

Academic Tutoring and Academic Performance: An Analysis at UNSM

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Abstract

This study explores the relationship between the comprehensive tutoring system and the academic performance of students at the National University of San Martín (UNSM). The study addresses the issues faced by the institution, whose tutoring programme lacks a coordinated approach between faculties, a strong clinical psychology team, and teachers with adequate tutoring skills, resulting in a loss of student interest. The aim was to determine whether there is a significant relationship between the comprehensive tutoring system and academic performance. A quantitative methodology with a non-experimental, cross-sectional design was used. A questionnaire was applied to 342 students selected through stratified probabilistic sampling, and their academic performance was analysed. The results indicated that, although most students perceived the tutoring system as acceptable, no significant correlation with their academic performance was found. In conclusion, the current tutoring system does not appear to directly influence academic performance, suggesting a need to review its structure and integration. This study addresses a gap in the literature by examining the relationship between tutoring and academic performance in Peruvian universities, aligning with SDG 4 (Quality Education). Future studies should investigate contextual and personal factors that may influence academic performance.

Keywords: *Comprehensive Tutoring, Professional Guidance, Social Integration, Higher Education, Educational Quality.*

Introduction

A comprehensive university tutoring system refers to a set of strategies, programmes, and activities designed to accompany and support students throughout their educational journey, from the moment they enter university until they complete their studies (Sánchez et al., 2017). This system aims to holistically address the various needs of students, promoting their adaptation, academic development, personal growth, and professional advancement. Higher education has undergone rapid transformations in recent decades, requiring institutions to firmly commit to supporting those students who, due to their circumstances upon entry, may face greater challenges in academic and social integration. Therefore, it is essential to understand their needs and potential in order to appropriately adapt learning resources and ensure a satisfying academic experience. An example of this is the initial academic characterisation tools, specifically designed to assess students during their first year at university (Yangali et al., 2020).

Furthermore, the number of young people aged 16 to 18 entering the university system continues to rise. As several studies have shown, these students not only require academic support but, crucially, also need assistance in personal development (self-esteem and social skills), an aspect often overlooked and minimised within a quality-focused context (Martínez Clares, Pérez Cusó, and Martínez Juárez, 2018).

Beginning university studies introduces the student to a new organisational, educational, and social context, governed by explicit and implicit rules that must be understood in order to fully integrate into the student community (Martínez et al., 2020). The transition from secondary school to university involves not only a change of environment but also a transformation of the student's identity, shifting from a more regulated and guided setting to a more autonomous and self-regulated one. This transition represents a significant change in living conditions and the student's academic identity. Over the past two decades, university systems globally have experienced significant transformations. A prominent example is the Bologna Process in Europe, which aims at "European convergence." This process seeks to standardise access and degree systems across European institutions, including the requirement for a master's degree, as it is known in Peru. Additionally, the tutoring system is being reviewed, adopting a comprehensive vision that includes

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preventive and personal development, complementing the purely academic tutoring that previously predominated (Villacrez, 2015).

Universities that do not implement a tutoring system struggle to identify the characteristics of their various stakeholders, complicating administrative decision-making and leading to a lack of development in services and university performance. This implies that tutoring activities should be considered not only from the student's perspective but also from the viewpoint of faculty members and the university institution (Di Vita et al., 2021). From the student's perspective, tutoring becomes a tool that provides knowledge, instruction, and guidance in learning, specifically in their personal and professional project. Additionally, tutoring offers valuable information to faculty members to improve their teaching practice and allows the university to identify the needs and shortcomings that may arise in the curriculum, as well as deficiencies in the student's personal, social, and professional development, and trends in dropout rates (García, 2019).

At the local level, there is a tutoring action plan without a system led by a psychology team with a strong clinical orientation and coordination between faculties. This plan does not adequately address tutoring needs and requirements. Peer tutoring is attempted with human resources that possess weak tutoring skills and are not integrated with the faculty members responsible for tutoring. Tutorial activities tend to focus more on information dissemination and less on training, leading to a loss of interest from university students. Moreover, there is no inter-faculty exchange to evaluate successful experiences, nor are personal tutoring experiences effectively channelled to foster student interest. Weak tutoring training for teachers also weakens the programme, which is not embedded within an institutional context of quality for university re-licensing and accreditation. This is reflected in the poor coordination between university welfare and faculties. Finally, tutoring cycles do not effectively culminate in activities that generate proposals for the continuous improvement of educational quality (Humberto, 2018).

