ARTÍCULO ORIGINAL

# Academic procrastination in students at a private university in the Peruvian Amazon: A cross-sectional study

Procrastinación académica en estudiantes de una universidad privada de la

Amazonía peruana: Un estudio transversal

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# SUMMARY

Introduction: Procrastination is considered a fairly recurring behavior since ancient times, as people tend to postpone activities that are considered complex, not very motivating, stressful or that do not generate interest. Objective: To analyze academic procrastination in students from a private university in the Peruvian Amazon. Methods: The approach was quantitative, the design was non-experimental, and the type was descriptive and transactional. Academic procrastination was evaluated in 275 students of the Administration, Accounting, and Law careers by applying the Academic Procrastination Scale, an instrument with adequate psychometric properties. Results: It was found that the level of

DOI: https://doi.org/10.47307/GMC.2023.131.3.4

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Recibido: 19 de marzo 2023 Aceptado: 20 de julio 2023

academic procrastination of 41.8 % of the students was moderate, 34.6 % was high and 23.6 % was low. Likewise, the dimensions of academic self-regulation and postponement of activities were also valued at a moderate level. On the other hand, it was determined that some sociodemographic and academic variables were significantly associated with levels of academic procrastination. Conclusion: The students of a private university in the Peruvian Amazon were characterized by moderate levels of academic procrastination. Therefore, it is necessary to design psychoeducational programs aimed at developing skills such as academic self-regulation, time management and organization, and metacognitive strategies to students avoid delaying practices and develops their academic responsibilities in a timely manner.

**Keywords:** Academic procrastination, academic self-regulation, postponement of activities, university students, undergraduate, time management.

# RESUMEN

Introducción: La procrastinación es considerada una conducta bastante recurrente desde tiempos remotos, ya que las personas tienen la tendencia de postergar las actividades que son consideradas complejas, poco motivadoras, estresantes o que no les genera interés. Objetivo: Analizar la procrastinación académica en estudiantes de una universidad privada de la Amazonía peruana. Métodos: El enfoque fue cuantitativo, el diseño no experimental y el tipo, descriptivo transeccional. Se evaluó la procrastinación académica a 275 estudiantes de las carreras profesionales de Administración, Contabilidad y Derecho mediante

la aplicación de la Escala de Procrastinación Académica, instrumento con adecuadas propiedades psicométricas. Resultados: Se halló que el nivel de procrastinación académica del 41,8 % de los estudiantes era moderado, del 34,6% era alto y del 23,6 % fue bajo. Asimismo, las dimensiones autorregulación académica y postergación de actividades también fueron valoradas en un nivel moderado. Por otro lado, se determinó que algunas variables sociodemográficas y académicas se asociaron de manera significativa a los niveles de procrastinación académica. Conclusión: Los estudiantes de una universidad privada de la Amazonía peruana se caracterizaron por presentar niveles moderados de procrastinación académica, por ello, es necesario diseñar programas psicoeducativos orientados al desarrollo de habilidades como la autorregulación académica, la gestión y organización del tiempo y las estrategias metacognitivas para que los estudiantes eviten las prácticas dilatorias y desarrollen oportunamente sus responsabilidades académicas.

**Palabras clave:** *Procrastinación académica, autorregulación académica, postergación de actividades, estudiantes universitarios, pregrado, gestión del tiempo.* 

# INTRODUCTION

University education is characterized by generating an impact on the development of students due to the various changes and adaptations that arise during this formative period (1,2). In this sense, they must strive to achieve the necessary learning to continue with the professional career that they are studying and complete it satisfactorily (3). To achieve these objectives, they must develop a repertoire of habits that allow them to manage and organize their time, carry out their activities in an orderly manner, review the topics covered, prepare for presentations and exams, and timely carry out the tasks assigned by the teachers to obtain quality results (4,5). However, it is common to perceive that many students unnecessarily postpone carrying out the tasks and work previously indicated, which could cause problems at a personal, social, or academic level (6). This delaying behavior that manifests in students is called academic procrastination (7).

At a general level, procrastination is considered a highly visible behavior since ancient times (8), as people tend to postpone activities that they perceive as complex, not very motivating, stressful, or that do not generate interest (9). Etymologically, the term procrastinate comes from the Latin verb '*procrastinare*' which means to leave something for the next day (10). In this sense, the procrastinating person is characterized by avoiding activities, committing to develop them further later or justifying their postponement (11) and it manifests itself in many people, as well as in various circumstances.

