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AI IN HIGHER EDUCATION: THE ROLE OF STUDENTS' VALUE ORIENTATIONS, EFFORT PERCEPTIONS, AND ACADEMIC ETHICS

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ABSTRACT
The rapid advancement of Artificial Intelligence (AI) has led to its widespread adoption in higher education. A growing body of research has examined its educational implications, including effects on learning and academic integrity. Building on this literature, this paper investigates how students' orientations toward learning, effort, and ethics relate to their use of AI in academic contexts. The study was conducted on a sample of 115 undergraduate and graduate business students using a structured questionnaire. Data were analyzed using Chi-square tests and Cramer's V coefficients. The results reveal significant relationships between students' orientations and AI use. Students who prioritize efficiency, minimal effort, and final outcomes are more likely to use AI frequently, trust its outputs without verification, and rely on it for assignments. Likewise, students with more tolerant attitudes toward unethical academic behavior are more likely to use AI as a shortcut in academic tasks. In contrast, students who value the learning process, theoretical knowledge, and academic integrity are more likely to critically evaluate AI-generated content and consult additional sources. The findings suggest that AI acts primarily as an amplifying tool rather than an independent driver of academic behavior, reflecting pre-existing attitudes toward learning and ethics.

KEY WORDS: artificial intelligence (AI), attitudes, behaviour, values, university students

JEL CLASSIFICATION: A22, I21, O33

1. Introduction

Students classified as Generation Z were born between 1995 and 2000. Instant culture, speed, streamlined processes, and a strong results orientation are among the defining characteristics of this generation. These students seem unable to live without technology, often using it for purposes that do not align with its intended use (Hendrastomo & Januarti, 2023). According to Seemiller and Grace (2016), Gen Z students expect to find the information they need quickly and with minimal effort. However, this tendency may lead them to procrastinate and leave little or no time to critically examine a situation. The same authors suggest that the ease of access

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to information has diminished people's curiosity. A similar conclusion is presented by Johnston et al. (2024), who argue that Gen Z students have a limited attention span and prefer to read less than 20% of a text while reaching the key points as quickly as possible. This lack of patience may encourage academic dishonesty, as Generation Z tends to focus primarily on the end result rather than the learning process itself. Combined with an online environment in which plagiarism is widespread, cheating has become a more socially accepted norm (Johnston et al., 2024).

The widespread use of artificial intelligence (AI) in education is closely associated with the emergence of AI chatbots, particularly ChatGPT, in November 2022. It demonstrated unprecedented potential to generate full-length texts across a variety of genres in a human-like manner, based on a series of straightforward prompts. This tool has proven useful in completing academic tasks by assisting students with idea generation, paraphrasing, summarizing, and proofreading. However, a certain number of students also use it to write part or all of their assignments (Črček & Patekar, 2023). A large proportion of students express a desire to use ChatGPT and similar tools in education (Obenza et al., 2023). Nevertheless, Gen Z students often use AI tools primarily to save time and simplify tasks. Many of them cite convenience and time-saving benefits as the main reasons for using AI in academic work. They report that AI is particularly helpful under academic pressure, such as tight deadlines or mental blocks (Llanes et al., 2025). According to Acosta-Enriquez et al. (2024), as students increasingly rely on ChatGPT for academic tasks, they may outsource essential cognitive skills — such as critical thinking, problem-solving, and the generation of original content — to this technology. This shift may reduce their sense of personal responsibility for maintaining academic integrity, as students might begin to perceive AI as a substitute for their own intellectual effort. In addition to creating opportunities for academic dishonesty, AI chatbots such as ChatGPT have been shown to make referencing errors and may reflect biases embedded in the datasets used for their training (Johnston et al., 2024). In this way, the improper use of AI chatbots not only threatens academic integrity but may also seriously undermine the overall outcomes of the educational process, potentially causing long-term and significant consequences for both individuals and society as a whole. Mumtaz et al. (2024) argue that a lack of ethical development during academic education is associated with a greater propensity for corrupt behavior later in one's career. Similarly, it can be concluded that the uncritical use of AI chatbots may compromise the educational process and contribute to the development of insufficiently competent professionals.

