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AI-Assisted Writing Tools and the Perceptions of Fairness in University Writing Courses and Assessments: An Analysis through Equity Theory

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Abstract

Nowadays, with the rapid breakthroughs in software and AI technology, the growing use of AI among university students has sparked considerable debate. In this context, the present research seeks to understand the impact of AI-assisted writing tools on students' perceptions of fairness, academic integrity, and their learning outcomes. An exploratory sequential design was used in this study, beginning with two focus groups to gather qualitative insights that informed the development of a 22-item survey. The survey was then administered to 107 students from the English departments at three institutions of Mohamed V University: FLSH, FSE, and ENS. The results indicate that AI use significantly affects students' perceptions of fair assessment, with many viewing it as a tool that enhances work quality and academic grades. However, the use of AI is also associated with reduced motivation, lower willingness to invest effort, and diminished self-confidence. To address these challenges, participants suggested alternative assessment methods, including oral exams, tasks that emphasize critical thinking and creativity, and group work. By Analyzing these findings through the lens of Equity Theory and in light of existing research, this study offers insights into the evolving dynamics of fairness and academic integrity in the era of AI. It also offers recommendations for adapting assessment practices to maintain equity and integrity in higher education.

Keywords: Academic integrity; AI-assisted tools; Alternative assessment; Equity Theory; Perceived injustice

1. Introduction

With the rapid growth in new technologies and advancements in AI software programs, university students, particularly those studying English at universities in Morocco, are increasingly turning to AI-assisted tools to complete exams, tests, presentations and other academic assignments. This trend is driven by the desire to stay competitive and efficient in an academic environment where the pressure to perform is high. AI tools, such as automated writing assistants and language generators, provide students with the ability to produce high-quality work with minimal effort. This recent shift in academic behavior highlights a growing concern in higher education about the changing nature of academic integrity and the role of technology in assessments.

This phenomenon has been described by scholars as a "cheating dilemma," where the line between legitimate academic assistance and unethical practices becomes increasingly blurred (Rane et al., 2024, p. 22). In the context of English studies at Moroccan universities, where writing assignments and language proficiency are central to assessment, this dilemma is particularly salient. Students who use AI tools may find themselves achieving higher grades with less effort, while their peers who choose to refrain from using such tools may perceive this as an unfair advantage. This creates a disparity in the assessment process, where students who rely on traditional methods may feel disadvantaged and demotivated. The growing reliance on AI tools raises important questions about fairness and equity in academic assessments, particularly in environments where resources and technological access are uneven, further complicating the integrity of academic evaluations. As a result, it is essential for educators and institutions to critically address these emerging challenges, ensuring that assessment practices remain fair and equitable for all students, regardless of their access to AI tools.

With the increasing use of AI-assisted writing tools in academic settings, students are becoming aware of their peers' use of these technologies to achieve higher scores. This has led to feelings of injustice among students who do not use AI tools and perceive the scoring as unfair, as they feel their hard work is being undervalued compared to the output produced with AI assistance. Moreover, these perceptions of inequity may contribute to a broader sense of dissatisfaction with the academic environment, potentially affecting student motivation and engagement. This research seeks to understand the impact of AI-assisted writing on students' perceptions of fairness, academic integrity, and their own learning outcomes, particularly in the context of English studies at Moroccan universities, where writing and language proficiency are central to assessment practices.

The present study aims to address the following research questions, which are central to understanding the evolving dynamics of academic assessments in the context of AI-assisted writing tools.

1. How does the use of AI-assisted writing tools influence students' perceptions of fairness in academic assessments?
2. How do feelings of unfairness related to AI use affect students' motivation and engagement in writing tasks?
3. What policies or guidelines do students suggest to create a fair assessment environment in contexts where AI tools are accessible to some students?

In order to explore these questions, this study is guided by the four main objectives, which are designed to provide a comprehensive understanding of how AI-assisted writing tools influence students' experiences with academic assessments. These objectives aim to investigate not only the perceptions of fairness but also the broader implications for academic integrity, motivation, and engagement in writing courses. Inn short the study aim:

1- to analyze how the use of AI-assisted writing tools affects Mohammed V University students' perceptions of fairness in writing assessments;

2- to investigate the relationship between students' use or non-use of AI tools and their academic performance in writing courses;

3- to explore the ethical and integrity-related concerns students experience in a mixed-use environment where some use AI tools and others do not;

4- to assess the impact of perceived assessment inequities on student motivation and engagement in university writing courses.

