INFLUENCE OF DIGITAL SKILLS ON THE ACADEMIC PERFORMANCE OF UNIVERSITY STUDENTS: A SOCIOECONOMIC APPROACH

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ABSTRACT

Purpose: Analyzing the influence of digital competencies on the academic performance of university students through a socioeconomic approach.

Theoretical framework: Theories associated with digital competence, academic performance and the influence of socioeconomic factors were addressed.

Method: A mixed Ditriac-type approach was applied, with a non-experimental and cross-sectional design, where the total population was 1215 university students and the probabilistic sample for the survey was 292 students and the non-probabilistic sample for the interview was 29 students who served to collect quantitative and qualitative data respectively. Quantitative data were obtained through the COMPDIPED instrument of digital competence in pedagogy, whose reliability was assessed by Cronbach's Alpha coefficient $\alpha = 0.911$ and academic performance was evaluated through documentary analysis of the institution's academic records, which were then processed in SPSS, and qualitative data were analyzed with Atlas.ti software considering 15 codes, 10 sub categories and 6 categories, also taking into account the socioeconomic aspect throughout the process, from the selection of participants to the interpretation of the results.

Results and conclusions: The results support a moderate degree of positive correlation of digital competencies and academic performance with an $r_s = 0.546$ and with a significance level $p = 0.000$, where with respect to the coefficient of determination it is shown that digital competency influences 30.5% on the academic performance of university students, while the remaining 69.5% is affected by other socioeconomic factors. Concluding that there is positive correlation and 30.5% of influence of digital competencies with respect to academic performance, where the remaining 69.5% is due to socioeconomic factors such as educational level in parents, economic level, work, sentimental relationship and the management of time dedicated to study.

Originality/value: To provide insight into students' perceptions on the management of digital competencies and their influence on academic performance, integrating socioeconomic aspects.

Keywords: Digital Literacy, Quality of Education, Performance, Society, Technology, University.

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INFLUENCIA DE LAS COMPETENCIAS DIGITALES EN EL RENDIMIENTO ACADÉMICO DE ESTUDIANTES UNIVERSITARIOS: UN ENFOQUE SOCIOECONÓMICO

RESUMEN

Objetivo: Analizar la influencia de las competencias digitales en el rendimiento académico de estudiantes universitarios, a través de un enfoque socioeconómico.

Referencial teórico: Se abordaron las teorías asociadas con la competencia digital, el rendimiento académico y la influencia de los factores socioeconómicos.

Método: Se aplicó un enfoque mixto del tipo Ditriac, con un diseño no experimental y transversal, donde la población total fue de 1215 estudiantes universitarios y la muestra probabilística para la encuesta fue de 292 estudiantes y la muestra no probabilística para la entrevista fue de 29 estudiantes que sirvieron para recopilar datos cuantitativos y cualitativos respectivamente. Los datos cuantitativos se obtuvieron a través del instrumento COMPDIG-PED de competencia digital en pedagogía, cuya confiabilidad fue valorada por el coeficiente Alpha de Cronbach α = 0.911 y el rendimiento académico fue evaluado mediante el análisis documental de los registros académicos de la institución, que luego se procesaron en SPSS, y los datos cualitativos se analizaron con el software Atlas.ti considerando 15 códigos, 10 sub categorías y 6 categorías, teniendo en cuenta también el aspecto socioeconómico a lo largo de todo el proceso, desde la selección de participantes hasta la interpretación de los resultados.

Resultados y conclusiones: Los resultados respaldan un grado de correlación positiva moderada de las competencias digitales y el rendimiento académico con un rs = 0,546 y con un nivel de significancia p = 0,000, donde respecto al coeficiente de determinación se demuestra que la competencia digital influye en un 30,5% en el rendimiento académico de los estudiantes universitarios, mientras que el 69,5% restante se ve afectado por otros factores socioeconómicos. Concluyendo que existe correlación positiva y 30,5% de influencia de las competencias digitales respecto al rendimiento académico, donde el 69,5% restante se debe a factores socioeconómicos como el nivel educativo en los padres, nivel económico, trabajo, relación sentimental y el manejo del tiempo dedicado al estudio.