Considering the above, it is necessary to clearly identify the factors that influence the non-selective and uncritical use of AI chatbots among students and, consequently, to adequately prepare them for future career challenges in which AI will be an indispensable component. The key research question addressed in this paper is whether students' personal traits, values, attitudes, and behaviors related to education, ethics, and life in general, influence the way they use AI chatbots when completing academic tasks. The main hypothesis is that students who exhibit a preference for shortcuts and a higher tolerance for cheating are more likely to use AI chatbots to complete academic tasks as quickly as possible and with minimal effort, disregarding both the quality of their work and the acquisition of knowledge. In line with this objective, the paper presents original research conducted on a representative sample of business students. The proposed hypothesis was tested using correlation analysis. The remainder of the paper is structured as follows: first, a review of the relevant literature is presented, followed by the research results, their detailed interpretation, and discussion.

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2. Literature Review

According to the Theory of Planned Behavior, intentions to perform various behaviors can be predicted with considerable accuracy based on attitudes toward the behavior, subjective norms, and perceived behavioral control. However, whether an individual will actually engage in a given behavior also depends on additional factors, particularly the availability of resources and opportunities (Ajzen, 1991). AI chatbots are easily accessible, and their use is simple and user-friendly. This accessibility creates the possibility of examining, relatively independently of structural constraints, the relationship between students' personal characteristics and the ways in which they use AI chatbots. Although this is a relatively new field of research, the existing literature already includes a number of studies investigating the influence of personality traits, as well as other individual characteristics and attitudes, on the willingness to use AI chatbots in unethical ways.

In examining the influence of personality traits on the potential misuse of AI chatbots (generative AI), several frameworks for understanding human personality have been employed. One of the most prominent is the Dark Triad framework, which encompasses three personality traits: Machiavellianism (manipulative and calculating behavior aimed at achieving personal goals at the expense of others), Narcissism (a sense of superiority, dominance, and a need for admiration), and Psychopathy (a lack of empathy and impulsivity). This framework was later expanded into the Dark Tetrad with the addition of Sadism, defined as deriving pleasure from provoking or witnessing harm to others (Clemente et al., 2025). Greitemeyer and Kastenmüller (2023) found that students scoring higher on Dark Triad traits – Machiavellianism, Narcissism, and Psychopathy – are more likely to potentially misuse generative AI. Similar conclusions regarding these three traits were reached by Liang et al. (2025), while de Winter et al. (2024) confirmed the significance of Machiavellianism. Furthermore, Clemente et al. (2025) demonstrated that a high expression of all four Dark Tetrad traits increases the likelihood of academic cheating among students. However, Sun et al. (2025) report that while Narcissism, Psychopathy, and Sadism are significantly associated with generative AI-related academic misconduct, Machiavellianism does not show a statistically significant relationship.

With regard to the HEXACO framework, which comprises six personality traits, Greitemeyer and Kastenmüller (2023) found that individuals high in Honesty-Humility tend to refrain from using chatbot-generated texts for academic cheating, as they prioritize fairness over personal gain. Using the same framework, Liang et al. (2025) reported that Extraversion and Openness to Experience are associated with more positive attitudes toward generative AI, reflecting curiosity and receptiveness to technological innovation. Conversely, Honesty-Humility, Agreeableness, and Conscientiousness were found to negatively predict generative AI–related misconduct, highlighting that moral and prosocial traits discourage unethical behavior. These findings suggest that while favorable attitudes toward generative AI may increase the willingness to use such tools, enduring personality traits largely determine whether that use remains ethical.

Using the Academic AI Usage Inventory, Athar (2025) found that Antagonism – typically associated with manipulation, deceit, and disregard for fairness in offline interpersonal interactions – was linked to irresponsible AI use. This suggests that individuals high in this trait may similarly exploit digital tools in ethically questionable ways. Additionally, Disinhibition – characterized by impulsivity, poor planning, and difficulty delaying gratification – was

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significantly related to both overreliant and irresponsible AI use, reflecting a broader tendency toward unregulated or excessive engagement with academic activities. In contrast, Anankastia – defined by perfectionism, orderliness, and cautious decision-making – was associated with constructive AI use and negatively related to misuse, consistent with its established role in promoting disciplined and ethical behavior in academic contexts.