2. Literature Review

Once emerged, AI was expected to facilitate tasks in different domains. Education is one of them. However, a number of university students use AI in writing courses examinations, which engendered much polemical debates. In the global context, a plethora of studies have been conducted to investigate this phenomenon. In a recent study, David (2024) defines AI-resistant assessment as follows: "AI-resistant assessment refers to assessment strategies we can use as educators where AI really is not useful to students at all", because AI is all the time being upgraded. He thinks that educators should find assessment strategies that are durable against AI assistance in general and regardless of how developed it gets. To solve this problem, Joyner (2024) suggests two ways: AI writing detectors and proctored exams. The problem here is that these tools are not as accurate as the plagiarism detectors they mimic. They are easy to trick. They will lapse behind the latest advancements in AI.

In a similar study, Vuckovic et al. (2020) attempted to determine students' and teachers' attitudes regarding cheating in assessing students' performance. This study opted for mixed methodology and a case study as main research study. The main objectives of this research are to describe how participants: 1- recognize ethical misconduct (EM) in different situations through case studies, 2- understand the roles of each subject involved, 3- predict consequences of ethical misconduct and how they understand its possible reasons, 4- create individual answers to ethical misconduct or solve problem situations. The research sample comprised 120 participants from three basic study programs and two postgraduate programs in the field of education. Another sample of 42 teachers was randomly selected from different faculties findings of this study display good understanding of ethical misconduct (with a percentage of 70% of the participants) (Vuckovic et al. 2020).

Analysed data confirmed that students mostly know what is expected from them, although the respondents recognized other errors, such as poor organization for time for learning, professors' strict deadline for paper submission. (2020). Results also show that respondents' reactions lead to the conclusion that the academic community perceives dangerous threats emerging from ethical misconducts. As for the recommendations, respondents drew attention to the fact that lack of learning skills is one of the reasons of ethical misconduct. The study also recommends that teachers should also be aware of the rules of AI and that teachers should design tests that cannot be easily plagiarized. The study recommended that teachers should be more careful while invigilating tests and exams.

Within the same vein, Stohr et al. (2024) conducted a study that explores the students' adoption and perceptions of ChatGPT and other AI chatbots in higher education. The sample included 5894 participants across Swedish universities. The study utilized descriptive statistical methods to analyze usage, attitudes, and concerns, and referential statistics to identify relations between attitudes and usage and background variables. The findings disclose broad awareness and use of ChatGPT among students, but not of all AI chabots. Results also showed that concerning ethical aspects and academic integrity, the majority of participants (61.9%) expressed their point of view that using chatbots to complete assignments and exams amounts to cheating. Chi-square tests reveal statistically significant gender differences Female respondents were ostensibly more concerned about the impact of AI on education (r = 5.6), regarded the use of chatbots as potentially contrary to the purpose of education (r = 9.3), and viewed the use of chatbots in assignments and exams as cheating (r = 6.1) that should be prohibited (r = 9.6). the study recommended that both students and teachers need new competencies in integrating the AI chatbots in the learning

process. The study casts more light on the need to address students' concerns about the potential impact of AI on their future learning.

Similarly, Nurhaliza (2024) investigates the reasons why students cheat, the applications they use and the possible solutions to avoid such behaviors. She conducted this research in STIKes Bina Cipta Husuda Purkerto. The target sample includes 16 students of clinical and community Pharmacy and two English learners. Data were collected using questionnaires and interviews. Findings of this study show that there are two reasons why students cheat . on the one hand, they lack in confidence and motivation to do the exams. On the other hand, they dislike English. To handle this issue, Nurhaliza suggests that educators should take into account measures such as making ant-cheating pledges, using different versions of tests or using a questions pool and application to detect plagiarism, and giving compliments to students.

Wang et al. (2024) undertook a study that investigates how students' AI learning anxiety and AI job replacement anxiety affect and inferential statistics and intrinsic / extrinsic learning motivation and subsequent AI learning intention. Data were collected via an online instrument. The sample included students from Taiwan the results show that AI learning anxiety negatively affects learning motivation. However, AI job replacement anxiety has a positive impact on extrinsic motivation. The findings also emphasize the importance of AI anxiety and can be used to guide course design in an AI learning environment. The study suggests providing students with successful and satisfying experiences, research data, and job market reports can improve confidence and contribute to more positive views towards AI.

Still, Al-Abdullatif and Alsubaie (2024) conducted a study which sought to understand students' intentions regarding the use of ChatGPT in learning from the angle of perceived value. The sample consisted of 676 university students from different academic backgrounds. A structure survey questionnaire was used to measure their perceptions of ChatGPT as a learning tool. The collected data were analyzed using Structural Equation Modelling (SEM) via SamartPLS4 software. The results show a strong effect on students' perceived value and perceived risk showed no effect. These findings suggest that the role of AI literacy emerged as pivotal in shaping these perceptions. Students with higher Ai literacy demonstrated an improved ability to discern the value of ChatGPT. The study emphasizes the increasing importance of integrating AI in university curricula to optimized the reception and rational utilization of innovative tools in academic settings.