Originalidad/valor: Dar a conocer las percepciones de los estudiantes en el manejo de competencias digitales y su influencia en el rendimiento académico, integrando aspectos socioeconómicos.

Palabras clave: Alfabetización Digital, Calidad de la Educación, Rendimiento, Sociedad, Tecnología, Universidad.

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1 INTRODUCTION

Since the beginning of the 21st century society has been experiencing rapid changes in the way information is accessed, communicated and stored, where the almost unlimited availability of different sources of information requires people to learn new skills, because although technology on its own does not produce a change in learning methods, it does facilitate to find new ways of knowledge and ways of interacting in certain social environments (López & Sevillano, 2020).

In 2006 in Europe the concept of digital competence is mentioned for the first time and eight skills essential for continuous learning are identified, with the aim of exploring new techniques and trends that promote the development of these competences related to Information and Communication Technologies (ICT) where it includes mastery of basic computer software such as word processors, spreadsheet and database (Fernández, 2023). The Council of the European Union in 2018 reconsidered these measures that allowed recognizing
the preponderance of the digital competence of the educator as an essential component in the progress of the citizen (García et al., 2023).

In Spain, digital competence is considered a fundamental skill in today's society and a necessary condition to maximize technological application in the education sector, not limited to a single discipline, but covering different areas allowing students to obtain a more effective, attractive and inclusive learning, since it has become an essential requirement in today's society (Pascual et al., 2019). However, since it is the fundamental digital competence in teacher preparation, several studies show that it is not yet being implemented effectively and with excellence (Mañas & Gonzales, 2023).

Globalization and technological progress bring with it an urgent need to offer a quality education, where online study becomes an essential element to increase performance, although with the arrival of the pandemic, it has been found that, in Spain, changing education from face to virtual was rejected by 93% of university students, which highlights the inability of many institutions to meet the requirements for successful online education (Tejedor et al., 2020).

In addition to this, teachers must have a high level of digital competencies to be able to use a variety of technological resources in teaching, providing students with the skills and knowledge to work with computers and digital learning tools, where universities must equip both teachers and students with the right tools for online teaching, including devices that allow students to easily ask questions when learning (Huu et al., 2022).

According to UNESCO, digital literacy refers to the ability to adequately and meaningfully manage digital technologies to access, organize, understand, integrate, communicate, evaluate and create information, including computer, ICT and media skills, in order to further empower especially young people to have a critical view towards the use of technology and acquire certain skills (UNESCO, 2023).

With regard to Latin America and the Caribbean, there are thirty-three states, in which only twenty-nine have implemented a strategy to support the continuation of education, mainly using distance learning. In addition, 26 countries have taken advantage of the internet as a learning tool, allowing their citizens to access educational material online, while 24 nations have designed a form of remote teaching, making use of active connection (ECLAC, 2020).

The digital revolution has revealed the urgent need to seek improvements in Latin America regarding education, specifically in the university order, where this demand has been even more evident during the COVID-19 pandemic, a historical event that has impacted education and humanity, where it has been shown that the needs arising from the health crisis also represent an opportunity to address the pending issues of digital transformation and educational innovation in Latin American universities (Cáceres & Gómez, 2023).

Increasingly, ICTs play an important role in the education of university students, since, thanks to these digital tools, learning is no longer limited to being only in real time, but educational institutions are progressively adopting asynchronous or combined teaching models, where in the Peruvian context, these new forms of learning are a reality in the educational environment, being forced to incorporate and use digital resources in their teaching processes, with the purpose that they can strengthen digital competences (Orosco et al., 2021).