According to Rodríguez-Ruiz et al. (2025), individuals who perceive themselves as competent in carrying out specific behaviors, even in the face of difficulties, are less likely to rely on AI tools to complete academic tasks on their behalf. Furthermore, a lower capacity to delay immediate gratification in pursuit of greater future rewards was found to predict a higher likelihood of using AI tools to perform academic tasks in the student's name. In addition, Yeung et al. (2026) found that overtrust in AI may encourage inappropriate use. The authors also observed that, despite being aware of the errors ChatGPT can produce, some students continue to use it extensively because it enables disburdenment — that is, the completion of academic tasks in the shortest possible time and with minimal effort.

Researchers have clearly established associations between various personality traits, as well as other individual characteristics and attitudes, and the intention to use AI chatbots in unethical or improper ways. However, the literature lacks consensus regarding the influence of certain specific factors. Therefore, in the study presented below, the effects of the largest possible number of the aforementioned factors, along with several additional variables, were examined.

3. Methodology

The research presented in this paper involved conducting a survey among business students, followed by statistical analysis of the collected data. The survey was administered to students at the FEFA Faculty, Belgrade Metropolitan University, in Belgrade. Questionnaires were sent via email to all students of the faculty, and out of a total of 634 students, 115 completed the survey, representing a response rate of 18.14%. The sample broadly reflects the gender and study-year structure of the surveyed student population. Specifically, the sample included 46 male students (40%) and 69 female students (60%). In terms of study year, the sample consisted of 33 first-year students (28%), 23 second-year students (20%), 22 third-year students (19%), 26 fourth-year students (23%), and 11 postgraduate students (10%). However, given that the study was conducted at a single faculty and the response rate was limited, the findings should be interpreted within the context of this specific sample.

The existing body of empirical research suggests that business students tend to demonstrate more pragmatic and instrumental thinking, as well as greater tolerance for unethical behavior, compared to students in other disciplines (Mumtaz et al., 2024). This makes them a particularly interesting population for studies on ethics, values, and adherence to rules.

The questionnaire consisted of closed-ended questions with predefined answer options that could be converted into a Likert scale. The collected responses were analyzed using Chi-square association test and Cramer's V values. The analysis was conducted between two groups of variables: one group related to students' personal values, attitudes, beliefs, and behaviors, and the other related to the use of AI chatbots as well as attitudes toward the reliability and significance of artificial intelligence. Each group consisted of nine variables, with each variable represented by a corresponding question in the questionnaire. Below is an

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overview of both groups of questions. The response options, from which participants could select one, are provided in parentheses.

Group of questions related to students' personal values, attitudes, beliefs, and behaviors regarding education, ethics, and life in general:

Q1. Do you agree with the following statement: "It doesn't matter how educated you are, but how resourceful you are"? (Strongly agree / Mostly agree / Neither agree nor disagree / Mostly disagree / Strongly disagree)
Q2. Do you agree with the following statement: "I believe I can quickly and easily find a well-paid job"? (Strongly agree / Mostly agree / Neither agree nor disagree / Mostly disagree / Strongly disagree)
Q3. When you face a very complicated and difficult problem, what do you usually do? (If I assess that the problem is too difficult, I do not try to solve it / I try to solve it, but if I don't succeed on the first attempt, I give up / I try to solve it by combining different approaches, but if I don't succeed after several attempts, I give up / I invest a great deal of effort, time, and persistence in solving the problem and do not give up as long as there is even the slightest chance it can be solved / I never give up and always find a solution to the problem, whatever it may be)
Q4. When writing a text or solving an assignment, how committed are you to the quality of your work? (I do only what is necessary and do not pay attention to technical or aesthetic details / I do only what is necessary, but I also try to ensure the work is technically well-organized and visually appealing / I do more than is necessary, but I do not pay much attention to technical or aesthetic details / I do more than is necessary and try to ensure the work is technically well-organized and visually appealing)
Q5. Do you agree with the following statement: "I am used to solving most of my problems with just a few clicks"? (Strongly agree / Mostly agree / Neither agree nor disagree / Mostly disagree / Strongly disagree)
Q6. Do you agree with the following statement: "The final result is more important than the path taken to achieve it"? (Strongly agree / Mostly agree / Neither agree nor disagree / Mostly disagree / Strongly disagree)
Q7. How important are grades to you during your studies? (They are not important to me; I am only interested in passing / They are important to me, but not too much / They are very important to me)
Q8. What is your attitude toward cheating on exams? (I believe one should try to cheat whenever there is an opportunity / I believe cheating on exams is not right, but that it is justified to try when one has not studied enough / I believe one should not cheat on exams under any circumstances)
Q9. To what extent is digital technology a part of your life, or in other words, to what extent do you live in a virtual world (apps, social media, video games, chatbots, etc.)? (I use digital technology minimally and primarily live in the "real" world / I consider my life in the virtual and "real" worlds to be equally balanced / I mostly live in the virtual world, using digital technology in many areas of my life / I almost entirely live in the virtual world; I love digital technology and constantly explore ways to integrate it into all areas of my life)