In this context, a basic research study with a correlational design is proposed, framed by the following question: Is there a relationship between the comprehensive tutoring system and the academic performance of UNSM students in 2022? The general objective is then established: To determine the relationship between the comprehensive tutoring system and the academic performance of UNSM students in 2022. The specific objectives are: to identify the level of relationship between adaptation to the university context and students' academic performance; to establish the level of relationship between personal guidance and students' academic performance; to define the level of relationship between academic guidance and students' academic performance; to identify the level of relationship between professional guidance and academic performance; to define the level of relationship between integration into the class group and academic performance; and to propose improvements to university tutoring.

Materials and Methods

The research employed a quantitative approach, using systematic procedures to understand how the study was conducted. This was based on the collection of data, which was later processed through mathematical analysis to answer the research questions (Walliman, 2021). It was applied in nature; according to Bell (2014), this type of research seeks to advance or expand knowledge on a specific topic related to tutoring and academic performance, exploring answers to specific questions on the dimensions of “adaptation, personal, academic, professional guidance, and integration” (p.32). In this regard, the research aimed to achieve the objectives set. The study had a descriptive scope, with a non-experimental design. According to Kerlinger (1966), one of the characteristics of this type of design is the observation of variables as they are presented in reality, meaning the variables are not subject to manipulation. Additionally, it was cross-sectional. In this respect, Kumar (Wong, 2024) indicates that this type of study is carried out at a specific point in time, with data collected at that moment. The population consisted of all students enrolled at the National University of San Martín during the 2022-II academic semester, totalling 5,491 students. The sample was stratified through probabilistic sampling and included 342 students enrolled in the 2022-II academic semester, representing the 20 study programmes. A questionnaire was applied to them, and their academic records were obtained from the Office of Academic Affairs, with prior informed consent.

Each response to the items was coded as: No (0) and Yes (1). The variable of the comprehensive tutoring system was categorised as: insufficient [0-15], acceptable [16-31], and excellent [32-47]. For the academic performance variable, it was adapted to the academic regulations approved by Resolution No. 294-2018, dated 2 May 2018: deficient [0-10.49], regular [10.50-13.49], good [13.5-17.49], and excellent [17.50-20] on a vigesimal scale. The categories for dimensions 1, 3, and 5 were insufficient [0-3], acceptable [4-7], and excellent [8-10]; for dimension 2: insufficient [0-2], acceptable [3-5], and excellent [6-8]; and for dimension 4: insufficient [0-2], acceptable [3-5], and excellent [6-7].

Results and Discussion

Table 1 Relationship Between Adaptation to The University Context and Academic Performance

	Category	Frequency	V ₂ . Academic Performance.				Total
			Deficient	Regular	Good	Excellent	
D ₁ . Adaptation to the university context	Insufficient	f _i	1	19	10	-	30
		%	0,3%	5,6%	2,9%	-	8,8%
	Acceptable	f _i	2	141	111	1	255
		%	0,6%	41,2%	32,5%	0,3%	74,6%
	Excellent	f _i	1	38	18	-	57
		%	0,3%	11,1%	5,3%	-	16,7%
	Total	f _i	4	198	139	1	342
		%	1,2%	57,9%	40,6%	0,3%	100%
	Statistical measures:						
	D ₁ .			$\bar{X} \pm S = 5,8 \pm 1,7$			CV% = 29 %
V ₂ .			$\bar{X} \pm S = 13,3 \pm 1,4$			CV% = 10,7 %	
Correlation analysis:			rho = - 0,034			p-value = 0,531	

Source: Application of the questionnaire, Google Forms, May-October 2023; academic records, April 2024

Table 1 shows a two-dimensional distribution between the dimension of adaptation to the university context and the academic performance of 342 university students. It is observed that 74.6% of the students indicated that they had achieved an acceptable adaptation to the university environment, followed by 16.7% who showed excellent adaptation, while 8.8% faced several challenges, indicating that their social integration was insufficient.

On the other hand, it is observed that 41.2% of the students achieved an acceptable adaptation with regular performance, 32.5% of the students achieved acceptable adaptation and good academic performance, and 11.1% of the students achieved excellent adaptation and regular performance. The statistical measures show that the average score for adaptation to the university context was in the acceptable category (5.8 ± 1.7) with a low degree of variability of 29%, and the average score for academic performance was regular (13.3 ± 1.4) with a low coefficient of variation of 10%. The correlation between adaptation to the university context and academic performance was very low and negative ($\rho = - 0.034$), with a p-value of 0.531, which is higher than 5%. Therefore, there is not enough evidence to assert that there is a significant correlation between these two variables.

The majority of the students achieved an acceptable adaptation to the university environment and regular academic performance. However, the correlation between adaptation to the university context and academic performance was very low and not significant, indicating that improving adaptation to the university context does not necessarily translate into better academic performance. It is likely that other factors are influencing students' academic performance.