Virtuallity has introduced numerous topics, such as the optimization of teaching techniques, the approach to online education and the mental health of both students and teachers, addressing the problem of dropout in the semester and also analyzing possible improvements taking full advantage of technology, encouraging the creativity of teachers in developing online teaching models and discovering new forms of teaching for learners (Figallo et al., 2020).

Currently, online education as a method to teach at the higher level has been significant, as it has brought about important changes in various institutions, mainly in private universities, which have managed to adapt optimally thanks to the development of technological tools for
virtual education, although there is still a risk in terms of the quality of education due to the existence of a gap between those students with better socio-educational contexts who can access virtual classes and those who cannot (Bazán et al., 2020).

Given that technology is advancing rapidly, it is of the utmost importance that graduates of university careers have a solid understanding of digital competences and before that, a last study concludes that a large number of university students are not adequately prepared to face the demands of today, revealing that students at 25.9% have a high level of development, while almost 74% is at a medium or low level of development, so they would not be in an ideal situation to find a job according to labor demand (Tassara et al., 2023).

At present, the advancement of digital competence is a crucial and immediate challenge, which constitutes a growing area within educational research, where a group of outstanding students with limited economic resources, belonging to the government scholarship program "Beca 18" in Peru, demonstrate a broad vision of digital competences, which goes beyond the merely technical and includes creativity and innovation as fundamental factors (Suarez et al., 2020). ICTs form a key socio-cultural role in society, being necessary to reflect on how digital media are transforming communication and how intuitive interfaces of ICTs can expand skills and create new forms of interaction, being part of a constant process of appropriation and technological convergence (Mateus & Suárez, 2017).

Salguero et al. (2024) who inspected the relationship between digital competence and academic performance statistically evaluated in higher education students, where the results confirmed a perfect positive correlation between both variables, suggesting that a good mastery of digital skills is associated with adequate academic performance. Ramirez et al. (2022) where the reason for their article was to decree the association of digital competence and academic performance developed in students of a technical educational entity in Peru, where they concluded that there is a connection between digital skills and academic performance, where those students who have a greater management of digital competences, will have a higher academic performance.

Universities in Ancash must be more consistent with the cultural and sociocultural diversity of the region and the country, where to do so, they must adopt an intercultural perspective in their governance and in the training of their students, including the management of digital competences, making it necessary that all universities in the region adopt an intercultural and inclusive education in all careers, to train competent professionals in a plural environment (Julca et al., 2023). In his study Muelle (2019) highlights the relevance of the social environment of the educator and other factors such as repetition of courses, mother tongue and irregular attendance can contribute to inequalities to access educational resources and affect academic performance. Also students face new situations other than school, which can be a challenge to adapt, as they must develop new habits, exposing them to multiple demands that can affect their health, mainly stress (Cassaretto et al., 2021).

Another of the main problems related to digital competence and academic performance is the access and management of ICT in students, where although access to technological devices has been increasing in Peru in recent years, there are still significant differences between different areas, as well as between different socioeconomic levels, which may affect the progress in digital competence, since not all students have the same opportunities to acquire the necessary skills and knowledge (Anaya et al., 2021).

The low academic performance in university students is influenced by a variety of social factors, including family, personal, school, health and labor factors (Cano & Robles, 2018). In particular, poor academic performance may be related to inadequate teaching processes and the lack of intrinsic motivation (Tacilla et al., 2020). In addition, social adaptability and interpersonal values can also play a prominent role in academic performance, where positive expectations can indirectly influence academic performance, by increasing motivation because...
a student who has high expectations often demonstrates greater commitment in their studies and greater effort to achieve the best achievements. (Ledesma & Cobos, 2023)

The overall purpose of this research was to analyze the influence of digital competences on the academic performance of university students, through a socioeconomic approach. Specific objectives were also set to determine the level of digital competences and academic performance of university students, identify the relationship between digital competences and academic performance of university students, identify challenges and difficulties related to the development of digital competences and their impact on academic performance and analyze the influence of socioeconomic factors on academic performance.