Within the same vein, Crawford et al. (2023) investigate this widespread unscholarly phenomenon. This study notes that the rising rates of stress among university students goes hand in hand with the growing use of plagiarism and AI-generated content (Crawford et al. 2023). University students virtually cheat due to a number of factors, among which are stress and increased pressure on students to achieve academic success paired with availability of technology. To cope with stress, university students use AI-generated content to complete their exams and academic tasks.

By the same token, in another study, Rane et al,. (2024) assert that the new developments and trends in AI-generated content, the line between an original student work and a machine produced product has been blurred. Therefore, a question mark has been put over academic integrity. This form of cheating is worrisome due to the fact that it is virtually undetectable and could potentially crumble the basis of education. To solve this problematic, some scholars suggest a couple of solutions, such as open-book exams that require higher-order thinking and problem-solving skills that are not easily replicable by AI. (Rane et al. 2024, p.3). Other possible solutions include using software that can detect the fingerprint of AI-generated content.

In the Moroccan contexts a few studies have recently been conducted. Khoudri et al. (2024) conducted a study that aims to compare how two groups of undergraduate students from Morocco and Indonesia perceive AI in learning English. Data were collected using an online structured questionnaire. The sample comprised 240 undergraduate students from the two countries. Results of this study reveal that both groups are optimistic about the use of AI in learning English. They utilize AI for feedback, engagement, motivation, personalized learning and autonomy. Yet, there is a disparity between the groups

in how each groups uses AI for translation. Moreover, participants expressed their concerns about privacy, overreliance, lack of responsibility and plagiarism. The study suggests that AI can be both beneficial and devastating. It calls for incorporating AI in the English classroom. The study also suggests a balanced approach that implies providing students with AI tools and at the same time raising their awareness as to ethical issues related to AI.

Relatedly, Moussa and Belhiah (2024) undertook a study whose aim is to reveal patterns and themes within student-written assignments. The research cast more light on the influence of AI tools on the writing process. The study targeted a sample of 62 Business Law undergraduate students, studying a general English course in the International University of Rabat, Morocco. Participants were divided into two groups: one group received structured AI training while the other acted as a control group. Findings disclosed positive outcomes in language proficiency, creativity, and organizational skills as well as vocabulary use with AI assistance. The study also noted that studying preferences in AI writing tools, inducing students and developers to adapt to innovation in AI writing tools. (Missa and Belhiah, 2024, p.151).

Similar to this study's scope, another research undertaken by Aherrahrou (2024) sought to assess Moroccan English language lecturers' ability to detect and identify semester 2 students' originality in writing different sorts of essays. In the Department of English, Moulay Ismai Uniuversity, Meknes. To attain this, 25 English language lecturers from various Moroccan Universities were selected to evaluate 1200 essays. Given that, 400 essays were generated using the free version of chat-GPT4, 400 essays were produced by students with the assistance of chat-GPT and Grammaly, and 400 essays were totally written by the English Department S 2 students without using neither chat-GPT nor Grammarly. Findings revealed that chat-GPT generated essays scored high results compared to chat-GPT or Grammarly assisted essays and essays totally produced by undergraduate stucents. Findings also uncovered that it was challenging for English language lecturers to detect and identify students' originality in writing academic essays notably in large-size classes. Results proved that incorporating AI tools in academia has positive and negative effects on both students and instructors.

Within the same vein, another study conducted by Daife and Elharbaoui (2025) sought to explore the experiences, advantages and challenges, and perceptions of Moroccan students towards AI use in education. Findings uncover that AI is received a potentially transformative tool capable of personalizing learning and enhancing academic performance. Students utilize different AI tools such as chatbots, data processing software, and scientific research assistance tools. This study notes a positive view towards future use of AI tools in academic research, and therefore, it recommends integrating it into curricula and training programs.

Nevertheless, given the above literature review, none of the afore-mentioned studies has endeavored to approach AI use in education from the affective and emotional aspect, which the present study attempts to investigate. By focusing on students' emotional responses to the perceived inequities introduced by AI-assisted tools, this research aims to explore the psychological impact of AI on motivation, engagement, and feelings of injustice. This emotional dimension is crucial, as it provides a deeper understanding of how technology influences not just academic outcomes, but also students' overall well-being and sense of fairness in educational settings.