Group of questions related to the use of AI chatbots in education, as well as attitudes toward the reliability and importance of artificial intelligence:

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Q10. How often do you use AI tools for completing homework, writing essays, solving problems, or finishing other faculty-related obligations? (Never / Rarely / Sometimes / Often / Always)
Q11. Why do you use AI tools when completing faculty-related obligations? (To finish tasks in the shortest possible time and with the least possible effort / To find ideas on how to complete a task / To technically and grammatically refine a solution that I previously created independently / To find raw data needed for developing and creating a solution / To check the correctness of a solution that I previously devised independently)
Q12. To what extent do you agree with the following statement: "I believe that AI creates solutions so intelligent that I would never be able to come up with them myself"? (Strongly agree / Mostly agree / Neither agree nor disagree / Mostly disagree / Strongly disagree)
Q13. When you use AI tools such as ChatGPT to solve a task or write a text, do you carefully read the solution provided by the AI? (I skim through it just to make sure there is no major mistake / I read it carefully, but do not change anything in the solution provided by the AI / I read it carefully and modify details that I think could be better written / I read it carefully and then write the text independently, using the AI's suggestion as a starting point)
Q14. What do you do if the solution proposed by the AI is not completely clear to you? (I use the solution anyway in its original form / I remove the parts of the solution that are not clear to me / I try to clarify the unclear parts through additional prompts to the AI / I try to clarify the unclear parts through additional prompts to the AI and additional online sources)
Q15. Do you think that the solutions proposed by AI contain errors, inaccuracies, or similar issues? (I believe the solutions proposed by AI do not contain errors / I believe the solutions proposed by AI contain very few errors / I believe the solutions proposed by AI contain a moderate number of errors / I believe the solutions proposed by AI contain a large number of errors)
Q16. When using AI to solve tasks or write texts, how often do you use other online sources to verify credibility or gather additional information? (Never, I believe what the AI provides is good enough / I check only if there is an obvious error or inaccuracy / I always check the solution provided by the AI against other online sources)
Q17. When you use AI to solve a task or write a text, how do you formulate your prompt? (I believe it is sufficient to provide a prompt containing a few keywords / I compose a detailed prompt and then submit it, but do not use follow-up prompts / I use a detailed prompt and follow-up prompts until I get the solution I want)
Q18. How important is learning theoretical material today, given the existence of AI? (I believe theoretical material is not important, as everything can be solved using AI / I believe theoretical material is important, but less so than before / I believe theoretical material is just as important as before / I believe theoretical material is more important today than before)

For the purpose of methodological transparency, the authors wish to disclose the use of ChatGPT during the preparation of this paper. The research was conducted and the original manuscript was written by the authors in their native language without the use of ChatGPT. ChatGPT was used only at a later stage to assist with the translation of selected passages into English and with linguistic and stylistic editing.