This suggests that the adaptation process may be influenced by the complexity of specific and specialised courses, which can reach up to 33% and may affect students in the faculties of Obstetrics, Nursing, and Human Medicine, followed by those in engineering-related faculties. A factor worth determining and

investigating is related to possible states of ill-being among students, as self-medication rates reach up to 46%. It should be determined whether this is related to mental or physical health, especially considering that almost 50% of students live in rented accommodation and that 56% come from other provinces or regions of the country. This heterogeneity of factors suggests that the learning style (Guerra-Martín and Borrallo-Riego, 2018) provided to the student may be a factor to define in future research. A closer didactic relationship between students and teachers is essential to stimulate and motivate knowledge and, thus, strengthen performance. Alex Estrada emphasises that learning styles are a little-discussed topic and that their applicability allows teachers to move away from traditional teaching methods and motivate students, thereby improving and modifying their skills and abilities (García, 2018).

Table 2 Relationship Between Personal Guidance and Academic Performance

	Category	Frecuency	V ₂ . Academic Performance				Total
			Deficient	Regular	Good	Excellent	
D ₂ . personal guidance.	Insufficient	f _i	-	20	12	-	32
		%	-	5,8%	3,5%	-	9,4%
	Acceptable	f _i	3	120	82	-	205
		%	0,9%	35,1%	24,0%	-	59,9%
	Excellent	f _i	1	58	45	1	105
		%	0,3%	17,0%	13,2%	0,3%	30,7%
	Total	f _i	4	198	139	1	342
		%	1,2%	57,9%	40,6%	0,3%	100%
Statistical measures:							
D ₂ .			$\bar{X} \pm S = 4,6 \pm 1,7$		CV% = 36,5 %		
V ₂ .			$\bar{X} \pm S = 13,3 \pm 1,4$		CV% = 10,7 %		
Correlation analysis:			rho = 0,059		p-value = 0,279		

Source: Application of the questionnaire, Google Forms, May-October 2023; academic records, April 2024

Table 2 shows that 59.9% of the students reported receiving acceptable personal guidance, followed by 30.7% who received excellent personal guidance, while 9.4% indicated that personal guidance was insufficient. On the other hand, it is observed that 35.1% of those who received acceptable personal guidance had regular academic performance, 24% who received acceptable personal guidance achieved good academic performance, and 17% of students who received excellent personal guidance had regular academic performance. The statistical measures showed that the average score for personal guidance was acceptable (4.6 ± 1.7), with a high degree of variability of 36.5%, and for academic performance, the average score was regular (13.3 ± 1.4) with a low coefficient of variation of 10%. The correlation between personal guidance and academic performance was low and positive ($\rho = 0.059$), with a p-value of 0.279, which is higher than 5%. Therefore, there is not enough evidence to claim a significant correlation between these two variables. This means that most students received acceptable personal guidance and demonstrated regular academic performance. However, the correlation between personal guidance and academic performance was low and not significant, suggesting that personal guidance, although important, is not directly related to significant improvements in academic performance. It is possible that other factors are influencing students' academic performance.

Personal guidance, while an important process, does not seem to influence performance; Bejar (Humberto n.d.) points out that it should not be simple guidance but rather accompaniment based on a constructivist approach that meets students' needs and revalues their personal development. Tutoring, especially peer tutoring (Kim, Jillapali, and Boyd, 2021), when properly developed, is a good strategy. It requires leadership from the teacher associated with the peer tutor to have a correct perception of students at academic risk (Zubiaur Alejos, 2021).

Table 3 Relationship Between Academic Guidance and Academic Performance

	Category	Frequency	V ₂ . Academic Performance				Total
			Deficient	Regular	Good	Excellent	
D ₃ . academic guidance.	Insufficient	f _i	-	89	68	1	158
		%	-	26,0%	19,9%	0,3%	46,2%
	Acceptable	f _i	4	74	59	-	137
		%	1,2%	21,6%	17,3%	-	40,1%
	Excellent	f _i	-	35	12	-	47
		%	-	10,2%	3,5%	-	13,7%
	Total	f _i	4	198	139	1	342
		%	1,2%	57,9%	40,6%	0,3%	100%
	Statistical measures:						
		D ₃ .		$\bar{X} \pm S = 4,2 \pm 2,7$			CV% = 64,3 %
	V ₂ .		$\bar{X} \pm S = 13,3 \pm 1,4$			CV% = 10,7 %	
Correlation analysis:			rho = - 0,045			p-value = 0,404	

Source: Application of the questionnaire, Google Forms, May-October 2023; academic records, April 2024

Table 3 shows that 46.2% of the students reported that the academic guidance they received at the university was insufficient, followed by 40.1% who stated it was acceptable, while 13.7% considered it excellent. On the other hand, it is observed that 26% of the students perceived insufficient academic guidance and had regular academic performance, 21.6% perceived acceptable academic guidance and had regular performance, and 19.9% perceived insufficient academic guidance and had good academic performance. The statistical measures showed that the average score for academic guidance was acceptable (4.2 ± 2.7), with a high degree of variability of 64.3%, and for academic performance, the average score was regular (13.3 ± 1.4) with a low coefficient of variation of 10%.

