own effort (venturing into unethical territory). Researchers have posited that students with higher ethical awareness might actually show less intention to use AI in certain ways, precisely because they foresee ethical conflicts. Zhu et al. hypothesized that

ethical awareness might negatively influence behavioral intention (i.e. students who recognize more ethical issues could be more cautious or hesitant to use AI). Interestingly, their empirical findings showed a nuanced outcome: ethical awareness did positively influence intention overall, suggesting that Chinese students who are ethically aware are not shunning AI altogether. Instead, they may be seeking to use it in a principled way. However, Zhu et al. also found ethical awareness was associated with higher perceived ethical risk—meaning students who know more about AI’s ethical issues also recognize more potential risks, such as plagiarism or misinformation. This heightened risk perception could paradoxically deter actual usage in specific high-stakes scenarios (a point we revisit under anxiety).

*Social Influence and Peer Pressure:* Students do not make technology choices in a vacuum—the behavior and expectations of peers, instructors, and the academic culture at large exert significant influence. UTAUT2’s social influence construct and TPB’s subjective norms capture this. In Zhu et al. (2024), social influence had a positive effect on students’ intention to use AI. That is, if people important to the student (friends, classmates, professors) encourage or normalize AI use, the student is more likely to intend to use it. Wang et al. (2024) found that subjective norms, together with AI literacy, significantly shaped students’ attitudes and their sense of control over using AI. This aligns with the idea that in environments where “everyone is using ChatGPT,” a student may feel both more positively about it and more capable of using it themselves. Conversely, if a student perceives that teachers strongly disapprove of AI use, they might refrain. Peer influence can unfortunately work against ethical practices if the prevailing norm is to misuse AI. For example, if within a dormitory it becomes common knowledge that one can generate an essay via AI and “get away with it,” resistant individuals might be pressured into doing the same. A mediation analysis by Swidan et al. (2025) revealed that academic stress leads to AI adoption intent especially when peer pressure is present. In essence, an overwhelmed student might not consider using AI to cheat on an assignment until they hear that their friends are doing so – then it seems like a necessary strategy to keep up. This is why establishing pro-social norms is critical. If institutions and student communities instead promote norms of using AI responsibly (for instance, using it for drafts but always citing or improving upon its output), peer influence can become a force for ethical use rather than misuse.

*Institutional Policies and Instructor Guidance:* The presence of clear policies and guidance constitutes a form of facilitating condition (UTAUT2) and can also affect subjective norms. When a university explicitly permits certain AI uses and forbids others, students gain clarity on what is expected ethically. Unfortunately, many universities were initially caught flat-footed by the sudden rise of AI tools. As noted earlier, a significant number of students report not having heard any specific guidelines from their professors about AI use. Swidan et al. (2025) found about two-thirds of students had not heard of any AI usage guidelines from faculty in their multi-campus survey (822 respondents)—only 18% said yes, they had encountered such guidelines, and the rest were unsure. This lack of guidance likely prevails in many Chinese universities too, at least until the recent interventions. In absence of policy,



students rely on personal judgment or peer advice, which may be flawed. When rules are put in place, they can strongly steer behavior. For example, if an assignment rubric explicitly states “AI-generated content is not allowed,” a risk-averse student will avoid using AI (or will use it covertly with anxiety). On the other hand, if guidelines say “you may use AI for grammar assistance but not for writing entire sections,” students gain a model for acceptable use. A case in point: Fudan University in China recently introduced strict AI usage policies that ban AI in six specific aspects of academic work requiring originality (research design, data collection, creating figures, thesis writing, etc.) while allowing AI for tasks like literature search or coding assistance with prior approval. Students must now sign a declaration on whether and how they used AI in their work. Such policies, paired with honor codes, clearly delineate ethical boundaries, effectively becoming part of students’ ethical awareness. In the UAE survey, researchers noted that students who had greater ethical concerns were more likely to support institutional regulations on AI—suggesting students themselves welcome having rules to ensure a level playing field. Indeed, Swidan et al. found that ethical concerns fully mediated the link between students’ ethical perceptions and their support for AI regulations. In simpler terms, students who care about AI ethics want their universities to step in and set enforceable standards.