Chi-square association test between the two groups of variables was conducted using SPSS 13.0. Expected cell frequencies were checked for all contingency tables. For tables where the expected frequency assumption was not fully satisfied, Monte Carlo exact significance values based on 10,000 simulations were calculated and reported. No missing responses were identified in the dataset.

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4. Results

Tables 1, 2, and 3 present the results of the Chi-square tests of association between the two groups of variables. The tables report the Chi-square statistic, p-values obtained through Monte Carlo simulation, and Cramer's V coefficients.

Table 1 Chi-square tests of association between variables Q1 - Q9 and Q10 - Q12

	Q10			Q11			Q12		
	χ^2 (df)	p-value	Cram. V	χ^2 (df)	p-value	Cram. V	χ^2 (df)	p-value	Cram. V
Q1	30.503 (16)	0.016	0.258	38.442 (20)	0.014	0.289	31.083 (16)	0.030	0.260
Q2	18.054 (16)	0.317	0.198	22.508 (20)	0.304	0.221	14.735 (16)	0.544	0.179
Q3	11.251 (16)	0.815	0.156	14.656 (20)	0.789	0.178	11.209 (16)	0.752	0.156
Q4	20.404 (12)	0.053	0.243	21.985 (15)	0.104	0.252	14.240 (12)	0.254	0.203
Q5	19.941 (16)	0.221	0.208	22.887 (20)	0.291	0.223	48.101 (16)	0.000	0.323
Q6	15.399 (16)	0.506	0.183	24.225 (20)	0.227	0.229	43.857 (16)	0.001	0.309
Q7	30.381 (8)	0.000	0.363	14.403 (10)	0.152	0.250	10.748 (8)	0.216	0.216
Q8	40.520 (8)	0.000	0.420	16.163 (10)	0.092	0.265	26.490 (8)	0.001	0.339
Q9	14.865 (12)	0.247	0.208	12.568 (15)	0.641	0.191	11.949 (12)	0.451	0.186

Source: Authors.

Table 2 Chi-square tests of association between variables Q1 - Q9 and Q13 - Q15

	Q13			Q14			Q15		
	χ^2 (df)	p-value	Cram. V	χ^2 (df)	p-value	Cram. V	χ^2 (df)	p-value	Cram. V
Q1	12.746 (12)	0.326	0.192	10.142 (12)	0.498	0.171	19.089 (12)	0.077	0.235
Q2	11.693 (12)	0.459	0.184	11.665 (12)	0.466	0.184	4.981 (12)	0.956	0.120
Q3	8.809 (12)	0.656	0.160	3.041 (12)	0.984	0.094	7.879 (12)	0.699	0.151
Q4	15.176 (9)	0.115	0.210	10.296 (9)	0.291	0.173	18.866 (9)	0.026	0.234
Q5	18.866 (12)	0.085	0.234	6.955 (12)	0.875	0.142	22.205 (12)	0.042	0.254
Q6	25.821 (12)	0.014	0.274	12.986 (12)	0.359	0.194	34.536 (12)	0.002	0.316
Q7	7.808 (6)	0.244	0.184	7.705 (6)	0.251	0.183	6.900 (6)	0.319	0.173
Q8	6.219 (6)	0.384	0.164	9.770 (6)	0.123	0.206	2.533 (6)	0.860	0.105
Q9	4.436 (9)	0.881	0.113	10.586 (9)	0.304	0.175	6.363 (9)	0.653	0.136

Source: Authors.

Table 3 Chi-square tests of association between variables Q1 - Q9 and Q16 - Q18

	Q16			Q17			Q18		
	χ^2 (df)	p-value	Cram. V	χ^2 (df)	p-value	Cram. V	χ^2 (df)	p-value	Cram. V
Q1	9.110 (8)	0.292	0.199	10.495 (8)	0.268	0.214	26.548 (12)	0.028	0.277
Q2	4.285 (8)	0.849	0.136	8.990 (8)	0.335	0.198	9.996 (12)	0.595	0.170
Q3	5.693 (8)	0.677	0.157	7.325 (8)	0.473	0.178	24.752 (12)	0.016	0.268
Q4	12.830 (6)	0.044	0.236	10.283 (6)	0.105	0.211	16.237 (9)	0.073	0.217
Q5	23.138 (8)	0.005	0.317	8.829 (8)	0.346	0.196	28.418 (12)	0.008	0.287
Q6	24.318 (8)	0.003	0.325	13.210 (8)	0.094	0.240	32.039 (12)	0.005	0.305
Q7	4.043 (4)	0.398	0.133	8.804 (4)	0.064	0.196	16.835 (6)	0.014	0.271
Q8	12.018 (4)	0.018	0.229	4.224 (4)	0.382	0.136	28.168 (6)	0.002	0.350
Q9	9.855 (6)	0.124	0.207	3.417 (6)	0.747	0.122	9.505 (9)	0.359	0.166