The theoretical justification of this study focuses on the relevance of digital competences in the current educational environment and thus understand how digital skills impact educational performance, highlighting the other socioeconomic factors as well. Methodologically, because it is a mixed design, it is suggested as the most appropriate to investigate how digital competences influence academic performance in university students considering also their socioeconomic factors. Finally, from a social perspective, this study aims to contribute to the improvement of academic performance of university students through the growth and strengthening of their digital skills and improvement in related socioeconomic factors. Therefore, this research seeks to analyze how socioeconomic factors such as parents' educational level, income, student work, student sentimental relationship and time spent on study can influence the advance of digital competencies and therefore on the performance of university students, reaching a fuller explanation of how digital skills and socioeconomic factors interact and affect student academic performance.

2 FRAMEWORK

2.1 Digital Competence

In his study, Vuorikari et al. (2022), argue that digital competence comes to be a fundamental skill for people today, involving responsibility and security in the handling of digital technology, as well as equality of being able to participate in various social sectors covering research and management of relevant information, communication and digital connection, as well as content creation, including aspects of security, such as digital well-being and cybersecurity, in addition to solving incidents according to the requirements, where five dimensions or key aspects that make up this competence have been identified.

Digital competence can be divided into three levels according to the level of skill and knowledge they have considering at the basic level when students have a basic knowledge in the use of common computer and technological tools, such as the operation of a computer, the use of web browsers, the creation and editing of documents in office programs. At the intermediate level, students have more advanced knowledge in the use of ICT and can use more complex and specialized tools. Finally, at the advanced level, students maintain a complete management of ICT and can efficiently use a wide range of tools and technologies being able to create and manage online content, use programming tools and web development, and apply advanced techniques and strategies of search and evaluation of information (Rodríguez et al., 2019).

Digital competence refers to understandings and skills related to technology, which must be acquired mainly in higher education, which must be based on a wide network of technological literacy, but with a practical approach (Moscoso et al., 2023). According to research by Ocaña et al. (2020), it has been demonstrated that digital competences have a primary role in higher education, being essential to achieve digital literacy of students, which implies a technological skill necessary to manage and take advantage of technological tools,
where for this new panorama to be viable, it is necessary that the teaching staff be at the level of the challenge implied by the technological change demanded by the current moments.

2.2 Academic performance

It is a constantly changing process that reflects progress in learning, depending on the skill and dedication of the student, which is influenced by the teaching received and is defined as the result of the skills that facilitate success during their period of study, reflected in a final note that measures their level of knowledge acquired and commonly considered as an indicator of the individual skills and intelligence of the student in their academic activities (Quispe, 2023).

Theorists have not reached an agreement in relation to the concept and explanation of the term academic performance, so it has been defined in different ways, such as the achievement of the defined purposes in the area, the development of competencies in different educational situations, the average score and the percentage value of students approved, where others see it as the development of competencies in different educational situations (Tacilla et al., 2020).

Academic performance is influenced by several factors, meaning that there are multiple causes that can explain variations in it, where in general, these factors can be classified as internal, that is, those that are directly related to the student (such as their age or health status), or external (such as the relationship with teachers and peers, university quality, etc.), where it is important to note that these factors do not have the same importance, since it has been observed that internal factors are those that most affect the performance of university students (Martínez & Ferreira, 2023).

2.3 Socio-economic factors

It is essential to take into account socioeconomic aspects such as coexistence with parents, partners or friends; educational level of parents; economic dependence of parents; monthly income; availability of technology at home; the means of transport used; whether the student works and his employment situation; personal relationships, especially with the couple; the administration of free time; and if they read for pleasure, where these factors can influence the use, being important to consider the relationships that the student has with his family, partner, friends and teachers (Araiza, 2021).