*Perceived Behavioral Control and Self-Efficacy:* In TPB, even if one has the intention to behave ethically, one must also feel capable of doing so. Some students might feel they lack the self-control or skills to avoid using AI shortcuts, especially if under pressure. Others might worry that even if they try to use AI responsibly, they could inadvertently violate a rule. Perceived control is boosted by confidence and by supportive conditions. For example, a student trained in proper citation and AI usage techniques will feel more control in using AI appropriately (like using AI to generate code but thoroughly commenting and checking it themselves). In contrast, if detection tools are arbitrary, students might feel “if I use AI at all I’ll be punished,” undermining their sense of control and possibly leading to avoidance of AI even for legitimate uses. Facilitating conditions like access to AI ethics resources, teacher support, and transparent AI policies all improve students’ perceived control to use AI in a safe, ethical manner.

*Habit and Convenience:* One more factor from UTAUT2 relevant to Chinese students is habit—repeated past use of AI. Zhu et al. (2024) found that habit did not significantly influence intention but did affect actual usage behavior. In other words, students who had made AI a routine tool were likely to keep using it (almost automatically), regardless of their conscious intentions. This suggests that once AI use becomes ingrained, ethical reflection might diminish unless habit is consciously redirected. The authors noted that Chinese students’ habit levels with generative AI were not yet very strong overall, perhaps because these tools are still relatively new and not always accessible in China. They stressed that developing productive habits of AI use, underpinned by ethics, is an urgent challenge for educators. For example, making it a habit to check AI outputs for accuracy and to never use AI-generated text without proper attribution could be instilled as “the way we do things.”

#### *2.4 AI Ethics Education and Its Effectiveness*

If ethical awareness and behavior are lacking, can education fill the gap? The literature suggests that targeted AI ethics education can indeed improve students' ethical understanding and decision-making, though the magnitude of change may be modest without practical reinforcement. As AI becomes pervasive, universities worldwide have begun experimenting with incorporating AI ethics into the curriculum, whether as standalone courses, modules within technical courses, or co-curricular workshops. A notable study by Usher and Barak (2024) evaluated an online AI ethics learning module for science and engineering graduate students. The course adopted an explicit-reflective approach using case studies that presented ethical dilemmas with AI (e.g., autonomous vehicle decisions, biased algorithms) to engage students in reflection and discussion. The results were encouraging: students' knowledge of AI ethics significantly increased after the module. At the outset, participants already had a medium-high perceived ethical awareness, but even on this base, the module produced a statistically significant uptick in their self-reported awareness levels. More importantly, there was a marked improvement in their actual awareness of issues—measured by their ability to identify and articulate ethical concerns in open-ended questions—after the training. For instance, before the course, a student might vaguely state “AI could be misused”; after the course, the same student could concretely discuss risks like privacy breaches from flawed datasets or biased outcomes under-representing certain groups. This suggests the education made their ethical awareness more concrete and informed. Crucially, the module also worked on ethical problem-solving skills. Initially, many students struggled to propose solutions to AI ethics problems (e.g., how to mitigate bias in an AI system)—a sign that awareness alone isn't enough; one needs tools to act. Following the intervention, students showed considerable enhancement in these competencies. They became better at not only spotting ethical issues but also suggesting ways to address them, like improving data collection practices or incorporating ethical checkpoints in AI development. This aligns with Rest's model: education helped students progress from moral awareness to the later components of moral judgment (analyzing what should be done) and moral intent (expressing willingness to do the right thing). The study concluded that explicit-reflective learning, which actively involves students in thinking through ethical scenarios, is effective in preparing future professionals with necessary skills for ethical decision-making in AI contexts. One key takeaway was that educators should emphasize not only identifying ethical issues, but also developing students' capacity to resolve or mitigate such issues.

In China, AI ethics education is gaining momentum, though it is still in early stages. Zhu et al. (2024) noted that the growing emphasis on AI ethics has “led to the incorporation of AI ethics education at higher education levels.” Some Chinese universities have started offering courses or modules on AI ethics, often as part of computer science or data science programs. These may cover topics like the national AI governance principles, case studies of AI failures, and discussions of professional codes of ethics. There is also movement toward integrating ethics content into general education. For instance, a course might be offered to all freshmen on “Digital Literacy and Ethics” to cover responsible use of