The correlation between academic guidance and academic performance was very low and negative ($\rho = -0.045$) with a p-value of 0.404, which is higher than 5%. Therefore, there is not enough evidence to assert that there is a significant correlation between these two variables. This means that most students considered the academic guidance they received to be insufficient or acceptable, and most had regular academic performance. The correlation between academic guidance and academic performance was very low and not significant, indicating that the quality of academic guidance is not directly related to students' academic performance. It is likely that other factors are influencing academic performance. These factors are related to technical assistance, organisation and coordination between teaching staff and educational support personnel (Pinchi Vasquez, 2019), educational innovation and research projects, cooperative learning methods (Azlan et al., 2020), learning workshops, curricular reinforcement and support, flexible groupings, collaboration networks, and teacher coordination (Moreno and Barrera, 2021), flexible use of spaces and time, methodological strategies that promote self-determination, in-depth study groups (Prada et al., 2020), among other dimensions that should be explored (Jiménez et al., 2020).

Estos factores están relacionadas con ayudas técnicas, organización y coordinación entre el personal docente y el personal de atención educativa (Pinchi Vasquez 2019), proyectos de innovación e investigación educativas, métodos de aprendizaje cooperativo (Azlan et al. 2020), talleres de aprendizaje, refuerzo y apoyo curricular, agrupamientos flexibles de grupo, redes de colaboración y coordinación del profesorado (Moreno y Barrera 2021), utilización flexible de espacios y tiempos, estrategias metodológicas que fomentan la autodeterminación, grupos de profundización (Prada et al. 2020), entre otras dimensiones que se deben de explorar (Jiménez et al. 2020).

Table 4 Relationship Between Profesional Guidance and Academic Performance

	Category	Frecuency	V ₂ . Academic Performance				Total
			Deficient	Regular	Good	Excellent	
D ₄ . profesional guidance.	Insufficient	f _i	2	79	61	1	143
		%	0,6%	23,1%	17,8%	0,3%	41,8%
	Acceptable	f _i	2	99	73	-	174
		%	0,6%	28,9%	21,3%	-	50,9%
	Excellent	f _i	-	20	5	-	25
		%	-	5,8%	1,5%	-	7,3%
	Total	f _i	4	198	139	1	342
		%	1,2%	57,9%	40,6%	0,3%	100%
	Statistical measures:						
		D ₄ .		$\bar{X} \pm S = 3,0 \pm 1,6$			CV% = 53,4 %
	V ₂ .		$\bar{X} \pm S = 13,3 \pm 1,4$			CV% = 10,7 %	
	Correlation analysis		rho = - 0,046			p-value = 0,401	

Source: Application of the questionnaire, Google Forms, May-October 2023; academic records, April 2024

Table 4 shows that 50.9% of the students stated that the guidance for their professional development was acceptable, followed by 41.8% who perceived that the guidance was insufficient, and 7.3% considered the professional guidance to be excellent. On the other hand, it is observed that 28.9% of the students who received acceptable professional guidance had regular academic performance, 23.1% with insufficient professional guidance also achieved regular academic performance, and 21.3% with acceptable professional guidance had good academic performance. The statistical measures show that the average score for professional guidance was acceptable (3.0 ± 1.6), with a moderate degree of variability at 53.4%. For academic performance, the average score was regular (13.3 ± 1.4) with a low coefficient of variation of 10%.

The correlation between professional guidance and academic performance was very low and negative ($\rho = -0.046$) with a p-value of 0.401, which is higher than 5%. Therefore, there is not enough evidence to assert that there is a significant correlation between these two variables studied. This means that most students perceived the professional guidance they received as acceptable or insufficient, and most showed regular academic performance. The correlation between professional guidance and academic performance was very low and not significant, indicating that the quality of professional guidance is not directly related to students' academic performance. It is likely that other factors are influencing academic performance. In this context, the quality of professional guidance reflected in the teaching-learning process is affected by various factors such as family circumstances, social issues, economic aspects, emotional or psychological disturbances; factors that may be independent or interrelated and could be influencing academic performance (Martínez Clares, Cusó, and Martínez Juárez, 2018). This suggests that education should be comprehensive and fostered in a more student-friendly environment, strengthening the teacher-student relationship for correct decision-making, which ultimately reflects in their grades. Barceló et al. (Barceló-Cerdá et al., 2024) highlight the importance of strengthening cooperative learning as an active learning strategy. On the other hand, Garcés emphasises that when evaluating academic performance, correlated aspects should be considered, not just the quantitative part of grades, taking into account attitudes, willingness to contribute, interest in research, that is, also considering vocation, human aspects, ethics, and students' values (Garcés et al., 2023). Other aspects that should be evaluated, which may influence performance, include access to technology (Guerra Perez, 2022), scholarships and other educational offerings provided by the university, and online tutoring (Hanham, Lee, and Teo, 2021). Another dimension related to this is the tutoring management model (Herrera Gomez, 2019), which should more dynamically integrate the tutor and tutee; incorporate new technologies into educational processes; knowledge management; and research training with the capacity to offer solutions. These are key elements that university schools should prioritise to develop quality educators (Álvarez Gómez et al., 2021).

