



## Research article

# A study on academic dishonesty among English as a foreign language students

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## ABSTRACT

Academic dishonesty is prevalent and has unfortunately become normalized in post-secondary institutions worldwide. The COVID-19 pandemic more than two years ago led to an increase in cheating and confrontation of instructors with academic honesty. The main objective of this study was to create an explicative model according to the levels of morality, pragmatism, and gender. Researchers applied an online questionnaire to 735 anonymous university students. Analysis showed that participants were less honest in morality than in pragmatism, but the average value was very close for both dimensions. A substantial number of students with low and moderate levels of dishonesty were observed in both moral and pragmatic contexts. The initial hypothesis was partially validated, as the level of morality was associated with the level of pragmatism rather than gender, indicating a direct albeit moderate impact of pragmatism on morality. We confirmed the second hypothesis, showing the influence of gender and morality on the level of pragmatism. Participants suggested that English as a Foreign Language instructors should modify their approach, account for ethical considerations, offer extra classes, revise teaching and evaluation methods, and sanction students who cheat. Surprisingly, results show a slight tendency for lower honesty in morality compared to pragmatism. Despite honest behaviors, it is essential to address gender differences and promote academic honesty through education, policies, and a culture of honesty.

## 1. Introduction

Academic dishonesty is prevalent in various learning environments, with studies highlighting its manifestations and implications. Research has shown that online academic dishonesty differs significantly from traditional forms, with online students engaging in behaviors like copying digital work, imitating technical issues, and googling for answers [1]. Furthermore, academic dishonesty is often viewed as a social norm, with students demonstrating a readiness to cheat and even opposing teachers in an organized manner [2]. Cognitive and emotional factors play a role in students' decisions to support academic integrity standards, especially in the face of

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electronic deception, which has become more widespread with the rise of distance learning and online education [3]. Additionally, a systematic review of academic dishonesty in online learning environments has identified various influencing factors and intervention types, highlighting the need for comprehensive understanding and guidance for relevant stakeholders in education [4]. Lastly, the mediating role of statistics anxiety and motivation in the relationship between personality traits, academic achievements, and dishonesty has been explored across different learning environments, emphasizing the importance of student-centered approaches in online course design [5].

Learning environments integrate elements such as the classroom, resources, students, the teacher, and student motivation. These can be in-person or virtual, and face-to-face environments characterized by in-person interactions [6]. Virtual environments are formed using telematic resources and can be planned or emergent. Planned virtual learning environments refer to a learning process in which students use the Internet to obtain learning materials, external support, and interactions with instructors and other students [7]. Emerging learning environments (ELE) refer to the need to change the teaching modality from face-to-face to virtual due to a situation that prevents face-to-face classes continue resulting in a rapid shift to online teaching and assessment [8]. We will focus on ELE because of the COVID-19 pandemic that forced educational institutions to offer emerging virtual classes. Online education has become increasingly prevalent throughout the twenty-first century but became an essential way to learn out of necessity during the global COVID-19 pandemic in 2020 [9].

Academic dishonesty must be punished worldwide, and Ecuador is no exception [10,11]. Currently, Ecuadorians face high levels of dishonesty that result from not addressing them honestly and straightforwardly in the early stages at households or academia, as they tend to replicate in all areas [12]. Academic dishonesty encompasses more than avoiding dishonest behaviors such as copying during exams, plagiarism, or contract cheating; it involves actively engaging with learning and completing work thoroughly, ensuring it serves the noble purpose of education [13]. Being honest might seem unpopular, and the belief that everyone cheats can make it appear normal. However, it is vital to question this notion. Academic dishonesty, prevalent at all levels, can harm societies economically, politically, and psychologically. Unfortunately, when students witness minimal consequences for these actions, they may adopt similar unethical behaviors [14–16].

Academic dishonesty is a problem according to Bandura [17] and the theory of social learning, which suggests we learn by observing others. Students in countries with varying dishonesty levels are more susceptible to dishonest academic activities. Exposure to cheating and evading rules in early years makes them prone to dishonesty in adulthood [18]. Hence, tackling academic dishonesty is imperative, necessitating comprehensive discussions within the educational community to provide positive role models for all students. Typically, college and high school students view academic dishonesty as wrong yet believe everyone engages in it [19], fostering a tendency to follow suit. Academic dishonesty is common in all university courses, with more prevalence in English as a Foreign Language (EFL) classes [20,21].

The University of Cuenca (UC) uses traditionally for EFL teaching the Academic Program of Second Language Sufficiency (Programa Académico de Suficiencia en Lengua Extranjera [PASLE] in Spanish), based on the Common European Framework for Languages [22]. The language courses that need to approve a B1 and B2 level are usually offered to the 12 different schools of the UC. Furthermore, these courses are occasionally arranged for the general public. Regrettably, the transition to online education due to the COVID-19 pandemic has worsened these concerns, particularly for EFL teachers who struggle to guarantee fair assessment without using unauthorized help from search engines or dishonest sources [23].