Source: Authors.

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Below is a summary of the statistically significant correlations ($p<0.05$), with the corresponding Chi-square and Cramer's V values for each:

- Students who fully agree with the statement that in life it is more important to be resourceful than educated are more inclined to use AI when writing essays, homework assignments, etc., compared to students who agree with this statement to a lesser extent. (Chi-square value = 30.503; Cramer's V = 0.258).
- Students who fully agree with the statement that in life it is more important to be resourceful than educated more frequently than others cite the intention to complete tasks with as little effort as possible and in the shortest possible time as their main reason for using AI to fulfill academic obligations. (Chi-square value = 38.442; Cramer's V = 0.289).
- Students who fully agree with the statement that in life it is more important to be resourceful than educated are more inclined to believe that AI creates solutions so intelligent that they themselves would never be able to produce them. (Chi-square value = 31.083; Cramer's V = 0.260).
- Students who fully agree with the statement that in life it is more important to be resourceful than educated are more inclined to believe that theoretical knowledge is irrelevant today given the existence of AI. (Chi-square value = 26.548; Cramer's V = 0.277)
- Students who tend to give up relatively easily when faced with difficult problems also more frequently than others believe that theoretical knowledge is less important today due to the existence of AI. (Chi-square value = 24.752; Cramer's V = 0.268).
- Students who report that they do just enough when completing academic tasks and do not strive to do more than required also more frequently than other students believe that the solutions proposed by artificial intelligence contain a small number of errors. (Chi-square value = 18.866; Cramer's V = 0.234).
- Students who report that they go beyond what is required when completing academic tasks, paying attention to all details, more frequently than others state that they always use additional sources to verify the solutions proposed by AI. (Chi-square value = 12.830; Cramer's V = 0.236).
- Students who are accustomed to solving most of their problems with just a few clicks are significantly more likely than others to believe that AI creates solutions so intelligent that they themselves could never create them. (Chi-square value = 48.101; Cramer's V = 0.323).
- Students who are accustomed to solving most of their problems with just a few clicks are also significantly more likely than others to believe that the solutions proposed by AI contain a small number of errors. (Chi-square value = 22.205; Cramer's V = 0.254).
- Students who are accustomed to solving most of their problems with just a few clicks are significantly more likely, when using AI to solve tasks or write texts, not to rely on additional sources. (Chi-square value = 23.138; Cramer's V = 0.317).
- Students who are not accustomed to solving most of their problems with just a few clicks are significantly more inclined to believe that theoretical knowledge has not lost its importance in the era of AI, that is, that it remains just as important as before. (Chi-square value = 28.418; Cramer's V = 0.287).
- Students who believe that the final outcome is more important than the process by which it is achieved are significantly more likely to believe that AI creates solutions they themselves could never produce. (Chi-square value = 43.857; Cramer's V = 0.309).