In the case of academic procrastination, it was defined as the willingness people have to postpone or delay the start or completion of activities that must be carried out within a certain period (12). In this regard, there is empirical evidence that academic procrastination is associated with low levels of self-esteem, low self-confidence, and self-control, depression, inadequate time management, as well as anxiety, which could lead students to drop out of university (13).

Currently, it is argued that academic procrastination, in addition to being a time management problem, also implies a relation between cognitive, affective, and behavioral factors (14). Cognitive factors refer to a series of excuses or arguments that students offer to try to justify their delaying behaviors, affective factors are related to fear of failure, while behavioral factors are related to little attention and inconsistency between what they want to do and what they actually achieve (15). On the other hand, it is also stated that among the main causes that motivate students to procrastinate are the lack of attraction for the activities to be carried out, apathy, uncertainties and doubts about how to do it, and perfectionism (4).

From Schouwenburg's perspective (16), academic procrastination is classified into two types according to the frequency and magnitude with which it occurs: sporadic and chronic procrastination. Sporadic procrastination is known as delaying behavior and refers to a punctual way of acting and is associated with the postponement of certain academic activities mainly due to the poor time management in which students have to organize their activities. On the other hand, chronic procrastination is a widespread habit of delaying or postponing dedication to studies (17). Likewise, it is necessary to specify that academic procrastination is made up of two quite different factors (18). The first refers to academic self-regulation, which shows behaviors oriented towards achieving goals and planning activities, while the second is the postponement of activities, a factor that is the center of procrastinating behavior (19).

Some investigations analyze academic procrastination in university students and determined that the mentioned behavior occurred at moderate levels (20-22). In the same way, other investigations established associations between academic procrastination and sociodemographic and academic variables and determined that male students (3,23-25) who belonged to the younger age groups (3,10,26,27) tended to procrastinate to a greater extent than women and older people, respectively. However, it should be noted that these findings are not conclusive, so it is important to interpret them with caution.

The relevance of this research lies in the fact that it will be possible to identify the level of academic procrastination of the students, as well as the dimensions that make it up: academic self-regulation and postponement of activities. In the same way, it will be analyzed which sociodemographic and academic factors are associated with academic procrastination. Therefore, these findings will allow the formulation and execution of psychoeducational programs to decrease the levels of procrastination in students and make them function effectively during their professional training.

The objective of this research was to analyze academic procrastination in students from a private university in the Peruvian Amazon.

#### METHOD

The research had a quantitative approach, and the data collection was carried out to answer the research questions and statistics were used. Regarding the design, it was non-experimental, since the academic procrastination variable was not intentionally manipulated, but was observed as it occurred in its environment and then analyzed it. Regarding the type, it was descriptive-transactional, since the properties and characteristics of the study variable were described and because the data collection process was in a single moment (28).

The population consisted of 960 undergraduate students from a private university in the Peruvian Amazon and the sample was made up of 275 students, an amount that was determined through a non-probabilistic convenience sampling. Of the total number of participants, 61.1% were male and 38.9 % were female. Regarding the age group, 47.6 % were between 16 and 20 years old, 32.4 % were between 21 and 25 years old, 12.4 % were between 26 and 30 years old, and 7.6 % were over 30 years old. Regarding their professional career, 37.1% studied Law, 36 % in Administration, and 26.9 % in Accounting. Regarding the year of study, 27.6 % were in the first year, 21.8 % in the second year, 19.6% in the third year, 17.1% in the fourth year, and 13.8 % in the fifth year. Regarding the socioeconomic level, 68.7 % belonged to the medium level, 18.9 % to the high level, and 12.4 % to the low level (Table 1).

To obtain information regarding academic procrastination, the Academic Procrastination Scale was applied, which was designed by Busko (29) and adapted to the Peruvian context by Domínguez et al. (18). It consists of 12 items quantitatively rated using a 3-point Likert scale ranging from 1 (never) to 3 (always) and evaluates 2 dimensions: academic self-regulation (items 1 to 9) and postponement of activities (items 10 to 12). Its psychometric properties were also determined in a previous study by Estrada et al. (30), where it was established that the inventory had adequate levels of validity based on the content (Aiken's V= 0.922) and reliability ( $\alpha$ = 0.911).