Cheating within Higher Education Institutions is an ongoing challenge. Bretag [24] states plagiarism significantly undermines academic integrity and devalues original and honest scholarly work. While previous research primarily focused on undergraduates, recent studies [25–29] highlight the complexity of plagiarism, requiring extensive induction, training, and support for various stakeholder groups to fulfill their academic responsibilities. To foster a scholarly community based on shared assimilation and academic integrity, educational institutions must adopt a holistic, multi-stakeholder approach to address plagiarism effectively. In contrast, there have been only a few studies conducted on cheating among university students in Ecuador.

Ponce [30], for example, found that cheating is a prevalent issue in higher education institutions. He highlighted the need for more research on cheating and academic integrity. Similarly, Kessler International [31] reported that university students cheat using various methods due to the increased pressure to succeed in their studies. However, despite the overall goal of universities to provide quality education, there is a lack of research on cheating, particularly in the EFL domain. Given the mandatory foreign language proficiency requirement for graduation, concerns about cheating persist in all areas of study, particularly in EFL courses.

Academic cheating involves fraud, deceit, or dishonesty during academic tasks, including prohibited materials or providing unauthorized assistance to others. It misrepresents students' actual knowledge and undermines fair assessment by instructors [32]. Defining cheating is challenging. It encompasses actions such as seeking if students use answers from others' or classmates' papers, paying someone to take a test, or using online sources like Chegg. As defined by Kibler [33] academic dishonesty involves unauthorized assistance or taking credit for work that is not one's own. Teaching a foreign language poses unique challenges, leading EFL students to cheat due to language proficiency issues, academic writing challenges, time constraints, and lack of confidence [34].

A study by Nimasari et al. in Indonesia identified distinct reasons for EFL students cheating, including lack of time, inadequate paraphrasing skills, and pressure to achieve good grades [35]. In the context of EFL, Saleh and Meccawy [36] found that female students in Saudi Arabia often cheated by assisting each other, copying answers from peers, or using electronic sources during exams. These authors also stressed the need to improve students' understanding of cheating policies and address technology challenges. Technological difficulties and focus on grades rather than understanding are also cited as reasons for cheating in distance learning programs. Other reasons included lack of preparation and effort, low self-efficacy, poor study techniques, and the convenience of Internet sources [37].

Studies revealed that EFL students are engaged in plagiarism due to three factors [1]: convenient access to online resources enabled

EFL students to retrieve information without properly citing the sources [2], questionable teacher assessment, and [3] students' poor academic writing skills [38]. Cheating among college students is influenced by factors such as moderate expectations of success, past cheating experiences, and positive attitudes toward cheating. It is more common in males, less proficient students, and those studying technology or science [39]. Motivation plays a significant role, with those studying solely to pass a course being more prone to cheating [40]. Technology advancement has amplified academic dishonesty, especially internet plagiarism [41,42].

Saleh and Meccawy [43] examined the EFL instructors challenges in teaching online, emphasizing students' lack of motivation and participation and the need for stricter disciplinary policies to combat cheating. COVID-19 forced a swift transition to online classes, resulting in increased academic dishonesty as students have easier access to notes, the Internet, and assistance from peers or services like Chegg during virtual evaluations [44]. This study explored university-level students' perspectives regarding the use of unfair means in English e-learning programs during the COVID-19 pandemic. A sizable portion of students engaged in cheating share or receive correct answers among classmates or copying responses from online sources, subsequently pasting them onto the exam portal screen [45].

In the same line, Eshet [5] pointed out that the COVID-19 pandemic forced higher education institutions to shift from face-to-face to emergency remote teaching, raising concerns about academic integrity. This author analyzed 7976 assignments from 39 Israeli institutions, finding a decline in academic integrity, especially in humanities and lower-ranked institutions. This researcher recommends a tailored, discipline-specific approach to combat academic misconduct and suggests that automated plagiarism detection could help students improve their honesty behavior. On the other hand, Steinberger [46] examined the mediating role of Statistics Anxiety in the relationship between students' personality traits and academic dishonesty before and during the COVID-19 pandemic. Data from 316 social science bachelor's students at three Israeli colleges were analyzed using Structural Equation Modelling, revealing a significant mediation effect only in emergency remote teaching. The study recommends supportive instructor interactions and Social Emotional Learning strategies to reduce anxiety and prevent academic dishonesty in remote learning environments.

Universities around the world, including those in the US, Canada, Mexico, Russia, China, and Spain, are grappling with a surge in cheating during online evaluations [47,48]. The shift to online assessments has brought concerns regarding the evaluation process [44]. On-campus, proctored exams deterred cheating, but their removal during the pandemic allowed easy access to online resources like Google and websites offering pre-made academic work [47]. In online classes, Internet anonymity and distance facilitated cheating to students utilizing platforms like Chegg to find answers quickly [49]. Faculty members observe higher academic fraud rates in online courses compared to face-to-face settings, with students often resorting to Chegg for answers, highlighting a fragility in the education system. This shift allowed students to approve subjects without understanding the material, as evidenced by user testimonials [50].