In order to frame and guide the analysis of our results, we employed Equity Theory as the theoretical framework for this study. Equity theory, originally proposed by Adams (1963), serves as a valuable framework for analyzing how students perceive assessment fairness in the context of unequal access to AI-assisted tools. The theory posits that individuals assess fairness by comparing the ratio of their inputs (e.g., effort, time spent, and skill level) to their outcomes (e.g., grades, recognition) with the corresponding ratios of others. In the context of assessment in university courses and assignments, when students who refrain from using AI tools observe peers achieving higher grades with seemingly less effort due to AI assistance, they often experience perceptions of inequity. This perceived imbalance can lead to feelings of frustration, resentment, or demotivation, as they may feel that their honest efforts are undervalued or

that the grading system fails to account for the disparities in resource access (Adams, 1963; Greenberg, 1987).

Such inequities may also influence students' engagement and trust in the assessment process (Astin 1990). According to equity theory, when individuals perceive inequity, they are motivated to restore balance, either by adjusting their inputs (e.g., reducing effort) or by re-evaluating the system itself. In the context of academic assessments, this could mean a decline in motivation for students who feel disadvantaged (Roshanaei 2023) potentially leading them to disengage from writing tasks or seek alternative ways to compete, including adopting AI tools themselves.

3. Research Methods

This study adopted an exploratory sequential design to examine perceptions of fairness in writing assessment among university students. The mixed-method approach ensured a deep and layered understanding of the phenomenon by first collecting qualitative data and then validating these insights quantitatively (Cohen et al., 2007). The initial qualitative phase involved two focus groups conducted with semester 3 and 5 students from the Faculty of Human Sciences in Rabat. The first group comprised 3 females and 2 males, and the second included 3 females and one male. Participants were selected based on their willingness and voluntary interest in taking part in the study. The discussions focused on perceptions of fairness, challenges, and contextual factors influencing assessment. The focus group protocol was designed to explore key aspects of fairness in academic assessments, particularly in the context of AI-assisted writing tools. It aimed to examine how the use of these tools influences students' perceptions of fairness, the impact of perceived unfairness on their motivation and engagement in writing tasks, and the policies or guidelines students propose to ensure equitable assessment practices in situations where access to AI tools varies among students. Data from these sessions were transcribed and analyzed thematically, following the framework suggested by Braun and Clarke (2006), to identify recurring themes and patterns.

Building on these qualitative findings, a structured survey was developed to assess the identified themes quantitatively (Jonker & Pennink, 2010). The survey was piloted with a small sample to ensure clarity, reliability, and validity before being administered to a larger cohort of students. The survey was distributed to 107 university students from three institutions in Rabat: the École Normale Supérieure (ENS), the Faculty of Sciences of Education (FSE), and the Faculty of Letters and Human Sciences (FLSH). Participants were selected through a random sampling method, ensuring representation from diverse profiles. In addition to a demographic section, the survey included 22 items aimed at capturing students' perceptions of fairness in their writing assessments, as well as the impact of AI use on writing quality, motivation, and self-confidence.

Quantitative data were analyzed using descriptive and inferential statistical methods the descriptive statistics primarily aimed to identify general trends in the survey data, while the inferential analysis focused on establishing correlations between variables. Notably, the data did not meet the assumption of normality, leading to the use of non-parametric tests. Specifically, Spearman's rank-order correlation (Spearman's rho) was employed as an alternative to Pearson's correlation coefficient to ensure the reliability of the results.

This methodology aligns with Creswell and Clark's (2017) guidelines for exploratory sequential research, ensuring that qualitative insights ground and contextualize the quantitative data. By integrating the perspectives of faculty members and students, the study offered a nuanced understanding of fairness in writing assessment practices in Moroccan universities.

4. Results

4.1 Data Characteristics

Prior to conducting the quantitative analysis, the normality of the data distribution was evaluated using the Kolmogorov-Smirnov and Shapiro-Wilk tests. The Kolmogorov-Smirnov test returned p-values between 0.000 and 0.012, while the Shapiro-Wilk test produced p-values ranging from 0.001 to 0.006 (Table 1). As all p-values were significantly below the threshold of 0.05, the results confirm that the data deviates substantially from a normal distribution across all variables.