emerging technologies. The practical guidance from recent research suggests a multifaceted approach to ethics education for AI. Zhu et al. recommended that courses related to generative AI put ethics first, using rich media (images, videos, text) to illustrate ethical risks, issues, and principles associated with AI. By directly teaching students about pitfalls like algorithmic bias or academic dishonesty cases involving AI, courses can raise awareness. Moreover, Zhu et al. emphasized that courses should not remain abstract—they should pay attention to students’ actual use of AI products. This means incorporating hands-on activities where students use AI under supervision and reflect on the experience. For example, a class might allow students to use an AI tool to assist with a task and then discuss what ethical concerns arose (Did the AI provide proper sources? Is it tempting to over-rely on it? etc.). Such practice helps students build habits of mind about when AI use is appropriate. Another educational strategy is teacher training on AI ethics. Since faculty attitudes influence student norms, training instructors to guide AI use ethically is vital. If teachers themselves are well-versed in AI’s capabilities and ethical issues, they can model good practices (like showing how to cite AI-assisted work, or designing assignments that encourage creativity beyond AI’s reach). Zhu et al. advocate for ensuring teachers have “sufficient ethical awareness, knowledge and operational competence” regarding AI, so they can effectively mentor students. Education can also be augmented by institutional measures like honor codes and student pledges. Having students sign a declaration of AI usage (as Fudan University now requires) is in part an educational act—it forces students to self-reflect on whether their AI use stays within ethical bounds and reminds them of accountability. Over time, such practices could internalize ethical considerations as part of the academic culture. It should be noted that a single ethics course or one-time workshop may not be a panacea. Ethical awareness can fade without reinforcement, and behavior change is hard to sustain if external pressures encourage shortcuts. Still, the literature and emerging experiences indicate that embedding AI ethics across the curriculum—from explicit modules to routine discussions in various courses—normalizes the expectation that AI should be used thoughtfully. This holistic approach is akin to cultivating “digital moral fluency” in students: not just knowing ethical rules, but being able to navigate new dilemmas by drawing on ethical principles. In summary, while Chinese university students already possess some awareness of AI ethics, formal education interventions can deepen that awareness and better equip students to handle ethical challenges. The modest but significant gains observed in studies like Usher & Barak’s provide a proof of concept. The goal is to move students through Rest’s framework: from simply recognizing an AI-related ethical issue, to judging the right course of action, to having the motivation and skills to carry it out. Coupling ethics education with supportive institutional policies and a positive peer culture will maximize its effectiveness, a point we turn to in the discussion of broader implications.

### 3. Methodology

This paper employs an integrative literature review and analysis methodology to examine the ethical awareness of AI use among Chinese university students. Rather than conducting primary surveys or

experiments, we synthesize findings from multiple recent research studies alongside relevant theoretical frameworks. Our approach is as follows:

*Selection of Source Literature:* We focused on peer-reviewed research published in 2023–2025 that investigates university students' use of AI, their ethical perceptions, and related factors. Six key studies form the core of our analysis: two studies from China examining AI adoption with extended UTAUT2 and TPB models (Zhu et al., 2024; Wang et al., 2024), a survey of AI tool use and attitudes in Slovenia (Fošner, 2024), a survey-based study in the UAE on students' AI usage and ethics (Swidan et al., 2025), an experimental study on AI ethics education in Israel (Usher & Barak, 2024), and a content analysis of Chinese academic discourse on ChatGPT (Hung & Chen, 2023). These articles were chosen to provide a mix of quantitative data (survey results, structural equation models) and qualitative insights (interview findings, content analyses), as well as to cover both the Chinese domestic context and international context for comparison.

*Analytical Framework:* We adopted a framework that triangulates theory, empirical data, and contextual factors. Theoretical lenses include the UTAUT2 model (to structure factors influencing technology use), the Theory of Planned Behavior (to understand how attitudes, norms, and perceived control relate to intentions), and Rest's Four Component Model (to conceptualize ethical awareness as part of moral decision-making). We mapped each study's findings onto this framework. For example, data on students' attitudes and social influences were examined through the TPB/UTAUT2 lens, while findings on ethical understanding were interpreted via Rest's model of moral awareness and judgment.

*Data Extraction and Synthesis:* We systematically extracted key findings from each source, such as: prevalence of AI use, student scores on ethical awareness measures, significant predictors of AI usage intention (e.g., performance expectancy, social influence, anxiety), students' expressed concerns about AI, and outcomes of ethics education interventions. These findings were organized thematically (usage patterns, ethical awareness levels, influencing factors, educational impacts). We then synthesized the results, identifying points of convergence (e.g., multiple studies indicating social norms are important) and divergence (e.g., whether ethical awareness increases or decreases AI usage intention).