In the context of Iranian EFL education, Ghanbari and Nowroozi [51] highlighted challenges in online assessment due to students' lack of experience and trust in the process, leading to academic dishonesty concerns. Professors grappled with exam security and designing assessments to minimize plagiarism. Security and cheating worries prompted a search for effective anti-cheating measures, emphasizing the need for institutional interventions [51]. Habiburrahim et al. [20] revealed a high prevalence of cheating (84 %) in Islamic universities. Students cited exam complexity, time constraints, and a desire to assist peers as the main reasons for cheating. Additionally, fear of failure, pressure for high grades, and motivation for achievement contributed to academic dishonesty. Common dishonest behaviors included sharing answers during exams, plagiarizing from various sources, and working together on assignments.

Academic dishonesty is generating increasing interest within the scientific community [52]. However, up to today, few studies have been conducted on cheating in EFL education, in contrast to the research on academic cheating among economics and business students [53]. The main objective of this study was to create an explicative model with the following variables: levels of morality, level of pragmatism, and gender; therefore, the research focused on answering the following research questions.

1. What are the scores of the two dimensions of academic dishonesty, namely morality and pragmatism, among the participants?
2. What is the level of academic dishonesty in the morality and pragmatism dimensions?
3. What are the main recommendations of university students to address academic dishonesty at the university level?

## 2. Hypothesis

Based on the above questions, here are two hypotheses:

As a null hypothesis (H0), the level of morality, the dependent variable, is not explained by gender, and the level of pragmatism, the independent variable. As a research hypothesis (H1), we propose that the level of morality, the dependent variable, is explained by gender and the level of pragmatism, the independent variable.

As H0, the dependent variable, pragmatism, is not explained by gender, the independent variable, and morality, the level of the independent variable. As an H1, the level of pragmatism, the dependent variable, is explained by gender, and the level of morality, the independent variable.

## 3. Method

### 3.1. Research design

The study employed a mixed-methods approach, using a simultaneous exploratory research design that integrated quantitative and qualitative data and analyses. The researchers chose this approach to enhance their understanding of the complex phenomena under study, especially in fields involving human beings and their diversity. By combining qualitative and quantitative methods, the study

comprehensively examined the research objectives and the nature of the problem. The quantitative component provided descriptive and correlational insights, aligning with the research goals [54–56].

For the quantitative approach, we used a descriptive scope to depict students' attitudes toward academic honesty, reasons for academically dishonest behavior, and cheating methods in English assessments. To examine the relationship between gender and the perception that cheating on an exam leads to receiving deserved consequences, we used the correlational scope. The qualitative approach in this study was exploratory, as it aimed to investigate the students' recommendations on academic dishonesty at the university level. To analyze the information, the researchers utilized the Atlas.ti software for automatic coding, followed by manual debugging. Furthermore, they conducted open, axial, and selective coding [54–56].

### 3.2. Participants

The total population was 3226 university students from different faculties and socioeconomic levels. A sample size of 735 was calculated, with a confidence level of 95 % and a margin of error of 3.19 %, using a non-probabilistic convenience sampling method [55].

### 3.3. Demographic profiles

The individuals included in the study lived in Cuenca, Azuay Province, Ecuador, and were students who participated in an online English as a Foreign Language (EFL) course during the March–August 2021 semester at the Language Department of the University of Cuenca, a public university, amidst the COVID-19 health pandemic. Table 1 shows the characteristics of the participants. The majority were between 18 and 20 years old, from Azuay Province, identified as female, from the Faculty of Economics and Administrative Sciences, and had no paid work. They were enrolled in the Noncurrent Careers Program (Credits) during their fourth academic term.

### 3.4. Research instrument

Researchers used a sociodemographic sheet to collect data on variables such as age, marital status, semester, and name of faculty they belonged. In addition, the authors employed the Ahmadi Dishonesty Questionnaire, consisting of 9 items using a Likert-type response scale ranging from 0 (completely disagree) to 4 (completely agree) [57]. The items are into two dimensions: the first referred to as morality of academic dishonesty (items 1, 2, and 3), which assesses the perception of being dishonest, and the second, pragmatism of academic dishonesty (items 4, 5, 6, 7, 8, and 9), which evaluates the feasibility of being dishonest [58].

To assess the levels of dishonesty, we followed the methodology proposed by Bennett et al. [59] and Hernández et al. [55], which involved analyzing the normal distribution of the data, calculating the arithmetic mean and determining the standard deviation. The cutoff points were determined using the mean and the standard deviation.