Table 5 Relationship Between Integration in The Class Group and Academic Performance

	Category	Frequency	V ₂ . Academic Performance				Total
			Deficient	Regular	Good	Excellent	
D ₅ . integration in the class group.	Insufficient	f _i	-	8	2	-	10
		%	-	2,3%	0,6%	-	2,9%
	Acceptable	f _i	1	54	35	1	91
		%	0,3%	15,8%	10,2%	0,3%	26,6%
	Excellent	f _i	3	136	102	-	241
		%	0,9%	39,8%	29,8%	-	70,5%
	Total	f _i	4	198	139	1	342
		%	1,2%	57,9%	40,6%	0,3%	100%
	Statistical measures:						
		D ₅ .		$\bar{X} \pm S = 7,9 \pm 1,8$			CV% = 22,9 %
	V ₂ .		$\bar{X} \pm S = 13,3 \pm 1,4$			CV% = 10,7 %	
	Correlation analysis		rho = - 0,001			p-value = 0,990	

Source: Application of the questionnaire, Google Forms, May-October 2023; academic records, April 2024.

Table 5 shows that 70.5% of the students reported excellent capacity to integrate and actively participate in their class group, followed by 26.6% who indicated their integration was acceptable, while 2.9% considered it insufficient. On the other hand, it is observed that 39.8% of the students with excellent integration in the class group had regular academic performance, 29.8% with excellent integration in the class group had good academic performance, and 15.8% with acceptable integration had regular academic performance. The statistical measures show that the average score for integration in the class group was approximately in the excellent category (7.9 ± 1.8), with a low degree of variability at 22.9%, and the average academic performance was (13.3 ± 1.4), with a low coefficient of variation of 10%. The correlation between integration in the class group and academic performance was very low and negative ($\rho = -0.001$) with a p-value of 0.990, which is higher than 5%. Therefore, there is not enough evidence to assert a significant correlation between the studied variables.

This means that most students demonstrated an excellent capacity to integrate into their class group and showed regular academic performance. However, the correlation between integration in the class group and academic performance was very low and not significant, suggesting that the quality of social integration is not directly related to students' academic performance. It is likely that other factors are influencing academic performance. The ability to acquire knowledge in a particular subject to achieve good academic performance may be related, for example, to the absence of peer tutoring, which can demonstrate learning strategies such as time optimisation and use of technology, which should be integrated into the presence of the tutor (Capelari). This may alter learning capacity if the tutor is overburdened or has poor teaching skills. Effective tutorial control is fundamental (Drago, Rheinheimer, and Detweiler, 2016). The role of the peer tutor is crucial if they apply their soft skills to explain to the teacher where their peer may be struggling. Lastly, an important dimension to consider is having appropriate study environments (Arco-Tirado, Fernandez, and Hervás Torres, 2019).

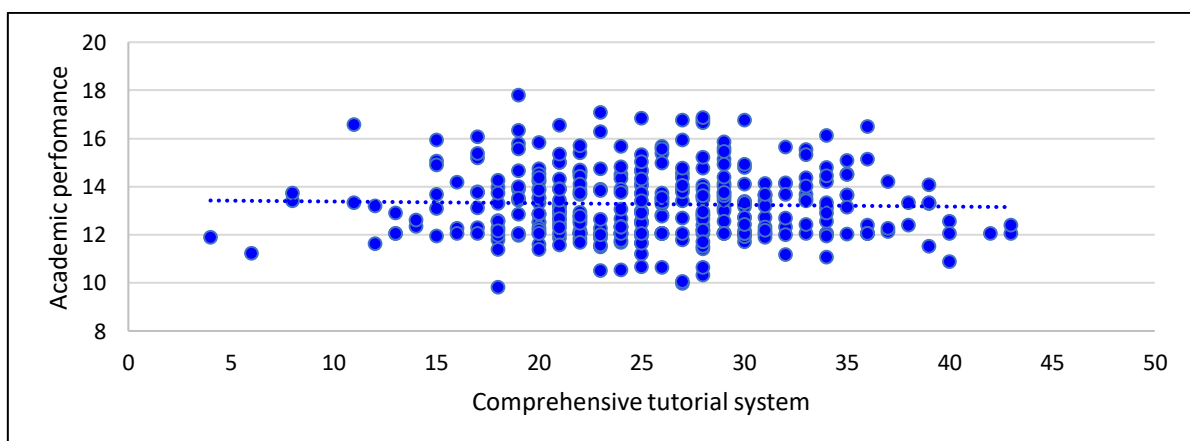
Drawing on the concepts of Ramirez and Vales, they emphasise that other dimensions of learning and academic performance should be considered, such as "the attention parents give to their children's performance, the student's family environment, motivating factors, the student's learning strategies, and the teacher's teaching style." These are important elements to consider when addressing group integration, where cognitive, communicative, and axiological skills should be deepened, fostering critical thinking and student independence. The implementation of a periodic tutor training programme for teachers is a process that should be applied (Yangali et al., 2020).