*Contextualization:* Recognizing that ethical use of AI is a socio-cultural issue, we contextualized the findings within Chinese higher education. This involved reviewing recent reports and policies in China (such as new university guidelines on AI use) to ensure our discussion reflects the current environment as of 2024-2025. It also meant comparing Chinese student data with international student data to highlight unique aspects or common trends. For instance, we contrasted the high AI ethics literacy observed in Chinese students with similar awareness observed in other contexts, and noted differences in institutional responses (Chinese universities' policy push vs. more ad-hoc approaches elsewhere).

*Limitations:* This study is limited by the scope and quality of the available literature. The integrated studies vary in sample (from a few hundred Chinese students to over 800 in the UAE to 422 in Slovenia) and methods, which can introduce heterogeneity. While we aimed to include diverse perspectives, the selection is not exhaustive; other relevant studies may exist beyond those we had

access to. Additionally, our synthesis relies on published findings and self-reported data therein, which could be subject to biases (e.g., social desirability in student responses about ethics). We attempted to mitigate bias by cross-validating points across multiple sources where possible. Nonetheless, our conclusions are inherently interpretive, drawing connections between separate studies rather than verifying causation through original data.

*Ethical Considerations:* Since this is a research synthesis, no human subjects were directly involved by us; however, we adhered to ethical scholarship practices, accurately representing source findings and giving credit through citations. We also critically evaluated the ethical implications of the source studies' designs (for example, noting where sample or regional limitations affect generalizability).

In sum, our methodology is that of a qualitative meta-analysis grounded in theoretical frameworks. By weaving together empirical evidence and theory, we aim to paint a comprehensive picture of Chinese students' ethical awareness regarding AI. The next section discusses our integrated findings, structured around the key themes identified, followed by a discussion and conclusion with recommendations.

#### 4. Discussion

Our review reveals a complex interplay between Chinese university students' burgeoning use of AI and their ethical awareness (or lack thereof) in doing so. Several key findings emerge: **1. Widespread AI Adoption with Signs of Misuse:** Chinese students, like their global peers, have rapidly adopted AI tools for education. The data indicates not only high usage rates (on par with or exceeding those in other countries) but also a troubling prevalence of improper use. The MyCOS survey (cited in Chinese media) points to a majority of students using generative AI regularly, and about one-third relying on it for writing tasks – sometimes to the extent of wholesale copy-paste. The Zhejiang University study of 8,000 students corroborates that overreliance and even dependency on AI for academic tasks is a real phenomenon. This aligns with global reports (e.g., German and U.S. surveys) that many students are attempting to outsource significant portions of academic work to AI (Fošner, 2024). The difference is that in China, until recently, there was less open discussion of these practices (possibly due to the semi-underground nature of accessing ChatGPT). Now, with institutional attention, the issue is coming to the fore. The clear implication is that just because students know something is ethically dubious does not mean they will refrain from it. Many Chinese students who use AI in unethical ways likely do have some awareness that what they are doing violates academic integrity (especially those who “knowingly commit deliberate plagiarism despite being aware of the consequences”). Yet factors like convenience, competition, and absence of enforcement can override that awareness (Zhu et al., 2024; Swidan et al., 2025).

**2. Ethical Awareness is Necessary but Not Sufficient:** Chinese students' high ethical cognition literacy score suggests they conceptually understand AI ethics issues, potentially more so than they understand AI technicalities (Wang et al., 2024). This finding is somewhat optimistic – it means educational messaging about AI ethics (through media or courses) is reaching students. Students likely

have heard about AI bias, data privacy, and plagiarism concerns (Hung & Chen, 2023). However, awareness alone has not curtailed unethical use (Zhu et al., 2024). This resonates with Rest's model: moral awareness is just the first step. Some students might recognize "using AI to cheat is wrong," yet fail at the second step (moral judgment – deciding what is right in context) or third (moral intent – prioritizing ethical action over self-interest). For instance, a student might internally acknowledge that writing their thesis with AI is deceitful, but then rationalize it ("everyone uses tools" or "I don't have time, I'll just do it once"). The disconnect between awareness and behavior was evident in Zhu et al.'s study: they hypothesized ethical awareness would reduce AI usage intentions (assuming aware students would be cautious), yet found it actually slightly increased intention. This could mean aware students intend to use AI responsibly, but without strong self-regulation or guidance, that intention might slide into irresponsible usage once they actually engage with AI. The implication is that interventions must push beyond raising awareness, to strengthening moral judgment (helping students distinguish appropriate vs. inappropriate AI use cases) and moral commitment (motivating them to choose the ethical route even when tempted) (Usher & Barak, 2024).