**Table 1**  
Sociodemographic characteristics.

	Variable	%		Variable	%	
<b>Age range</b>	18–20	46.4	<b>Province of origin</b>	Azuay	77.6	
	21–23	35.8		Cañar	6.1	
	24–26	11.8		El Oro	6.0	
	27–29	3.4		Guayas	0.8	
	30–32	1.4		Loja	3.1	
	33–35	0.4		Morona Santiago	2.2	
	36–38	0.4		Other	3.3	
<b>Paid work</b>	39+	0.4	<b>Gender</b>	Pichincha	1.0	
	No	91.6		Female	62.6	
<b>Faculty</b>	Yes	8.4	Male	37.4		
	<b>Academic grade</b>	Architecture and Urban Planning	2.7	Professional	0.7	
		Arts	5.2	Graduate	1.6	
		Agricultural Sciences	5.9	Tenth Term	3.8	
		Economic and Administrative Sciences	18.9	Ninth Term	3.8	
		Medical Sciences	14.4	Eighth Grade	11.2	
		Chemical Sciences	14.8	Seventh Term	1.6	
		Philosophy, Literature, and Education Sciences	13.2	Sixth Term	12.7	
		Engineering	6.7	Fifth Term	2.2	
		Law and Political and Social Sciences	8.6	Fourth Grade	31.2	
		Dentistry	3.3	Third Term	2.2	
		Other	1.4	Second Term	29.0	
		Psychology	5.0	First Term	0.1	
		<b>Program</b>	Non-current Courses	22.9		
			Intensive	2.7		
PASLE			74.4			

Note: PASLE= Programa de Apoyo para la Suficiencia en Lenguas Extranjeras (In Spanish). Academic Program for Second Language Sufficiency.

## 4. Data collection

First, the researchers obtained written authorization from the Language Department, created a Google form, and sent it to the English teachers to share with their student groups. Students then answered the questionnaire electronically during class or when convenient.

### 4.1. Ethical considerations

The researchers considered ethical principles such as voluntariness, consent, and anonymity by placing an informed consent section at the beginning of the form for the students to read carefully and agree to collaborate in the investigation. At no time were the responses related to the identity of the participants or presented individually as results. Since all participants were adults (over 18 years old), no informed assent was required. Finally, we indicated that the results would be for research purposes.

### 4.2. Model

To achieve the objective, and considering that academic dishonesty has two dimensions—morality and pragmatism, according to the instrument used—the model was structured as follows: the dependent variable was the level of morality (classified as low, medium, high, and very high), while the independent variables included gender (male and female) and the level of pragmatism (classified as low, medium, high, and very high).

Additionally, we proposed a second model, with pragmatism level as the dependent variable (categorized as low, medium, high, and very high) and gender (male and female) and levels of morality as independent variables.

### 4.3. Data analysis

To analyze the data, the authors downloaded the responses into Microsoft Excel, transferred them to a database in the Statistical Package for the Social Sciences (SPSS) version 27, and used frequency measures and percentages for the objectives with descriptive scope, cross-tabulations, and Pearson chi-square test with a confidence level of 5 % for the associated variables.

Finally, the authors conducted a logistic regression analysis with ordinal response, considering the two dimensions of academic dishonesty (levels of morality and impulsivity). We decided to use the logistic regression model with an ordinal response due to the nature of the dependent variables, which are categorical (ordinal), which implies that their categories have an inherent order. This analytical approach seeks to model the cumulative probability of each category for being sequentially ordered. So, we employed a generalized linear model with a logit link function. In this model, each equation directly compares the likelihood of belonging to a specific category with lower codes to the probability of belonging to categories with higher codes [60,61].

For the qualitative analysis, the researchers used the Atlas. ti program, an automatic coding option initially, and then conducted the categorization process manually. There were seven main categories: 1) instructors'; 2) students'; 3) ethical considerations; 4) additional courses; 5) teaching methodologies; 6) evaluation methods; and 7) sanctions.

### 4.4. Validity and reliability

The authors utilized the validated English version for students in Ecuador, demonstrating good reliability (moral integrity of academic dishonesty  $\alpha = 0.92$ ; practicality of academic dishonesty  $\alpha = 0.74$ ). Reliability was assessed through internal consistency analysis using Cronbach's alpha coefficient to ensure that the instrument accurately measures academic dishonesty [60]. The calculation of Cronbach's alpha was conducted because it yields more reliable results for instruments utilizing Likert-type responses and when there is a sufficient number of participants [62].

This instrument was validated [58] (confirming the proposed dimensions of the original instrument and finding a weak but significant correlation between both dimensions). Finally, an open-ended question was included to recommend ways for teachers and students to prevent academic dishonesty in the EFL classroom. A pilot test was conducted with 28 undergraduate students from the Department of Languages at the end of the September 2020–February 2021 semester and revealed a good understanding of the items.