Data collection was carried out in February 2023. For this, the respective permits were obtained from the corresponding university authorities. Subsequently, during a face-to-face meeting with the participants, the purpose was explained to them, their informed consent was requested, the respective guidelines were given, and the instruments were developed. This procedure lasted approximately 15 minutes. Finally, a database was created with the answers of the students.

To carry out the statistical analysis, the SPSS Software version 25 was used. The descriptive

#### ACADEMIC PROCRASTINATION

Variables	Sociodemographic and academic characteristics of the sample	n= 275	%
Sex	Male	168	61.1
	Female	107	38.9
Age group	From 16 to 20 years old	131	47.6
	From 21 to 25 years old	89	32.4
	From 26 to 30 years old	34	12.4
	Older than 30 years old	21	7.6
Professional career	Administration	99	36.0
	Accounting	74	26.9
	Law	102	37.1
Year of Study	First	76	27.6
	Second	60	21.8
	Third	54	19.6
	Forth	47	17.1
	Fifth	38	13.8
Socioeconomic level	Low	34	12.4
	Medium	189	68.7
	High	52	18.9

Sociodemographic characteristics of the sample

results were systematized through a figure and two tables, while the inferential results were obtained through the non-parametric Chi-Square test ( $X^2$ ), which allowed us to know if the levels of academic procrastination were significantly associated with the proposed sociodemographic and academic variables.

## RESULTS

According to Figure 1, the level of academic procrastination of 41.8 % of the students was moderate, 34.6 % was high, and 23.6 % was low. Regarding the academic self-regulation dimension, 42.2 % were located at the moderate level, 37.4 % at the high level, and 20.4 % at the low level. Regarding the postponement of activities dimension, 41.5 % were located at the moderate level, 32.7 % at the high level, and 25.8 % at the low level.

Table 2 shows that the behaviors associated with academic self-regulation that occurred less frequently were preparing in advance for exams, trying to complete assigned work as soon as possible, seeking help when they have trouble understanding something, and spending the time necessary in studying even when the subject is boring. In this sense, since they were not recurring behaviors, they affected the presence of academic procrastination in students.

According to Table 3, the behaviors associated with the procrastination of activities that occurred most frequently were procrastinating the coursework they do not like and when they had to do a task, they usually leave it to the last moment. The aforementioned behaviors would contribute to the presence of academic procrastination in students.

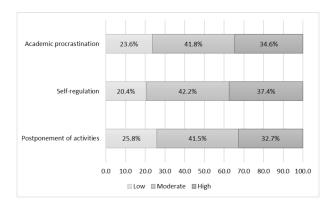


Figure 1. Descriptive results of the academic procrastination variable and its dimensions.

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Table	2
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Descriptive results of the items of the academic self-	regulation	dimension
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tems			Never		Sometimes		Always	
		n	%	n	%	n	%	
1.	I usually prepare for exams in advance.	94	34.2	128	46.5	53	19.3	
2.	When I have trouble understanding something,							
	I immediately try to get help.	66	24.0	121	44.0	88	32.0	
3.	I regularly attend classes.	22	8.0	86	31.3	167	60.7	
4.	I try to complete assigned work as soon as possible.	69	25.1	112	40.7	94	34.2	
5.	I constantly try to improve my study habits.	48	17.5	123	44.7	104	37.8	
6.	I invest the necessary time in studying even							
	when the subject is boring.	60	21.8	125	45.5	90	32.7	
7.	I try to motivate myself to keep up my study pace.	54	19.6	121	44.0	100	36.4	
8.	I try to finish my important work with time to spare.	50	18.2	150	54.5	75	27.3	
9.	I take the time to review my assignments before							
	delivering them.	43	15.6	79	28.7	153	55.6	

	Descriptive results of the items of the dimens	ion postpo	onement of	activities	5			
Items		Never		Son	Sometimes		Always	
		n	%	n	%	n	%	
10.	When I have to do a task, I usually leave it to the last							
	minute.	71	25.8	119	43.3	85	30.9	
11.	I postpone the work on the courses that I do not like.	55	20.0	101	36.7	119	43.3	
12.	I put off reading the courses I don't like.	88	32.0	121	44.0	66	24.0	

Table 3

In Table 4 it can be seen that the level of academic procrastination was significantly associated with the gender, age group, and socioeconomic level of the students (p<0.05). In this sense, it was determined that women, those between the ages of 16 and 20, and those with a high socioeconomic level had higher levels of academic procrastination compared to the other contrast groups.