**3. Key Influencers – Performance Expectancy, Social Norms, and Anxiety:** In line with UTAUT2/TPB, Chinese students' decision to use AI is strongly driven by perceived benefits and usefulness. Multiple studies confirm that if students believe AI will improve their grades or efficiency, their intention to use it rises (Zhu et al., 2024; Wang et al., 2024). This is understandable in a competitive academic environment. Therefore, any effort to promote ethical use must contend with the fact that AI's allure (easy, fast results) is a primary motivator. Simply telling students "don't use AI to cheat" may fall flat if they see AI as a necessary tool to manage workloads or outperform peers. Instead, perhaps the narrative should be "use AI smartly, not in ways that undermine your learning or get you in trouble." Additionally, social influence emerged as a notable factor: Chinese students are influenced by what they perceive their peers and teachers think about AI (Zhu et al., 2024; Swidan et al., 2025). If a student's friends brag about how ChatGPT helped them finish an assignment in 1 hour, that student's normative belief shifts towards accepting AI assistance. Conversely, if a respected professor explicitly incorporates guidelines on ethical AI use in class, students receive a normative cue that ethical restraint is valued. The current situation in many Chinese universities might have been one of ambiguous norms, which are dangerous because they allow rationalizations ("no one said I couldn't use AI, so it must be fine"). The recent introduction of strict policies at top universities (like Fudan's ban on certain AI uses) is rapidly shaping new norms – likely deterring blatant misuse at least on those campuses (ECNS.cn, 2025).

Another factor is AI-related anxiety and perceived risk. Zhu et al. found AI ethical anxiety (worry about AI's unethical outcomes) significantly deters actual use of AI, even if it doesn't always reduce the intention (Zhu et al., 2024). Their interpretation was that some students intend to use AI but then refrain at the last minute out of fear (e.g., fear of getting caught for plagiarism or fear that AI content might be incorrect). This "inhibiting effect" of anxiety can actually be positive if it prevents unethical actions

(for instance, a student who wanted to cheat with AI decides not to because they are anxious about violating academic integrity). However, anxiety is not a reliable guardian of ethics – it might simply encourage secrecy or stress. Ideally, students should avoid unethical AI use because of principled choice, not just fear of consequences. Moreover, if anxiety is too strong, it might also hinder legitimate use of AI (a student might avoid useful AI tools altogether, to their detriment). The challenge for universities is to calibrate this: clear policies and detection measures raise the risk perception enough to dissuade cheating, but simultaneously, education and support can channel students toward productive, allowed uses so they don't feel all AI is forbidden fruit.

**4. Institutional Response is Critical and Underway:** One of the clearest themes is that universities and policymakers hold the levers to influence student behavior at scale. The situation in China is rapidly evolving from laissez-faire to structured governance of AI in academia. As detailed in the ECNS news report, leading Chinese universities have begun enacting explicit AI usage rules. These rules serve multiple functions: they clarify gray areas (so ethical students know what's acceptable), they impose penalties for violations (raising the stakes for unethical use), and they symbolically affirm the institution's commitment to academic integrity in the AI era. For example, requiring students to declare AI usage on projects prompts a moment of self-reflection and honesty, integrating ethics into the assignment workflow. The introduction of AI-generated content limits (like the 40% cap in theses at one university) is another novel policy tool – it tacitly acknowledges that some AI use is fine (and probably inevitable), but puts a quantitative boundary to ensure the student's own work remains central. Such measures could be refined as we learn more (the number is arguably arbitrary, but it sets a tone). Importantly, Chinese universities are also investing in detection technologies for AI content and manipulated data. While this raises its own ethical questions (surveillance and false positives), it signifies that academic integrity mechanisms are adapting to AI. From a policy perspective, Chinese authorities have signaled support for ethical AI use at a systemic level. UNESCO's guidance on generative AI in education (2023) was promptly translated into Chinese contexts, and the Ministry of Education in China has funded research into AI-integrity detection systems. There is recognition that maintaining fairness and trust in educational qualifications is paramount. If students (and employers) lose trust that a degree certifies a person's own competencies (not just their ability to prompt AI), the whole educational enterprise suffers. Thus, policymakers are interested in setting broad regulations. Zhu et al. (2024) recommended establishing ethical safety mechanisms and laws regarding AI, highlighting principles of fairness, transparency, accountability, non-maleficence, and privacy. In China, we see moves in this direction, such as draft regulations on AI usage in research and education, though enforcement will be key. For universities, Zhu et al. also provided practical strategies: proactively support and supervise students' AI use, implement on-campus AI use standards, and have emergency responses for ethical incidents. Essentially, the advice is for institutions to engage with AI rather than ignore it – by providing AI resources (so students don't turn to sketchy tools), while also embedding ethical guardrails. Our findings strongly concur: a hands-off approach leaves too much room for misuse,

whereas thoughtful policies can guide students toward a middle ground of responsible use.