**Table 2**  
Levels of academic dishonesty.

Levels		%
<b>Morality</b>	Low honesty	11.2
	Average honesty	35.5
	High honesty	18.2
	Very high honesty	35.1
<b>Pragmatism</b>	Low honesty	17.8
	Average honesty	28.3
	High honesty	35.9
	Very high honesty	18.0

Data collection was performed virtually using Google Forms.

## 5. Results

### 5.1. Morality and pragmatism of academic dishonesty

We found that the students were less honest in this dimension ( $M = 3.32$ ,  $SD = 0.683$ ) than in pragmatism ( $M = 3.27$ ,  $SD = 0.601$ ). Still, the average value was remarkably close for both.

Furthermore, the average value of both dimensions was close to the maximum of the scale [4] and indicated that the participants presented academic honesty in morality and pragmatism. Table 2 shows the levels of academic dishonesty in morality and the pragmatism dimensions despite varied distributions. A good percentage of low levels of honesty was found in morality (11.2 %) and pragmatism (17.8 %). This percentage increases if we consider low and medium levels of honesty as it reaches more than 45 %.

### 5.2. First model

Table 3 presents the global fit, the substantive significance of the proposed model, and the saturated model. In the adjustment of the model, the significance value was less than 0.05 ( $X^2 = 43.271$ ;  $gl = 2$ ;  $p = . <0.001$ ); therefore,  $H_0$  is rejected, and  $H_1$  is accepted, which indicates that the independent variables contribute to reducing the misfit of the null model. The adjustment reduction is 62 %. The significance value of the goodness of fit is greater than 0.05 ( $X^2$  Pearson = 8.066;  $gl = 13$ ;  $p = 0.893$ ;  $X^2$  Deviance = 8.123  $df = 13$ ;  $p = 0.835$ ); that is, the proposed model does not differ significantly from the saturated model.

### 5.3. Estimates

The results indicated that the level of pragmatism is a significant predictor of the level of morality (Coefficient  $\beta = -0.572$ ; Standard Error = 0.089; Wald Value = 40.883; Degrees of Freedom = 1;  $p < .001$ ; 95 % Confidence Interval: Lower Limit =  $-1.726$ , Upper Limit =  $-0.593$ ). This finding suggests that an increase in the level of pragmatism is associated with a decrease in the likelihood of belonging to a higher category in the dependent variable, morality. The odds ratios corresponding to different levels of pragmatism are as follows: low level = 0.18, medium level = 0.24, and high level = 0.40. In contrast, gender was not a statistically significant predictor of morality ( $p = .605$ ).

In the parallel lines test, we observed statistical significance with a p-value greater than 0.05. The null hypothesis established that the log-likelihood would be equal to 89.507. In contrast, the general model showed a reduced log-likelihood of 87.681 with a statistic  $X^2 = 1.826$ ,  $df = 4$ . This result, with a p-value of .768, suggests that the overall model does not effectively reduce the discrepancy in this instance.

### 5.4. Second model

Table 4 presents the global fit, the substantive significance of the proposed model, and the saturated model. In the adjustment of the model, the significance value was less than 0.05 ( $X^2 = 123.429$ ;  $gl = 2$ ;  $p = <0.001$ ); therefore, we rejected the  $H_0$  and accepted the  $H_1$ , which indicates that the independent variables contribute to reducing the misfit of the null model. The estimated adjustment reduction is 10 %. The goodness of fit's significance value is greater than 0.05 ( $X^2$  Pearson = 22.081;  $df = 19$ ;  $p = 0.280$ ;  $X^2$  Deviance = 23.605;  $df = 19$ ;  $p = 0.212$ ); consequently,  $H_0$  is confirmed, indicating that the proposed model does not significantly differ from the saturated model.

### 5.5. Estimates

We found that both parameters showed statistical significance: the levels of morality (Coefficient  $\beta = 0.505$ ; Standard Error = 0.066; Wald Value = 57.805; Degrees of Freedom = 1;  $p < 0.001$ ; 95 % Confidence Interval: Lower Limit = 0.375, Upper Limit = 0.635) and gender (Coefficient  $\beta = -0.509$ ; Standard Error = 0.140; Wald Value = 13.256; Degrees of Freedom = 1;  $p < 0.001$ ; 95 % Confidence Interval: Lower Limit =  $-0.783$ , Upper Limit =  $-0.235$ ). These results indicate that as the level of morality increases, the level of pragmatism also increases. But, as the gender category increases (from feminine to masculine), pragmatism decreases.

The odds ratios corresponding to different levels of morality are as follows: low level = 0.30, medium level = 0.40, and high level = 0.55. About gender (from feminine to masculine) = 1.59. Male participants have a more favorable perception of the practicality and

**Table 3**  
Model adjustments.

Model Adjustments					Pseudo R square		Goodness of Fit				
Model	Log-likelihood	-2	$X^2$	gl	P	Cox and Snell	0.057	$X^2$	df	p	
Intersection only	132.724					Nagelkerke	0.62	Pearson	8.066	13	0.893
Final	89.507		43.271	2	<0.001	McFadden	0.23	Deviance	8.123	13	0.835

Note: Link Logit function.  $df$  = degrees of freedom.