Table 1. Tests of Normality

	Kolmogorov-Smirnov[a]			**Shapiro-Wilk**		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Perceptions of Fairness in AI-Assisted Writing	,087	107	,000	,911	107	,001
Academic Performance and AI Tool Use	,055	107	,000	,902	107	,003
Ethical and Integrity Concerns Related to AI Use	,114	107	,000	,945	107	,001
Social Comparison and Peer Influence	,184	107	,012	,946	107	,006
a. Lilliefors Significance Correction						

Based on these findings, the data's deviation from normality made it unsuitable for parametric testing, which relies on the assumption of normal distribution. Consequently, non-parametric methods were deemed more appropriate to ensure accurate and reliable statistical inferences. The analysis mainly included Spearman's rank correlation coefficient (Spearman's rho) to explore relationships between variables.

4.2 Reliability Test

The reliability of the survey was evaluated across its five constructs, with scores ranging from 8.21 to 9.23 (Table 2). These results demonstrate strong internal consistency, affirming the instrument's robustness and suitability for reliable data analysis. Three items reflecting participants' suggestions for mitigating the impact of AI use were excluded from the reliability analysis, as measuring the consistency of suggestions is not relevant or appropriate in this context.

Table 2: Alpha Reliability Analysis of the Survey's Main Constructs

Construct	Number of items	Cronbach's Alpha
Perceptions of Fairness in AI-Assisted Writing	6	,853
Academic Performance and AI Tool Use	2	,923
Ethical and Integrity Concerns Related to AI Use	3	,863
Social Comparison and Peer Influence	5	,821

4.3 The Research Population

The research population consisted of 107 participants (Table 3), with a gender distribution of 29 males and 78 females. Students were recruited from three institutions: ENS Rabat (63 participants), FSE Rabat (28 participants), and FLSH Rabat (16 participants). Regarding academic standing, 61 students were in semester 5, while 46 were in semester 3. This diverse sample ensured a comprehensive representation across gender, institutional affiliation, and academic levels, enhancing the depth and reliability of the study's insights.

Table 3 : The Research Population

Gender	Institution	Level	Total number
78 females 29 males	ENS Rabat : 63 FSE Rabat : 28 FLSH Rabat : 16	Semester 3 : 46 Semester 5 : 61	107

4.4 Perceptions of Fairness in AI-Assisted Assessment

Qualitative data from the focus group discussions revealed that the use of AI tools by students at Mohamed V University is widely perceived as a threat to fair assessment. Most informants expressed concerns that AI-assisted writing tools undermine the integrity of academic evaluations by enabling students to bypass the process of original thought and effort. This perception is particularly strong in modules such as Writing, U.S. Culture and Society, and British Civilization, where the integrity of original thought and analysis is central to the assessment process. This shift could lead to an uneven playing field, where those who rely on AI tools might receive higher grades without demonstrating true understanding or skills. As a result, there is a growing apprehension about the potential impact of AI on the fairness and reliability of assessment practices in educational settings. Adam's testimony captures the essence of this concern: ***"My classmates who use AI get better results, and professors don't always detect it. It feels unfair because they're not putting in the same effort, but still getting higher grades".***

Quantitative data from the survey largely supported this view. The construct of "perception of fairness" was measured using six items, with responses collected on a 5-point agreement scale. The mean score of 3.36 indicates that most informants agreed that AI tools pose a threat to fair assessment (Table 4). This result, then, indicates a significant concern among students that the use of AI in academic work can distort the fairness of evaluations, as it allows some to bypass the effort typically required to demonstrate their knowledge and skills.

Table 4. Perceptions of Fairness in AI-Assisted Assessment

	N	Minimum	Maximum	Mean	Std. Deviation
Perceptions of Fairness in AI-Assisted Assessment	107	2,44	4,99	3,3665	,31644
Valid N (listwise)	107				

The survey included a direct item to specifically assess participants' views on the impact of AI tools on the fairness of academic assessments: "I believe using AI tools affects the fairness of academic assessments." The response to this item yielded a very high mean score of 4.70, suggesting that a significant majority of participants strongly agree with the statement (Table 5). Again, this result highlights a widespread concern among students that the use of AI tools can compromise the fairness of academic evaluations, reinforcing the perception that AI-assisted work may not reflect a student's true abilities or effort.

Table 5. AI Tool Use and Perceptions of Fairness

	N	Minimum	Maximum	Mean	Std. Deviation
I believe using AI tools affects the fairness of academic assessments.	107	3	5	4,70	,717
Valid N (listwise)	107				

Despite the concerns raised about the fairness and ethical implications of using AI tools, the survey revealed no correlation between students' use of AI and their perception of its unethical nature with a correlation coefficient of 0.126 (Table 6). This suggests that, while many students acknowledge the potential ethical issues associated with AI, they still choose to use these tools in their academic work. The lack of correlation indicates that students may prioritize the perceived benefits of AI—such as improved efficiency or better grades—over any ethical considerations, continuing to use AI regardless of their personal stance on its morality. This highlights a disconnect between ethical awareness and behavior, pointing to the complexity of integrating AI into academic environments.