**5. Effectiveness of AI Ethics Education:** Educational interventions focusing on AI ethics show promise but also reveal how much more is needed. The Usher & Barak (2024) study demonstrates that even a relatively short online module can measurably boost students' understanding and awareness of AI ethics. The improvement in students' ability to articulate concerns and propose solutions post-intervention is heartening (Usher & Barak, 2024). This suggests that students are receptive to ethics education – they likely know this is important and are eager to learn “the right way” to use emerging tech. It also indicates that many had gaps in their knowledge that a structured learning experience could fill (for example, a student might not have thought deeply about AI data bias until the course prompted them). However, one module is just a start. There is a risk that if only a subset of students (like those in certain majors) gets explicit ethics training, others might miss out. Ideally, ethics of AI should become a cross-cutting theme, addressed in orientation sessions, IT literacy courses, and relevant subject courses (e.g. an economics class might discuss ethical issues of AI in finance, etc.). For Chinese universities, implementing such curricula at scale is challenging but increasingly feasible. One approach could be to integrate AI ethics case studies into existing “Ideological and Political Education” courses that all students take – linking AI ethics to societal values and personal integrity, which would resonate with the moral education component of Chinese college curricula. Another approach is co-curricular: workshops, hackathons or competitions on ethical AI innovation (to engage students actively). Given that Chinese students scored lower on “AI consciousness” (general awareness of AI), educational efforts should also raise their overall understanding of how AI works. This technical literacy underpins ethics: for instance, knowing that AI can generate fake references or confident-sounding false answers (a phenomenon known as hallucination) is crucial so that students don't inadvertently trust AI outputs blindly. As one Tsinghua student noted, AI sometimes produces “blatantly incorrect answers, even absurd ones” – awareness of this technical limitation is an ethical issue, because using unchecked AI answers could mislead others and degrade academic quality. The Chinese Ministry of Education might consider issuing guidelines or frameworks for AI ethics education (similar to how cybersecurity or entrepreneurship education have been promoted). As of now, initiatives seem university-driven, but a national framework could ensure consistency. Importantly, ethics education should be continuous: a single course in freshman year might fade by senior year when students are writing a thesis. Continuous reinforcement via honor codes and faculty reminders is needed. Encouragingly, experts in China are calling for a revamp of evaluation systems to emphasize creativity and critical thinking – skills that AI cannot easily replicate. This pedagogical shift itself is a form of ethics promotion: it steers both teaching and learning toward outcomes that reduce the temptation to misuse AI (if an assignment requires personal reflection or hands-on work, AI cannot replace the student, thus students are naturally discouraged from trying to outsource it to a bot).

**6. Implications for Universities and Policymakers:** Synthesizing all the above, we outline several implications and recommendations:



**Develop Clear AI Usage Policies:** Universities in China should urgently establish or refine guidelines on AI usage in coursework and research. These should be specific (enumerating what is allowed vs. prohibited, as Fudan’s policy does) and communicated widely to students and faculty. The policies should also articulate the rationale – that the goal is not to stifle AI innovation but to uphold fairness and learning integrity. Policies could include requiring students to declare AI assistance, specifying citation norms for AI-generated content, and setting boundaries for AI use in assessments (possibly even creating AI-free exam settings for certain evaluations).

**Promote an Ethical AI Culture:** Institutions should strive to create an environment where ethical use of AI is the norm. This can be done by incorporating discussions of academic integrity in the AI era during student orientations, encouraging faculty to mention AI ethics in their syllabi, and showcasing positive examples (students or projects that used AI creatively yet responsibly). Peer influence can be leveraged by forming student ambassador groups or AI ethics clubs that raise awareness. Competitions or assignments that challenge students to use AI within ethical constraints (e.g. “use an AI tool to help with X, document exactly how you used it and ensure no plagiarism”) could reinforce culture (Hung & Chen, 2023).