**Table 4**  
Model adjustments.

Model Adjustments					Pseudo R square		Goodness of fit			
<b>Model</b>	Log-likelihood	-2	X <sup>2</sup>	df	p	Cox y Snell	0.095	X <sup>2</sup>	df	p
<b>Intersection Only</b>	196.754					Nagelkerke	<b>0.102</b>	Pearson	22.081	19
<b>Final</b>	123.429		73.325	2	<0.001	McFadden	0.037	Deviance	23.605	19

Note: Logit link function. df = Degrees of Freedom.

ease of being dishonest. In this context, high levels of pragmatism indicate a less positive attitude towards the feasibility of acting dishonestly.

In the parallel lines test, we observed statistical significance with a p-value greater than 0.05. The null hypothesis stated that the log-likelihood would be equal to 123.429. In contrast, the general model showed a reduced log-likelihood of 118.928 with a statistic  $X^2 = 4.501$ ; degrees of freedom = 4. This result, with a p-value of .342, suggests that the overall model does not effectively reduce the mismatch in this case.

5.6. Main recommendations to tackle academic dishonesty at the university level

The authors categorized the top recommendations from students for addressing academic dishonesty at the university level into seven groups outlined in Fig. 1.

The first category relates to teachers and refers in a general way to the distinct aspects and characteristics that influence the approach of academic dishonesty by teachers. These aspects range from how teachers communicate and establish trusting relationships with students to their ability to prevent plagiarism, educate students about academic ethics, be patient and responsive, and function as guides in the learning process. Teachers play a critical role in promoting academic integrity and creating an environment conducive to ethical learning, thereby helping to prevent academic dishonesty among students [63–67].

The second category of main recommendations relates to students and encompasses a variety of elements ranging from self-awareness and autonomy to integrity, morality, motivation, responsibility, and managing fears. These aspects are essential to promote an ethical approach to learning, encourage academic honesty, and avoid the temptation to resort to dishonest practices. Students must understand the importance of academic integrity and cultivate skills such as ethical decision-making, realistic goal-setting, and self-regulation in their learning process. Additionally, working on managing fears related to academic performance and pressure can help students stay engaged in ethical learning and avoid dishonest behavior to escape the fears of failing. Therefore, student-related aspects are crucial in promoting a collaborative and responsible academic environment [68–70].

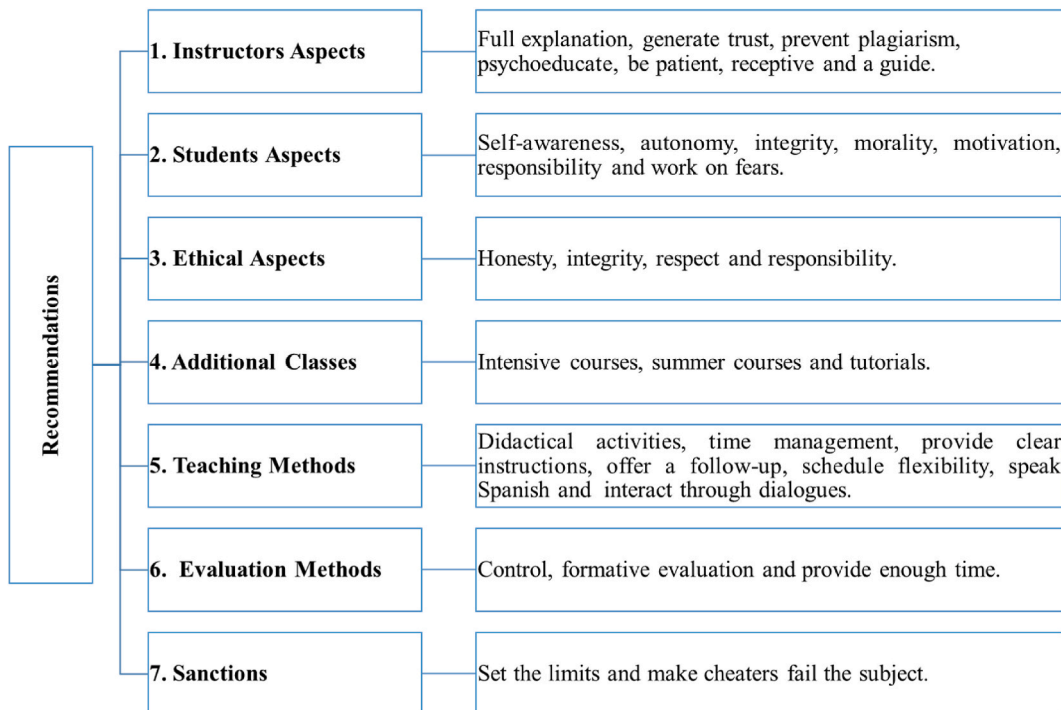


Fig. 1. Summary of principal recommendations.