Table 6. The Correlation Between AI Usage and Perceived Ethicality

			I use AI writing tools regularly in my academic work.	I believe that using AI tools for writing assignments is ethical.
Spearman's rho	I use AI writing tools regularly in my academic work.	Correlation Coefficient	1,000	,126
		Sig. (2-tailed)	.	,087
		N	107	107
	I believe that using AI tools for writing assignments is ethical.	Correlation Coefficient	,126	1,000
		Sig. (2-tailed)	,087	.
		N	107	107

4.5 The Positive and Negative Effects of AI Usage on Mohamed V University Students

4.5.1 Perceived Positive Impacts: Improved Writing Quality and Higher Grades

Participants in the focus group unanimously agreed that AI tools have a positive impact on writing quality and academic performance. They shared that AI assistance helps them improve the clarity, structure, and overall quality of their writing by offering useful suggestions and corrections. As a result, many participants reported receiving higher grades, attributing their success to the enhanced quality of their work enabled by AI tools. This consensus highlights the perceived benefits of using AI in academic writing, especially in terms of producing more polished and well-crafted assignments. Example from the data includes the testimony of Asmae: **"When I discovered AI during Semester 2, my writing has become much better. The suggestions and corrections the AI websites provide always help me improve my work, and this makes it clearer and easier to understand. But later, most professors started to ask us to write in class"** (Asmae)

Rihab, another participant in the focus group discussion, did not emphasize grades, as she mentioned that most of her professors prefer in-class writing tasks, which don't allow for the use of AI tools. However, she highlighted how AI has played a significant role in improving her writing skills outside of class. She explained that at home, AI tools help her refine her writing by offering suggestions for clarity, structure, and style. This feedback allows her to focus on improving her writing independently, ultimately helping her become a more skilled and confident writer over time. She noted that: **"Regardless of grades, using AI tools has significantly improved my writing. It provides helpful suggestions to make my sentences clearer and more structured. The feedback helps me correct mistakes and refine my style, so AI is like a writing teacher who hep you become better writer"**

The subsequent quantitative phase of this research confirmed the same findings. Quantitative data strongly supported the same trend among Mohamed V University students, reinforcing the positive impact of AI tools on writing quality and academic performance. The survey results revealed that participants perceived AI as a significant aid in improving their writing, with a mean score of 4.80 on a 5-point agreement scale for the statement that AI helps enhance writing quality (Table 7). Additionally, the mean score for the impact of AI on achieving better grades was 4.30, indicating that students also believed AI tools contributed to higher academic performance (Table 8). These statistics underscore the widespread recognition of AI's role in refining writing and boosting academic outcomes.

Table 7. AI Tool Use and Writing Quality

	N	Minimum	Maximum	Mean	Std. Deviation
I feel that AI tools significantly improve the quality of my writing	107	3	5	4,80	,813
Valid N (listwise)	107				

Table 8. AI Tool Use and Writing Tests Scores

	N	Minimum	Maximum	Mean	Std. Deviation
Using AI tools makes it easier to achieve higher scores on writing assignments.	107	2	5	4,30	,901
Valid N (listwise)	107				

4.5.2 Perceived Negative Impacts: Reducing Motivation, Willingness to Invest Effort, and Self-Confidence

Most participants denied that using AI tools made them feel demotivated, except for one participant who strongly disagreed. She insisted that the use of AI by others had a significant negative impact on her motivation, as it created a sense of unfairness and made her feel her own efforts were insufficient. Despite the majority rejecting this notion, her perspective highlighted the emotional and psychological effects AI usage can have on some students, emphasizing the challenges of competing in an environment where others rely on such tools. She said: **"Knowing others use AI tools makes me feel like my efforts aren't enough to write high quality work as theirs, it often make you demotivated, let's admit this fact" (Rim)**

Her strong insistence on the demotivating effect of AI usage led the researchers to include her testimony in the quantitative phase of the study to determine if others shared this view. The results were surprisingly confirmatory, with a high mean score of 4.23, indicating that a significant number of participants also felt that the use of AI by others contributed to feelings of demotivation (Table 9). This finding highlighted the emotional impact AI tools can have on students, suggesting that, for some, the perceived unfair advantage of AI leads to decreased motivation and a sense of inequality.