A crucial factor in the failure rates is the need for many students to work to pay for their studies, which limits the time to review or advance topics, because it prevents them from attending reinforcement classes or counseling offered by the institution, where the lack of time devoted to study in a competency-based approach affects the ability to assimilate concepts only through face-to-face classes, as it requires research and search for additional information, also counting that if the student is not motivated, their performance may be affected in a course (López et al., 2022).

There are many circumstances that can impact academic performance, such as your mental health at present, your employment situation and time spent studying, as well as the number of hours spent daily on social networks (Wan Abdul Razak et al., 2021). According to international indicators, Peru lags behind in terms of digital advancement, where inequity in access to the Internet and digital skills limit student learning where, unfortunately, equality is not a guiding principle in education policies in Peru during the health crisis, there is a risk that if appropriate measures are not implemented the digital divide will widen even more (Chuco, 2021).
3 METHOD

This research consisted in carrying out a type of study with a mixed research approach of the Ditriac type where simultaneously (concurrent) quantitative and qualitative data were collected and analyzed, the design was non-experimental and cross-sectional, where the population was composed of 1215 university students belonging to a private university of Nuevo Chimbote - Ancash - Peru.

For quantitative analysis, a probabilistic sample of 292 students was defined by applying a survey to respond to the COMPDIG-PED instrument of digital competence in pedagogy (Silva et al., 2022), structured in 5 dimensions and 30 items, whose reliability was assessed by the Cronbach's Alpha coefficient $\alpha = 0.911$, when a pilot test of 30 students was applied and academic performance was evaluated by documentary analysis of the academic records of the institution, where then using the SPSS version 27 software the Kolmogórov-Smirnov normality test was applied because it was a major sample 50 participants, where it was obtained that the data did not respond to a normal distribution, applying the Spearman Rho test to define the degree of relationship of the variables and then with respect to the coefficient of determination the influence of digital competence in the academic performance of university students was demonstrated.

Regarding the qualitative analysis, a non-probabilistic sample of 29 students was defined considering those who had the lowest averages in their academic performance applying the technique of intentional sampling, in which the person in charge of the research uses his own judgment to choose each participant who was part of the study (Feehan et al., 2022). A semi-structured interview with 15 questions aligned to the 15 codes, 10 sub-categories and 6 categories was applied to the sample, whose answers were subsequently analyzed using the Atlas.ti software, also taking into account the socioeconomic aspect throughout the process, from the selection of participants to the interpretation of the results.

4 RESULTS AND DISCUSSIONS

4.1 Quantitative analysis

![Figure 1. Level of digital competence in university students. Note. SPSS V.27](image-url)
Figure 1 shows that in the sample established for the analysis of quantitative data made up of 292 university students, 56.51% consider that the level of digital competences they possess is at an intermediate level and the other 43.49% consider that this level is advanced.

In Figure 2, reviewing the academic records of the 292 university students, it can be found that 58.22% is at a good level in their academic performance, another 29.45% is at a regular level and deficiently a minimum of 12.33%.

Table 1. Degree of correlation between digital competence and its dimensions with respect to academic performance.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Academic performance</th>
<th>Spearman’s coefficient</th>
<th>Rho gl</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Competence</td>
<td></td>
<td>0.546</td>
<td>292</td>
<td>0.000</td>
</tr>
<tr>
<td>Information and data management.</td>
<td></td>
<td>0.489</td>
<td>292</td>
<td>0.000</td>
</tr>
<tr>
<td>Communication and collaboration</td>
<td></td>
<td>0.533</td>
<td>292</td>
<td>0.000</td>
</tr>
<tr>
<td>Digital Content Creation</td>
<td></td>
<td>0.450</td>
<td>292</td>
<td>0.000</td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td>0.514</td>
<td>292</td>
<td>0.000</td>
</tr>
<tr>
<td>Troubleshooting</td>
<td></td>
<td>0.456</td>
<td>292</td>
<td>0.000</td>
</tr>
</tbody>
</table>

In Table 1, it is considered that there is a moderate positive connection of digital competences and academic performance in university students, with a value Rho = 0.546 obtained by an inferential analysis, where when determining the significance of this relationship, a value of 0.000 was obtained, this value being much lower than the threshold of 0.01, thus confirming the hypothesis raised, which affirmed a highly significant relationship between both variables. Similarly with respect to the relationship between each dimension of the variable digital competence with respect to the second variable academic performance can
be inferred that there is a highly significant correlation (less than 0.01) and a moderate positive level of correlation in each of the cases.