The third category deals with the ethical aspects; they are the fundamental principles and values that guide moral and ethical behavior. It includes elements such as honesty, integrity, respect, and responsibility. These aspects are crucial for fostering an ethical environment in any setting, as they involve transparent, honest, and respectful behavior towards others, along with taking responsibility for our actions. By cultivating these ethical aspects, ethical conduct is encouraged, and a building of a solid foundation for harmonious coexistence and personal and professional development [71,72].

The fourth category comprises supplementary classes comprising additional educational activities as part of the curriculum. It includes intensive courses, courses taken during semester breaks, and tutorials. These classes offer extra learning opportunities, enabling students to explore specific topics, acquire additional skills, or receive supplementary support in areas that require reinforcement. Supplemental classes provide an enriching educational experience that can broaden academic horizons and help students fully achieve their educational goals [73–75].

The fifth category refers to teaching methods and includes the strategies and techniques to facilitate student learning. It involves elements such as didactic activities, time management, giving clear instructions, following up, time flexibility, using the native language to teach, and encouraging interaction through dialogues [76]. These methods seek to provide an effective and stimulating educational environment, allowing students to actively participate in their learning process, understand concepts clearly, and receive the necessary support to achieve their academic goals [77–80].

The category of assessment methods, 6th category, deals with the techniques used to measure students' progress and level of understanding. It contains elements such as monitoring, formative assessment, and allowing sufficient time to complete tasks and evaluations. These methods seek accurate and relevant information on student performance, allowing instructors to adjust their teaching and provide constructive feedback. By managing the assessment process, teachers adhere to the established standards and conduct evaluations equitably. Formative assessment is an ongoing approach used to identify students' strengths and areas for improvement to guide their learning more effectively. In addition, allowing sufficient time to take assessments permits students to demonstrate their understanding and apply what they have learned properly. These assessment methods contribute to a fair, objective, and meaningful assessment of student learning [81,82].

The seventh, sanctions, category involves the disciplinary measures and consequences established for those students who violate academic rules or regulations [83]. It includes elements such as setting clear boundaries about cheating and the possibility of failing a course should students engage in this behavior [84]. These implemented sanctions are to maintain an orderly educational environment and promote responsibility and respect for the established norms. Setting clear limits helps establish clear expectations for behavior, while the failure of a subject is a more severe consequence for serious infractions. Sanctions applied fairly and proportionally contribute to maintaining academic integrity and mutual respect in the educational community [30,85–87].

## 6. Discussion

As mentioned, the research results must be interpreted cautiously due to the potential impact of students' honesty when completing the questionnaire. The students showed scores close to honesty in morality and pragmatism, with average values close to the maximum; however, the lowest score was morality. Similarly, Jensen et al. [19] stated that college and high school students typically view academic dishonesty as wrong but believe that everyone participates in it, which shows that the moral aspect also stands out. To understand academic dishonesty, it is crucial to consider, among other variables, exposure to deceit and rule evasion in early years, as it has been pointed out that these factors may be related to a propensity for dishonesty in adulthood [18]. Among the possible causes are the convenient access to online resources that allowed EFL students to retrieve information without properly citing sources, the questionable teacher assessment, and the students' poor academic writing skills [38].

Another element to analyze is that teaching a foreign language presents unique challenges, which can lead EFL students to resort to fraud due to linguistic competence issues, academic writing challenges, time limitations, and lack of confidence [34]. Finally, time constraints, inadequate paraphrasing skills, and pressure to achieve good grades [35], along with technological advancements and COVID-19, have heightened academic dishonesty [41–45].

The lowest score in morality reflects the discrepancy between moral perception and the actual practice of academic dishonesty, supporting the notion that morality plays a significant role in understanding the phenomenon. We observed variable levels of academic dishonesty in both dimensions, with a high percentage of students exhibiting low levels of honesty in morality and pragmatism. This percentage increases when considering low and medium levels of honesty (45 %). This result aligns with Ponce [30] who identified fraud as a prevalent issue in higher education institutions, and Habiburrahim et al. [20] highlighted a high prevalence of fraud (84 %) in Islamic universities.

Additionally, universities worldwide, including the United States, Canada, Mexico, Russia, and China, are experiencing increased cheating in online evaluations, raising concerns about the evaluation process during the COVID-19 pandemic [44,47,49]. It is worth mentioning that such actions significantly undermine academic integrity by devaluing original and honest academic work [24]. Therefore, the authors emphasize the importance of addressing academic dishonesty as a global concern that requires effective measures to safeguard academic integrity and promote educational excellence.