Table 9. AI Tool Use and Motivation

	N	Minimum	Maximum	Mean	Std. Deviation
Seeing classmates use AI tools affects my motivation to perform well.	107	2	5	4,23	,901
Valid N (listwise)	107				

Interestingly, the correlation between feeling disadvantaged and a lower level of motivation was found to be strong, with a Spearman's rho of 0.612 (Table10). This indicates a significant positive relationship, suggesting that as students feel more disadvantaged compared to their peers using AI tools, their

motivation tends to decrease. This finding highlights the emotional and psychological impact that perceptions of unfairness can have on students' drive and engagement in their academic work.

Table 10. Correlation between feeling disadvantaged and lower level of motivation

			I feel disadvantaged if I do not use AI tools while others do.	Seeing classmates use AI tools affects my motivation to perform well.
Spearman's rho	I feel disadvantaged if I do not use AI tools while others do.	Correlation Coefficient	1,000	,612**
		Sig. (2-tailed)		,001
		N	107	107
	Seeing classmates use AI tools affects my motivation to perform well.	Correlation Coefficient	,612**	1,000
		Sig. (2-tailed)	,001	
		N	107	107

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

When asked about the impact of seeing others use AI on their determination to rely on their own efforts for writing tasks, Nora explained, **"Sometimes, when you read the work of others who use AI, it feels like no matter how much effort you put in, you won't be able to write as well as they do."** She emphasized that the polished quality of AI-assisted work made it difficult for her to feel confident in her own writing abilities. Rim echoed these sentiments, adding, **"You even lose your self-confidence."** She explained that the feeling of being at a disadvantage, seeing others produce superior work with AI tools, often left her questioning her own skills and ability to compete, ultimately affecting her motivation to put in the same level of effort. Both testimonies highlight the emotional toll that the use of AI can take on students, undermining their confidence and drive to rely on their own abilities.

Quantitative data confirmed that the use of AI assisted tools often lead to reduced willingness to make personal effort and to lower levels of self confidence among the students of Mohamed V University in Rabat (Table 11). The mean score for the reduced willingness to invest effort was 3.86 on the same agreement scale, indicating moderate agreement among participants. This suggests that a significant number of students feel less inclined to put in the effort required for their academic work, possibly due to the perceived advantages of AI tools used by others. The relatively high score reflects a growing sense of disengagement, where students may feel that their efforts are not enough to match the quality of work generated with AI assistance, leading to a decrease in motivation and effort investment. However, The mean score for reduced self-confidence was 2.44, indicating that most participants did not feel significantly impacted in terms of self-esteem by the use of AI tools. While a few students reported a decline in confidence, the overall effect on self-confidence was minimal according to the collected data.

Table 11. Reduced Willingness to Invest Effort and Lower Self-Confidence

	N	Minimum	Maximum	Mean	Std. Deviation
Knowing that others use AI tools makes me question the value of putting effort into writing assignments	107	2	5	3,86	,642
Comparing my results to peers who use AI affects my self-confidence in writing.	107	1	5	2,44	,641
Valid N (listwise)	107				

4.6 Informants' Suggestions to Mitigate the Impacts of AI use

Participants recommended several solutions to address the impact of AI on assessments. They suggested that assessment tasks should include a variety of formats, such as oral exams, to better gauge students' understanding and limit the reliance on AI tools. As Adam said: **"an oral exam will always give**

a true image about your level". Additionally, they emphasized the need for assessments to focus more on critical thinking, creativity, and personal insight, which would encourage students to engage deeply with the material rather than relying on AI-generated responses. In this regrad, Kenza complained that **"the topics of some assigned writing tasks are very simple".** Group projects were also proposed as a way to promote collaboration, reduce the temptation to misuse AI, and encourage students to work together, fostering a more equitable and authentic learning environment. To elaborate on this point Rihab said: **" when you work in a group, you can't use AI because you are concerned about the fact that using it will have consequences on the whole group not just on you, and this will ruin your friendships and relations"**

The quantitative phase included these testimonies to check for generalizability, and most participants agreed with the proposed solutions. The mean scores of 4.25, 3.97, and 3.89 for the suggestions of incorporating diverse assessment formats, emphasizing critical thinking and creativity, and encouraging group projects, respectively, reflect strong support for these ideas (Table 12). These scores indicate that the majority of participants see these approaches as effective in addressing the issues related to AI use in assessments.