**Strengthen AI Literacy and Ethics Training:** Curricular integration of AI literacy (technical and ethical) is essential. Based on TPB findings, improved literacy not only increases usage but can shape better attitudes and perceived control. Therefore, universities might introduce mandatory modules on AI fundamentals and ethics for all students, regardless of major. These should cover not just abstract principles but practical guidance: how to cite AI, how to double-check AI outputs, data privacy practices, etc. The training should also underscore consequences for misuse, making clear that cheating via AI is still cheating (Wang et al., 2024; Runcan et al., 2025).

**Support Faculty and Teaching Adjustments:** Faculty need development opportunities to cope with AI in their classrooms. Many instructors worry about AI undermining learning and assessment. Workshops can help teachers redesign assignments (favoring open-ended, personalized tasks that AI finds hard to do) and learn to use AI detectors judiciously. Professors might also incorporate AI as a teaching tool – for example, asking students to critique an AI-generated essay – to build students’ critical thinking. Institutional support (guidelines, tech tools, recognition in performance evaluations for those innovating in this area) will empower faculty. As noted by experts, shifting towards evaluating higher-order thinking and creativity will reduce the viability of AI as a cheating tool (Hung & Chen, 2023). This pedagogical shift requires administrative backing.

**Leverage Technology to Complement Ethics:** Policymakers and universities are investing in AI content recognition and other detection technologies. While these are useful for enforcement, they should be paired with ethical training to avoid an arms race of detection vs. evasion. One interesting implication is the idea of “co-evolution”: as AI gets better, detection and evaluation methods must also improve. It might even be worthwhile to include students in developing solutions (e.g. student-led research on AI detection or watermarking could both educate them and contribute to integrity efforts).

**National and International Collaboration:** At the policy level, Chinese educational authorities might work with international bodies (like UNESCO, mentioned in Wang et al., 2024) to stay updated on best practices and guidelines. Ethical AI use in education is a global challenge, and China can both learn from and contribute to global standards (for instance, the idea of requiring disclosure of AI use could be promoted internationally). National standards or recommendations could ensure that even less-resourced institutions adopt minimum guidelines, so no campus becomes a loophole where unethical AI use flourishes.

Finally, students themselves should be engaged as part of the solution. Often, they can identify loopholes or issues that administrators might miss. Creating channels for student feedback on AI policies (e.g. student representatives in academic integrity committees) can improve compliance and fairness. Many students, as evidenced by survey responses, want clear rules and do care about ethics (Swidan et al., 2025). Empowering those voices helps counter the narrative that all students will cheat if given AI – in reality, a culture of integrity can take hold if the majority buy into it. In conclusion, the path forward involves a multi-pronged strategy: educational interventions to bolster ethical awareness and skills, policy frameworks to delineate boundaries, technological tools for enforcement, and cultural change to make responsible AI use part of academic identity. Chinese universities are at a critical juncture; how they respond to AI's rise could serve as a model (or cautionary tale) for the world's educational systems. The discussion above indicates that while challenges are significant, there is also a strong foundation – students who are aware and care, educators and leaders mobilizing – upon which to build a robust paradigm of ethical AI integration in academia.

## 5. Conclusion

Artificial intelligence is transforming the landscape of higher education in China, bringing unprecedented capabilities to university students while also testing the resilience of academic ethics. This study set out to investigate Chinese university students' ethical awareness in their use of AI and to identify the factors that shape responsible versus irresponsible AI use. By integrating recent survey research, theoretical models (UTAUT2, TPB), and educational frameworks (Rest's moral development model), we gain a nuanced understanding of both the promise and the peril of AI in the hands of students. Several conclusions can be drawn:

Chinese students are avid adopters of AI, and this will only increase. Despite limited official access to some tools like ChatGPT, students have found ways to leverage generative AI for a range of academic tasks. The convenience and performance gains – real or perceived—make AI tools highly attractive. This trend is not a fad but a paradigm shift in how students learn and produce work. Ignoring or banning AI outright is neither practical nor pedagogically sound in the long run (blanket bans are difficult to enforce and may drive usage underground). Therefore, stakeholders must acknowledge AI's presence and work to maximize its benefits while curbing abuses (Swidan et al., 2025).