Our results show that, in terms of morality, both female and male students believe that academic dishonesty can exist in all areas of our lives, including academia. On the contrary, male students are more likely to engage in academic dishonesty as a form of pragmatism. According to Saleh and Meccawy [36], female students in Saudi Arabia often cheat by helping each other, copying answers from peers, or using electronic sources during exams. The statistically significant association between the dimension of pragmatism and students' gender suggests differences in how adults, men, and women approach academic dishonesty. These results are consistent with previous research that has emphasized gender gaps in attitudes and behaviors regarding academic dishonesty. Whitley also



mentions that academic dishonesty is more common among males, less proficient students, and those studying technology or science [39]. Therefore, understanding these gender disparities is crucial for developing effective interventions to address and prevent academic dishonesty.

The seven categories of recommendations put forth by the students to prevent academic dishonesty at the university level reflect the breadth and complexity of this issue within the educational sphere. The fact that students identify aspects related to teachers, students, ethics, supplementary classes, teaching methods, evaluation methods, and disciplinary measures suggests the need for a holistic and multidimensional approach to address academic dishonesty. The recommendation to implement stricter disciplinary policies, as supported by Saleh and Meccawy [43], underscores the importance of establishing clear consequences for students engaging in dishonest academic practices. Sanctions such as these can help prevent students from committing fraud and foster an academic environment grounded in integrity and accountability.

Overall, the recommendations to address academic dishonesty at the university level are multifaceted and encompass various aspects related to teachers, students, ethics, supplementary classes, teaching methods, evaluation methods, and sanctions. Ghanbari and Nowroozi [51] also emphasize the importance of addressing academic dishonesty at the university administration level. They stress the need for a comprehensive and coordinated approach to tackle academic dishonesty. Finally, Ghanbari and Nowroozi [51] mention that addressing academic dishonesty at the university administration level reinforces the need for a coordinated and strategic approach. This approach implies that policies and measures to address academic dishonesty should not be limited to the classroom but should encompass a more inclusive institutional scope.

## 7. Conclusions

According to our results, despite students showing similar levels of honesty in both dimensions, there was a slight tendency towards lower honesty in morality compared to pragmatism. This outcome suggests that students might be more prone to justifying dishonest behaviors where pragmatism outweighs ethical considerations. Although the authors found low levels of honesty in both dimensions, the overall average was close to the maximum of the scale, indicating that participants exhibited honest behaviors in the academic realm. However, low levels of honesty in a sizable proportion of participants suggest that there is still room for improvement in academic integrity.

The level of morality was significantly explained by pragmatism but not by gender, partially confirming the first hypothesis. It means that levels of practicality have a direct, though weak, impact on the morality of participants, irrespective of gender. Additionally, we confirmed the second hypothesis, indicating that gender and morality influence the level of pragmatism. These findings underscore the importance of considering both gender and morality levels when studying the impact of pragmatism on ethical decisions and related behaviors.

Given that many participants exhibited low or medium levels of honesty, especially in pragmatism, these conclusions suggest the importance of implementing targeted interventions to promote academic integrity and address the observed gender differences. Interventions, such as ethics education programs, clearly defined academic integrity policies, and initiatives to promote a culture of honesty within the educational setting may be considered. The students provided valuable recommendations to address academic dishonesty at the university level, emphasizing the importance of ethical education, clear expectations, an engaging learning environment, and appropriate sanctions to foster a culture of academic integrity.

## 8. Limitations of the study

Since the data used in this study are self-reported, results ought to be analyzed cautiously. The researchers expected different results based on the premise that currently, Ecuador is one of the Latin American countries facing high levels of dishonesty at all levels. They infer that if educators do not take action against academic dishonesty in the earlier years at educational institutions, nor take care of their dishonest behavior as mentors, and do not educate with the example, our future is not bright. The main limitation of this study was that the participants could have been untruthful in their responses to the survey. They based this inference on the surprising results, which indicate that most EFL evaluations taken by Ecuadorian university students are sincere. It is common among most of these students to respond to questionnaires according to what researchers would like to read in their responses for fear of punishment. Most students talk among themselves about how they would answer surveys, whereas the reality is different.

## Ethics statement

All participants provided informed consent to participate in the study. There was no need to review and/or have this study approved by an ethics committee because the study design did not involve invasive interventions or the collection of identifiable personal data.

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## Data availability statement

The authors have shared the database via the repository.  
Name of the repository: openICPSR. Number: openicpsr-198862.

## CRedit authorship contribution statement

**Walter Marcelo Bernal Arellano:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Conceptualization. **Jhessenia Natalia Galarza Parra:** Writing – review & editing, Methodology, Investigation, Data curation. **Jorge Mauricio Villavicencio Reinoso:** Writing – original draft, Methodology, Data curation. **Janina Felishia Quito Ochoa:** Writing – review & editing, Writing – original draft.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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