Table 12. Participants' Suggestions

	N	Minimum	Maximum	Mean	Std. Deviation
Assessment tasks should include a variety of formats such as oral exams	107	3	5	4,25	,886
Assessment should emphasize critical thinking, creativity, and personal insight to reduce reliance on AI-generated responses.	107	2	5	3,97	,812
Group projects encourage collaboration and reduce the likelihood of AI misuse.	107	1	5	3,89	,705
Valid N (listwise)	107				

5. Discussion

In this section, the findings of our study are critically analyzed in the light of the theoretical framework we employed and the existing literature on the topic. The findings of this study provide valuable insights into the complex relationship between AI-assisted writing tools, students' perceptions of fairness, and academic integrity at Mohamed V University. The perception that AI usage significantly influences the fairness of assessments is consistent with the broader concerns raised by scholars such as Vuckovic et al. (2020), who identified the ethical risks of AI in academic settings, particularly in relation to fairness and equity. According to Equity Theory (Adams, 1963), individuals assess fairness by comparing the ratio of their inputs (effort in our case) to their outcomes (good grades). When students who refrain from using AI tools observe peers achieving higher grades with seemingly less effort, they may feel their input-output ratio is imbalanced, leading to a perception of inequity. This sense of unfairness is compounded by the growing awareness of how AI can enhance academic performance, making it a critical factor in students' perceptions of fairness in assessments.

Interestingly, while the ethical risks of AI usage are acknowledged, our study found no correlation between using AI and viewing it as unethical. This suggests that students may be more focused on the academic benefits—such as enhanced grades and the quality of their work—than on the potential ethical concerns. This finding contrasts with Stohr et al. (2024), who found that many students (61.9%) viewed AI tools as cheating. In our study, despite the ethical awareness, students continue to use AI tools,

demonstrating that the desire for improved academic outcomes often outweighs concerns about the ethical implications. This aligns with the central premise of Equity Theory, where students weigh the rewards (grades, work quality) against the perceived fairness of the system. When the perceived rewards are high, as with AI-enhanced performance, students may justify their use of AI, even if they recognize the ethical risks involved.

However, the study also revealed a negative impact of AI usage on motivation, effort, and self-confidence. Students reported a decrease in intrinsic motivation and a diminished willingness to invest effort in their academic tasks when relying on AI tools. From an Equity Theory perspective, this reduction in effort may be seen as a response to perceived inequities in the system. If students feel that AI tools provide an unfair advantage to some while others work harder to achieve similar results, their motivation to put in the same level of effort may diminish. This could lead to disengagement or a reduction in academic effort, as students seek to restore equity by adjusting their inputs. These findings are consistent with Joyner (2024), who suggested that AI writing detectors and proctored exams might be ways to address these inequities, but they also highlight the challenges of maintaining student engagement in an environment where perceived fairness is in question.

In contrast to the potential negative outcomes, Moussa and Belhiah (2024) found that AI tools can enhance language proficiency, creativity, and organizational skills, which suggests that AI can provide students with opportunities to improve academically. However, the potential benefits of AI must be weighed against the broader concerns regarding equity and motivation. As students perceive AI tools as contributing to both improved academic performance and unfair advantages, the challenge for educators is to create policies that maintain academic integrity while ensuring that all students feel their efforts are valued and fairly assessed.

Ultimately, the findings of this study underscore the importance of considering both the academic and emotional dimensions of AI usage in educational assessments. The use of Equity Theory provides a framework for understanding how students' perceptions of fairness and the resulting effects on motivation and engagement can be influenced by AI tools. Future research should continue to explore strategies for balancing the benefits of AI with the need to maintain fairness and academic integrity in university assessments, ensuring that all students feel equally motivated and valued.

6. Conclusion

In conclusion, this study has highlighted the significant impact of AI-assisted writing tools on students' perceptions of fairness in academic assessments at Mohamed V University. The findings reveal a complex relationship between the use of AI, academic performance, and students' emotional responses to perceived inequities. While AI tools are seen as enhancing academic outcomes, they also introduce feelings of unfairness among students who do not use them. To address this, it is crucial for universities to adopt a more comprehensive policy response, moving beyond simplistic measures to incorporate AI literacy into the curriculum. This would raise awareness among students about the ethical implications of AI use and foster a culture of academic integrity (Rane et al., 2024). By educating students on the ethical use of AI tools, universities can encourage responsible engagement with technology while preserving fairness in academic assessments.

Furthermore, incorporating AI tools like ChatGPT into the curriculum can offer an opportunity to guide students on ethical AI usage while supporting their academic growth. As suggested by Crawford et al. (2023), using AI as a learning tool rather than a shortcut for cheating can help students better understand its ethical application in academic contexts. Providing early feedback through AI tools can also help students identify areas of weakness and guide them toward further readings or improvements. This approach not only addresses the issue of AI-assisted cheating but also enhances students' learning experiences, fostering a more ethical, supportive, and equitable academic environment. Ultimately, universities must strive to balance the advantages of AI with a commitment to maintaining academic integrity and ensuring that all students have equal opportunities to succeed.

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