**Table 2. Level of Influence of Digital Competence on the Academic Performance of University Students**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>Square R</th>
<th>Adjusted Square R</th>
<th>Standard error of estimation</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.552</td>
<td>.305</td>
<td>.303</td>
<td>2.298</td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Digital Competence.

**Note.** SPSS V.27

Table 2 shows that digital competence affects the academic performance of university students by 30.5%, with 69.5% being influenced by other factors.

### 4.2 Qualitative analysis

Data were obtained about the 15 codes, 10 subcategories and 6 categories used in the research, where the questionnaire was applied by the researcher.

**Category 1: Information and data management**

**Subcategory 1.1: Information search and evaluation**

Code 1.1.1: Use of Academic Databases: Students often encounter challenges in navigating and efficiently using academic databases due to a lack of training in these tools, where reliable and relevant sources of information such as Scopus, WOS, SciELO, ScienceDirect, Google Scholar and ProQuest are essential for developing solid research. However, many university students may face difficulties when using academic databases, either due to lack of knowledge of how to search properly or due to lack of access to these platforms, where those who manage to master these skills often report better performance in research and academic task-making.

Code 1.1.2: Critical Evaluation of Online Sources: In the age of digitization, it is common for students to turn to online sources for information, but not all of these sources are reliable, so it is essential to develop critical evaluation skills to discern between true and false information where students commonly turn to SCImago Journal Rank which is used to know the impact of scientific journals through the number of references in other media and relevant publications, being that students who develop these skills tend to produce higher quality jobs and have better academic performance.

**Category 2: Communication and collaboration**

**Subcategory 2.1: Online collaboration**

Code 2.1.1: Teamwork through collaborative tools: At present, it is increasingly common for academic projects to be carried out in a team and often in a virtual way, being relevant to use collaborative tools that facilitate communication and joint work between team members, where those who manage to master these tools often report better collaboration and performance in group projects, commonly using collaborative tools such as Google Docs, Trello, Skype and Zoom.

Code 2.1.2: Participation in Online Collaborative Projects: Online collaborative projects can present challenges, such as coordinating schedules, distributing tasks, and communicating efficiently, where students who adapt to these environments often experience an increase in their academic performance and serve to enhance productivity and efficiency in teamwork.

**Category 3: Digital content creation**

**Subcategory 3.1: Multimedia production**

Code 3.1.1: Editing images and videos for academic presentations: When creating digital content, the use of images and videos can be a valuable weapon to achieve an improvement in the presentation of information being the most used by Adobe Photoshop, CorelDRAW, Filmora and VEGAS Pro. However, not all students have knowledge of editing.
these types of materials, but students who develop these skills often produce more engaging, higher-quality work.

Code 3.1.2: Creating multimedia presentations for university projects: Multimedia presentations can be an attractive way to present research results and university projects, the most commonly used being Canva, Prezi, Visme and Animaker. However, their development requires specific digital skills and knowledge, where students who master these skills often report improved performance in project presentations.

Category 4: Security
Subcategory 4.1: Online safety
Code 4.1.1: Knowledge of Safe Internet Practices for Academic Research: Many students are unfamiliar with safe Internet practices, which can put their online security at risk, although students who develop a solid knowledge of safe Internet practices often report increased confidence in their online academic work by always having up-to-date antivirus software such as Avast, Kaspersky, Norton, McAfee, and Bitdefender.