Table 6 Relationship Between the Comprehensive Tutorial System and Academic Performance

	Category	Frequency	V ₂ . Academic Performance				Total
			Deficient	Regular	Good	Excellent	
V ₁ . comprehensive tutorial system.	Insufficient	f _i	-	13	6	-	19
		%	-	3,8%	1,8%	-	5,6%
	Acceptable	f _i	4	149	110	1	264
		%	1,2%	43,6%	32,2%	0,3%	77,2%
	Excellent	f _i	-	36	23	-	59
		%	-	10,5%	6,7%	-	17,3%
Total	f _i	4	198	139	1	342	
	%	1,2%	57,9%	40,6%	0,3%	100%	
Statistical measures:							
	V ₁ .		$\bar{X} \pm S = 25,5 \pm 6,5$			CV% = 25,6 %	
	V ₂ .		$\bar{X} \pm S = 13,3 \pm 1,4$			CV% = 10,7 %	
Correlation analysis:			rho = - 0,022			p-value = 0,684	

Source: Application of the questionnaire, Google Forms, May-October 2023; academic records, April 2024

La Tabla 6 muestra que el 77,2% de los estudiantes percibieron que el sistema tutorial integral fue aceptable, para el 17,3% consideraron como excelente al acompañamiento y apoyo por parte de sus tutores, sin embargo, para el 5,6% fue insuficiente. También se observa que el 57,9% tuvieron un rendimiento académico regular, para el 40,6% fue bueno, para el 1,2% fue deficiente y para el 0,3% fue excelente. Desde una perspectiva bidimensional, se observa que el 43,6% de los estudiantes que percibieron el sistema tutorial integral como aceptable tuvieron un rendimiento académico regular. En tanto que, el 32,2% con una percepción aceptable del sistema tutorial tuvieron un rendimiento académico bueno, y para el 10,5% que percibieron el sistema de tutoría como excelente alcanzaron un regular rendimiento académico. El puntaje promedio para el sistema tutorial integral fue aceptable ($25,5 \pm 6,5$), con una variabilidad homogénea del 25,6% y respecto al rendimiento académico, se obtuvo un puntaje promedio regular ($13,3 \pm 1,4$), con un bajo porcentaje de variabilidad del 10,7%. La correlación entre el sistema tutorial integral y el rendimiento académico fue negativa muy baja ($\rho = - 0,022$), con p-valor de 0,684, que es superior al 5%. Por lo tanto, con un 95% de confianza, no hay suficiente evidencia para aceptar la Hipótesis de que existe una correlación significativa entre las variables. Figura 1. Significa que la mayoría de los estudiantes consideraron el sistema tutorial integral como aceptable, y la mayoría presentó un rendimiento académico regular. Sin embargo, la correlación entre el sistema tutorial integral y el rendimiento académico fue muy baja y no significativa, indicando que la percepción del sistema tutorial no está directamente relacionada con el rendimiento académico de los estudiantes. Es probable que otros factores influyan en el desempeño académico.

Figura 1 Relación Entre El Sistema Tutorial Integral Y El Rendimiento Académico

Source: Application of the questionnaire, Google Forms, May-October 2023; academic records, April 2024

Conclusions

This study has several limitations that should be considered. Firstly, it was conducted with a specific sample of students from the National University of San Martín, which limits the generalisability of the results to other institutions or educational contexts. Additionally, the analysis focused on students' perceptions of the tutorial system, professional guidance, and social integration, without delving into other contextual or individual factors that could influence academic performance, such as motivation, family support, or access to educational resources. This study fills an important gap in the academic literature by exploring the relationship between the tutorial system and academic performance, a topic that has been little addressed in previous studies within the Peruvian university context. Furthermore, it offers a novel approach by including variables such as social integration in the class group and professional guidance, areas that have been insufficiently explored in previous research on academic performance.