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- Students who believe that the final outcome is more important than the process by which it is achieved are significantly more likely to only superficially read and minimally revise the solutions proposed by AI. (Chi-square value = 25.821; Cramer's V = 0.274).
- Students who believe that the final outcome is more important than the process by which it is achieved are significantly more likely to believe that the solutions proposed by AI contain few errors. (Chi-square value = 34.536; Cramer's V = 0.316).
- Students who believe that the final outcome is more important than the process by which it is achieved are significantly more likely not to use additional sources to verify AI-generated solutions, or to use them only when there is an obvious and major inconsistency. (Chi-square value = 24.318; Cramer's V = 0.325).
- Students who believe that the final outcome is more important than the process by which it is achieved are significantly more inclined to believe that theoretical knowledge is less important today, in the era of AI, than it was previously. (Chi-square value = 32.039; Cramer's V = 0.305).
- Students who state that grades are not important to them use AI for solving tasks and writing essays significantly more often than others. (Chi-square value = 30.381; Cramer's V = 0.363).
- Students who state that grades are not important to them also significantly more often than others believe that theoretical knowledge is less important today, in the era of AI, than it was before. (Chi-square value = 16.835; Cramer's V = 0.271).
- Students who consider cheating on exams to be justified are significantly more likely than others to use AI for completing assignments and writing essays. (Chi-square value = 40.520; Cramer's V = 0.420).
- Students who believe that one should never cheat on exams more frequently than others express disagreement with the claim that AI creates solutions so intelligent that they themselves could never produce them. (Chi-square value = 26.490; Cramer's V = 0.339).
- Students who believe that one should never cheat on exams are significantly more inclined to thoroughly verify the solutions proposed by AI. (Chi-square value = 12.018; Cramer's V = 0.229).
- Students who believe that one should never cheat on exams are significantly more inclined to believe that theoretical knowledge today, in the era of AI, is equally important or even more important than it was previously. (Chi-square value = 28.168; Cramer's V = 0.350).

5. Discussion

The results of this study reveal a consistent and theoretically meaningful pattern linking students' value orientations, learning attitudes, and ethical positions with their perceptions and use of artificial intelligence in academic contexts. Rather than merely reflecting technological adoption, the findings suggest that AI use among students is deeply embedded in broader cognitive, motivational, and normative frameworks related to effort, knowledge, process orientation, and academic integrity.

A central axis around which many of the observed relationships converge is the belief that being resourceful is more important than being educated. Students who strongly endorse this view demonstrate a markedly instrumental orientation toward AI. For these students, AI is not primarily perceived as a support for learning, but as a tool for minimizing effort and time investment. This is evidenced by their higher likelihood of using AI for writing essays and assignments, their explicit motivation to complete tasks as quickly and effortlessly as possible, and their reduced valuation of theoretical knowledge in the age of AI. Together, these findings

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suggest a shift from education as a formative process toward education as a task-oriented obligation, where outcomes matter more than the cognitive journey required to achieve them.

Importantly, this instrumental orientation is accompanied by an elevated perception of AI's cognitive superiority. Students who prioritize resourcefulness over education are significantly more inclined to believe that AI generates solutions beyond their own intellectual capabilities. This perception may serve a legitimizing function: by construing AI as inherently more intelligent, reliance on it becomes rationalized rather than experienced as a shortcut or a compromise. In this sense, faith in AI's superior intelligence appears to coexist with, and possibly reinforce, the devaluation of theoretical knowledge and personal intellectual effort.

A similar pattern emerges among students who report a low tolerance for cognitive difficulty. Those who tend to give up easily when confronted with challenging problems are also more likely to view theoretical knowledge as less relevant in the presence of AI. This finding aligns with motivational theories suggesting that individuals with lower persistence are more inclined to externalize cognitive effort, especially when alternative tools promise rapid solutions. AI chatbots, in this context, function as a means of avoiding prolonged engagement with complexity rather than as a scaffold for deeper understanding.

Effort-related self-perceptions further differentiate students' approaches to AI use. Students who report doing "just enough" to meet academic requirements tend to display greater trust in the accuracy of AI-generated solutions, while simultaneously showing less inclination to critically evaluate them. In contrast, students who describe themselves as going beyond requirements and paying attention to detail consistently demonstrate a more cautious and reflective approach, frequently verifying AI outputs using additional sources. This contrast underscores that AI does not homogenize student behavior; rather, it amplifies pre-existing differences in learning orientation. For highly engaged students, AI becomes an object of scrutiny, whereas for minimally engaged students, it becomes an authority.