Code 4.1.2: Managing privacy and data security when using university platforms: Students can face challenges when using university platforms where they have their data stored so many back up their data by performing regular backups and storing them in the cloud, with the most used being Google Drive, Dropbox and OneDrive, where those who manage to master these skills often report greater confidence in their use of university platforms.

Category 5: Troubleshooting
Sub-category 5.1: Implementing digital solutions
Code 5.1.1: Applying Digital Knowledge to Solve Complex Academic Tasks: To address complex academic challenges, it is necessary to apply digital knowledge in various areas, such as finding information, creating multimedia content, and online teamwork, where learners who develop these skills often report improved academic performance.

Code 5.1.2: Adapting to new tools and digital environments to address academic challenges: With the constant advancement of technology, students can face the urgency of adapting to new tools and digital environments to face academic challenges, where those who manage to adapt often report greater flexibility and performance in their academic tasks, the best example being artificial intelligence that has recently been showing exponential development.

Category 6: Socio-economic factors
Code 6.1.1: Parents' school level: The higher the level in parents, the better academic performance of the university student can be expected.

Code 6.2.1: Student's economic level: Those with a higher economic level tend to perform better academically compared to those with low economic resources.

Subcategory 6.3: Influence of work on academic performance.
Code 6.3.1: Balance between work and study: Although work is important for acquiring experience and skills, it can affect a student's academic performance. It is often reflected in a decrease in time spent studying and lower academic achievement.

Subcategory 6.4: Influence of a sentimental relationship on academic performance.
Code 6.4.1: Personal relationships: When a university student enters a relationship, he spends less time studying compared to when he was single, therefore, it can be said that having a partner affects the time a student spends in his studies.

Subcategory 6.5: Importance of time management in education.
Code 6.5.1: Study time: When you have a lot of free time where you can go out or do leisure, it is common for you to be distracted or procrastinate rather than dedicate time to study,
therefore, we can say that if a university student has more free time, you are likely to spend less time studying.

5 FINAL CONSIDERATIONS

It can be concluded that there is a degree of correlation between digital competence and academic performance in students of a university in Ancash, where a moderate positive correlation is established according to the value of Spearman's Rho being highly significant and with respect to the coefficient of determination it is shown that digital competence influences 30.5% in the academic performance of university students, while the remaining 69.5% is affected by other socio-economic factors, where students have a predominant perception that digital competence is at an intermediate level (56.51%) and based on academic records it can be noted that academic performance is mostly considered good (58.5 22%).

University students face several challenges and difficulties in managing their digital skills, ranging from accessing and managing academic databases such as Scopus, WOS, SciELO, ScienceDirect, Google Scholar and ProQuest to critically evaluate online sources using SCImago Journal Rank, which is used to know the impact of scientific journals, having as another challenge to obtain a more solid and specific training in the handling of digital tools and collaborative platforms such as Google Docs, Trello, Skype and Zoom, as well as to be able to create digital content commonly using Canva, Prezi, Visme and Animaker, where the related to online security considers that must have updated software and scheduling periodic backups (Google Drive, Dropbox and OneDrive) to solve problems, having also at hand the new technological tools being the best example of artificial intelligence that has recently been showing an exponential development, where the lack of skills in these areas can significantly limit their ability to access quality information, collaborate effectively with their peers and protect their privacy and security in digital environments.

Regarding the influence of socio-economic factors on the academic performance of students, it is highlighted that the higher educational level in parents and better economic situation is reflected an improvement in academic performance, however, when the student works, has a relationship or dedicates much free time to go out or dedicate to leisure this will impact negatively causing their academic performance to decrease.

In conclusion, the management of digital competences is relevant for university students as well as socioeconomic factors, not only to improve their academic performance but also to prepare them for the labor market and digital society, so that educational institutions must provide adequate and continuous training in digital competences and take several measures to mitigate the socioeconomic factors that can influence low performance in university students.

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Influence of Digital Skills on The Academic Performance of University Students: A Socioeconomic Approach

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