In terms of relevance, the findings of this work are significant for educational institutions seeking to improve students' academic performance through tutoring programmes. The lack of a significant correlation between the tutorial system and academic performance suggests that these initiatives need to be rethought, focusing on other aspects that may have a greater impact on academic achievement. For future research directions, it is recommended to explore additional factors that could influence academic performance, such as intrinsic and extrinsic motivation, the use of educational technologies, mental health, and the socio-economic environment of students. Comparative studies between different universities or countries would also be relevant, allowing for the identification of more general trends and variations in the influence of tutoring systems on academic performance. Additionally, future research could focus on designing more comprehensive student tutoring models that combine professional guidance, psychological support, and innovative pedagogical strategies that meet the current needs of university students.

References

- Álvarez Gómez, Sharon Diznarda, Ariel José Romero Fernández, Jesús Estupiñán Ricardo, Dionisio Vitalio Ponce Ruiz, Sharon Diznarda Álvarez Gómez, Ariel José Romero Fernández, Jesús Estupiñán Ricardo, y Dionisio Vitalio Ponce Ruiz. 2021. «Selección del docente tutor basado en la calidad de la docencia en metodología de la investigación». *Conrado* 17(80):88-94.
- Arco-Tirado, Jose, F. Fernandez, y Miriam Hervás Torres. 2019. «Evidence-based Peer Tutoring Program to Improve Students Performance at the University». *Studies in Higher Education*. doi: 10.1080/03075079.2019.1597038.
- Azlan, Nor, Mohamad Endut, Shamsul Ibrahim, y Aida Anuar. 2020. «Effectiveness of Peer Tutoring in Elevating the Academic Performance of KUPTM Students». *Jurnal Evolusi* 1. doi: 10.61688/jev.v1i2.19.
- Barceló-Cerdá, María Luisa, Ernesto López-Gómez, Belén Poveda-García-Noblejas, y Inmaculada Rodríguez Gómez. 2024. «La aplicación del aprendizaje cooperativo en la universidad de acuerdo con la percepción de los estudiantes de Magisterio». *EDUCAR* 60(2):553-68. doi: 10.5565/rev/educar.2074.
- Bell, Judith. 2014. *Doing Your Research Project: A Guide for First-Time Researchers*. McGraw-Hill Education (UK).
- Capelari. s. f. «El rol del tutor en la Universidad». Editorial Sb. Recuperado 16 de agosto de 2024 (<https://www.editorialsb.com/product-page/el-rol-del-tutor-en-la-universidad>).
- Di Vita, Alessandro, Florencia Daura, María Montserrat, y María Montserrat. 2021. «La tutoría universitaria entre Latinoamérica y Europa: el caso de la Universidad Austral (Argentina) y el de la Universidad de Estudios de Palermo (Italia)». *Revista Panamericana de Pedagogía*. doi: 10.21555/rpp.v0i31.2123.
- Drago, Anthony, David Rheinheimer, y Thomas Detweiler. 2016. «Effects of Locus of Control, Academic Self-Efficacy, and Tutoring on Academic Performance». *Journal of College Student Retention: Research, Theory & Practice* 19. doi: 10.1177/1521025116645602.
- Garcés, Dora Alexandra Poveda, Carlos Rene Flores Murillo, Leonor Georgina Pazmiño Robles, y Shulay Pamela Yaguar Gutiérrez. 2023. «Factores que influyen en el desempeño académico universitario». *RECIAMUC* 7(1):381-89. doi: 10.26820/reciamuc/7.(1).enero.2023.381-389.
- García, Alex Estrada. 2018. «Estilos de aprendizaje y rendimiento académico». *Revista Boletín Redipe* 7(7):218-28.
- García, José Luis Aguilera. 2019. «La tutoría universitaria como práctica docente: fundamentos y métodos para el desarrollo de planes de acción tutorial en la universidad». *Pro-Posições* 30:e20170038. doi: 10.1590/1980-6248-2017-0038.
- Guerra Perez, Jessica. 2022. «Propuesta de gestión de las TIC para mejorar el rendimiento académico secundario en La Banda de Shilcayo, 2022». *Repositorio Institucional - UCV*.
- Guerra-Martín, María Dolores, y Álvaro Borrallo-Riego. 2018. «Tutoría y rendimiento académico desde la perspectiva de estudiantes y profesores de Ciencias de la Salud. Una revisión sistemática». *Educación Médica* 19(5):301-8. doi: 10.1016/j.edumed.2017.03.019.