Ethical awareness among students exists but needs strengthening and channeling. Many Chinese

university students can recognize the ethical issues surrounding AI use, such as plagiarism and data integrity. However, awareness is often superficial or compartmentalized. Students might distinguish right from wrong in theory yet fail to apply those principles under pressure or when temptation strikes. A key insight from our review is that raising awareness is just the starting point; the bigger challenge is converting awareness into consistent ethical behavior. This requires internalizing ethical values (integrity, honesty, fairness) in relation to AI and developing the self-regulation to act accordingly, even when unsupervised. It also means correcting misperceptions – for example, the false belief that using AI isn't cheating if "the AI isn't a person." Continued ethics education and open conversations are needed to dispel such misconceptions (Zhu et al., 2024; Durall Gazulla et al., 2024).

Multiple factors influence AI use and ethics, with peer norms and institutional cues being especially powerful. Our findings reinforce that student behavior is malleable and responds to the surrounding environment. If the environment tacitly condones cut-and-paste from AI (through silence or lack of consequences), more students will go down that path. Conversely, if students see their community taking academic integrity seriously in the context of AI – peers who refrain from cheating, professors who articulate clear values, universities that enforce rules – they are likely to follow suit. As such, universities should strive to create a community ethos that "at this institution, we use AI, but we do so responsibly and ethically." Achieving this involves clear honor codes updated for AI, visible enforcement of policies when violations occur (to signal that cheating is unacceptable), and also positive reinforcement (recognizing students who innovate with AI in legitimate ways). Over time, the goal is to make ethical AI use part of the identity of the student body (Swidan et al., 2025; Hung & Chen, 2023).

AI ethics education can make a difference and should be scaled up. The evidence from intervention studies shows that students' ethical reasoning regarding AI can be improved through structured learning experiences. Therefore, universities – and indeed secondary schools as pipeline feeders – should integrate AI ethics into curricula. This investment in education is arguably the most sustainable solution: when students understand why certain uses of AI are problematic and learn how to use AI as a supportive tool rather than a crutch, they are more likely to self-police their behavior. It is far more effective to convince students of the value of doing their own thinking (and using AI appropriately) than to solely rely on catching them after the fact. Ethics education also keeps pace with technology; as AI evolves, curricula can update students on new ethical challenges (for example, deepfakes or more advanced AI that may blur authorship lines even further).

Institutions and policymakers must provide leadership through policy and infrastructure. Chinese universities have begun implementing policies that delineate acceptable AI use, and this momentum should continue. Each institution may tailor rules to its context, but a common baseline (perhaps guided by the Ministry of Education) would be beneficial so students across China receive consistent messages. Policies should be enforced fairly and accompanied by due process – for instance, if AI misuse is suspected, there should be clear procedures for investigation and appeal, to protect students from

unfounded accusations. On the infrastructure side, developing AI-detection tools and plagiarism checkers adapted to Chinese language content is important, as is investing in secure assessment methods for high-stakes evaluations (to ensure, for example, that a final exam truly reflects a student's ability without AI assistance). Policymakers can also encourage or mandate transparency in academic output – e.g. requiring that AI involvement be disclosed in research publications or theses, which fosters a norm of honesty.

The balance between innovation and integrity must be carefully managed. AI offers tremendous educational opportunities – from personalized learning support to improved efficiency in research – and we should not lose sight of that amid the concerns. The aim is not to stifle students' use of cutting-edge tools, but to ensure those tools are used in service of learning and scholarship rather than as tools for fraud. As one expert quoted: education should encourage students to collaborate with AI rather than rely on it blindly (Runcan et al., 2025). This perspective treats AI as an augmentative partner: just as we teach students how to use calculators or the internet responsibly, we now must teach how to “team up” with AI in a way that extends human creativity and understanding, not replaces it. If we succeed, today's students will enter the workforce as professionals who can harness AI ethically, benefiting society.

In closing, the ethical awareness of AI use among Chinese university students is a work in progress – a landscape of considerable awareness yet considerable misuse, of new rules being written and old habits being re-examined. The next few years will be pivotal. Will we see a backlash, with tighter restrictions and punitive measures reigning in AI on campus? Or will we see a progressive adaptation, where AI finds a respected, well-governed place in academic life, analogous to libraries or laboratories? The evidence in this paper leans toward the latter possibility, provided that education and policy interventions maintain momentum. Students themselves are crucial allies in this journey; when empowered with knowledge, guided by mentors, and bound by shared values, they are capable of remarkable integrity even amidst transformative technological change. As China and the global academic community navigate the era of AI, the ultimate measure of success will be an educational culture that prizes both innovation and ethics – producing graduates who are not only proficient in using AI, but who do so with a conscience and a sense of responsibility to the broader human community.

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