The notion of "solving problems in a few clicks" further crystallizes this divide. Students accustomed to instant solutions exhibit stronger beliefs in AI's superior intelligence, greater confidence in the correctness of AI-generated outputs, and a lower propensity to consult external sources. These students also tend to disengage from theoretical knowledge, viewing it as less relevant in an AI-mediated environment. Conversely, students who are not habituated to rapid, low-effort problem-solving retain a stronger belief in the enduring value of theoretical knowledge. This suggests that habitual reliance on immediacy and convenience may gradually reshape epistemic beliefs, fostering a view of knowledge as something delivered rather than constructed.

Process orientation emerges as another key explanatory dimension. Students who believe that the final result is more important than the process by which it is achieved consistently demonstrate a cluster of attitudes that favor uncritical AI use. They are more likely to perceive AI solutions as cognitively superior, to read and revise AI-generated content only superficially, to assume a low error rate, and to forego verification unless an obvious flaw is detected. They also tend to devalue theoretical knowledge in the context of AI. Collectively, these findings indicate that when learning is framed primarily in terms of outcomes, AI becomes a shortcut rather than a tool for intellectual engagement, further marginalizing the learning process itself.

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Academic motivation and ethical orientations reinforce these patterns. Students who claim that grades are unimportant to them nevertheless use AI more frequently and are more inclined to believe that theoretical knowledge has diminished in importance. This apparent paradox may reflect a disengagement from formal academic evaluation rather than a commitment to intrinsic learning.

Similarly, attitudes toward cheating reveal some of the strongest associations in the study. Students who justify cheating are significantly more likely to use AI for academic tasks, suggesting that AI may be perceived as an ethically neutral extension of already permissive norms. In contrast, students who categorically reject cheating demonstrate greater skepticism toward claims of AI's intellectual superiority, more rigorous verification practices, and a stronger belief in the continuing or even increased importance of theoretical knowledge.

Taken together, these findings suggest that AI adoption in higher education cannot be adequately understood as a purely technological or skills-based phenomenon. Instead, it reflects deeper orientations toward knowledge, effort, ethics, and learning itself. AI appears to function as a "multiplier" of existing dispositions: for students who value process, rigor, and integrity, it becomes an object of critical engagement; for those who prioritize efficiency, convenience, and outcomes, it becomes a substitute for cognitive effort.

From a broader educational perspective, these results raise important concerns. If theoretical knowledge and learning processes are increasingly perceived as expendable in the presence of AI, higher education risks shifting from intellectual formation toward procedural credentialism. At the same time, the findings suggest that simply restricting AI use may be insufficient. Instead, educational institutions may need to explicitly address students' epistemic beliefs, effort orientations, and ethical frameworks, integrating AI literacy with a renewed emphasis on critical thinking, verification practices, and the value of theoretical understanding.

6. Conclusion

This study, from both theoretical and practical perspectives, analyzed the role of students' personal traits, attitudes, and values in their use of AI chatbots for completing academic tasks. Both the literature review and the original research confirmed the hypothesis that students inclined toward shortcuts and more tolerant of unethical behavior are more likely to rely on AI chatbots to complete tasks quickly, often at the expense of quality and genuine learning. The study shows that students' use of and attitudes toward artificial intelligence are deeply intertwined with their broader value systems and learning orientations. AI does not simply change how students' complete tasks; it reshapes how they conceptualize knowledge, effort, and responsibility within the academic environment. These insights are essential for developing pedagogical strategies that leverage the benefits of AI without compromising the core objectives of higher education. This indicates that AI chatbots, in themselves, do not pose a threat to education — they are merely tools, and their impact depends on how individuals choose to use them. Despite its contributions, this study has several methodological limitations. First, the research was limited to students from a single faculty and field of study, which restricts the generalizability of the findings. Second, the reliance on self-reported data may introduce social desirability bias, as students might underreport reliance on AI due to the sensitive nature of academic integrity. Third, a potential non-response bias exists, meaning non-participants might possess different ethical

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frameworks or AI usage patterns. Lastly, the cross-sectional design captures data at a single point in time, preventing the establishment of definite causal relationships. Therefore, future longitudinal and multi-institutional studies should include more diverse samples to examine how students' attitudes and ethical perspectives evolve alongside rapid AI development.

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