- Hanham, José, Chwee Beng Lee, y Timothy Teo. 2021. «The influence of technology acceptance, academic self-efficacy, and gender on academic achievement through online tutoring». *Computers & Education* 172:104252. doi: 10.1016/j.compedu.2021.104252.
- Herrera Gomez, Norman. 2019. «Estrategias metodológicas humanísticas para mejorar las relaciones interpersonales de docentes y estudiantes de la Universidad Nacional de San Martín – Tarapoto». Repositorio - UNSM.
- Humberto, Luis. 2018. «Concepción de la tutoría universitaria: metodología constructiva para el desarrollo educativo».
- Jiménez, Patricia Costa, Juan Pedro Martínez Ramón, Cecilia Ruiz Esteban, y Inmaculada Méndez Mateo. 2020. «Análisis de la orientación académica y profesional en Educación Secundaria y su adaptación al alumnado con necesidad específica de apoyo educativo. *Revista Electrónica Interuniversitaria de Formación del Profesorado* 23(1). 10.6018/reifop.373701.
- Kerlinger, F. N. 1966. *Foundations of behavioral research*. Holt, Rinehart and Winston: New York.
- Kim, Son Chae, Regina Jillapali, y Shawn Boyd. 2021. «Impacts of peer tutoring on academic performance of first-year baccalaureate nursing students: A quasi-experimental study». *Nurse Education Today* 96:104658. 10.1016/j.nedt.2020.104658.
- Martínez Clares, Pilar, Javier Cusó, y Mirian Martínez Juárez. 2018. «Aplicación de los modelos de gestión de calidad a la tutoría universitaria». *Revista Complutense de Educación* 29. 10.5209/RCED.53541.
- Martínez Clares, Pilar, Francisco Javier Pérez Cusó, y Mirian Martínez Juárez. 2017. «Aplicación de los modelos de gestión de calidad a la tutoría universitaria». *Revista Complutense de Educación* 29(3):633-49. 10.5209/RCED.53541.
- Martínez Clares, Pilar, Javier Pérez Cusó, Natalia González Morga, Cristina González Lorente, Mirian Martínez Juárez, Pilar Martínez Clares, Javier Pérez Cusó, Natalia González Morga, Cristina González Lorente, y Mirian Martínez Juárez. 2020. «La Tutoría universitaria vista por sus alumnos: Propuestas de mejora». *Revista de la educación superior* 49(195):55-72. 10.36857/resu.2020.195.1251.
- Moreno, Ángel, y Flor Barrera. 2021. «Implementación y retos de la tutoría integral: indicadores y percepción de estudiantes en tres universidades del norte de México». *Revista Latinoamericana de Estudios Educativos* 51:201-30. 10.48102/rlee.2021.51.3.393.
- Pinchi Vasquez, Anibal. 2019. «Asertividad docente y rendimiento académico de los estudiantes de la Escuela Profesional de Contabilidad en la Universidad Nacional de San Martín, Tarapoto 2017».
- Prada, Miguel, Manuel Dominguez, Jose Lopez Vicario, Paulo Alves, Marian Barbu, Michal Podpora, Umberto Spagnolini, Maria Pereira, y Ramon Vilanova. 2020. «Educational Data Mining for Tutoring Support in Higher Education: A Web-Based Tool Case Study in Engineering Degrees». *IEEE Access* 8:212818-36. 10.1109/ACCESS.2020.3040858.
- Sánchez, Lina María Martínez, Francisco Conejo Carrasco, y Astrid Viviana Rodríguez Sierra. 2017. «La Acción Tutorial Como Experiencia Educativa Para La Formación Integral de Los Estudiantes de Medicina». *Actualidades Investigativas En Educación* 17(3).
- Villacrez, Willy Saavedra. 2015. «Propuesta de un Sistema de Tutoría Universitario». *UCV-Scientia* 7(2):114-20.
- Walliman, Nicholas. 2021. *Research Methods: The Basics*. 3.a ed. London: Routledge.
- Wong, Kai Wai. 2024. «Step by Step Creation Logics». *Open Journal of Philosophy* 14(01):93-99. 10.4236/ojpp.2024.141008.
- Yangali Vicente, Judith Soledad, Kriss Melody Calla Vázquez, Herminio Teófilo Camacho Conchucos, Liria Soca Saavedra, Nestor Cuba Carbajal, y José Ruiz Tejada. 2020. «Implementación del programa de fortalecimiento de tutoría universitaria en la mejora de la calidad educativa en una universidad peruana». *Revista Inclusiones: Revista de Humanidades y Ciencias Sociales* 7(Extra 19 (octubre-diciembre)):75-96.
- Zubiaur Alejos, Miguel Angel. 2021. «Efectividad de la tutoría desde la percepción del estudiante en riesgo académico de una universidad nacional». Repositorio Institucional - UCV.