## DISCUSSION

Academic procrastination is the voluntary and habitual delaying of activities for later and is characterized by short-term benefits and long-term costs. In recent years, the number of investigations on this problem has increased because it is a fairly frequent behavior in university students. However, it has serious repercussions on their development. For this of a private university in the Peruvian Amazon. In the first place, it was identified that the students were characterized by presenting

students were characterized by presenting moderate levels of academic procrastination. In other words, sometimes they used to unnecessarily postpone their academic activities (homework, readings, forums, exhibitions, etc.) and leave them for the last moment, which would be explained because they did not adequately manage their time and had not fully developed their study habits and some self-regulation and planning processes.

reason, in the present investigation, academic

procrastination was analyzed among students

The exposed finding coincides with that reported by a study carried out on Peruvian students from a private university, where they found that most of them (58.3 %) presented a moderate level of procrastination. They demonstrated self-regulation problems when it

#### ACADEMIC PROCRASTINATION

Sociodemographic	and academic		Acad	lemic pro	ocrastinatio	on		
variab	les	Low		Moderate		High		р
		f	%	b f	%	f	%	· ·
Sex	Male	33	19.6	72	42.9	63	37.5	0.001*
	Female	32	29.9	43	40.2	32	29.9	
Age group	From 16 to 20 years old	24	18.3	59	45.0	48	36.6	0.022*
	From 21 to 25 years old	22	24.7	37	41.6	30	33.7	
	From 26 to 30 years old	10	29.4	13	38.2	11	32.4	
	Older than 30 years old	9	42.9	6	28.6	6	28.6	
Professional career	Administration	24	24.2	41	41.4	34	34.3	0.055
	Accounting	18	24.3	30	40.5	26	35.1	
	Law	23	22.5	44	43.1	35	34.3	
Year of Study	First	18	23.7	33	43.4	25	32.9	0.083
	Second	15	25.0	25	41.7	20	33.3	
	Third	13	24.1	23	42.6	18	33.3	
	Forth	11	23.4	19	40.4	17	36.2	
	Fifth	8	21.1	15	39.5	15	39.5	
Socioeconomic level	Low	9	26.5	14	41.2	11	32.4	0.046*
	Medium	46	24.3	79	41.8	64	33.9	
	High	10	19.2	22	42.3	20	38.5	

Table 4
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Association between academic procrastination and sociodemographic and academic variables

\* Statistically significant association.

came to fulfilling their academic responsibilities, so they left them for the last minute (31). Likewise, it is related to a study also carried out in Peru, which found the prevalence of academic procrastination in students of the professional career of Psychology from two private universities and concluded that there was a partially significant prevalence (1). On the other hand, it is related to what was reported in an investigation carried out in Australia, in which they found that university students manifested moderate levels of academic procrastination (20).

Academic procrastination may be due to a late start of the assigned activities and the appearance of distractors during their development (32). This situation would be associated with some personality factors such as impulsivity and preference for short-term gratifications, deficiencies in planning and selfregulation, low levels of self-efficacy, fatigue, and low energy (10,33). Likewise, it is argued that academic procrastination is a fairly complex phenomenon that develops over time and in interaction with situational, social, contextual, cultural, and even organizational factors (34).

The gender of the participants was also found to be significantly associated with levels of academic procrastination. In this sense, males were characterized by presenting higher levels of academic procrastination than females. This is because women tend to present skills that allow them to manage time and, therefore, procrastinate less frequently than men, who are characterized by being more impulsive and having developed lower levels of self-control (35). Some investigations corroborate the exposed finding (3,25). However, it should be noted that there are controversies in the scientific literature because the results focused on the association between gender and procrastination levels are not entirely conclusive (12,36).

Similarly, it was found that the age group to which the students belonged was significantly associated with levels of academic procrastination. In this sense, it was identified that the youngest students, with ages ranging between 16 and 20 years, were characterized by presenting slightly higher levels of academic procrastination than older students. This would be explained because students older than 21 years old have greater control over their impulses, during their university education they developed some study habits and learned to manage their time to obtain good grades and graduate as soon as possible. Several investigations support what was reported in the present investigation since they found that academic procrastination was inversely associated with the age of the students (3,10,26,27).

On the other hand, it was determined that the socioeconomic level to which the students belonged was significantly associated with the levels of academic procrastination. According to the foregoing, students who reported belonging to a high socioeconomic level had slightly higher levels of academic procrastination than students of medium and low socioeconomic levels. This is due to the fact that a large part of the students who belong to a higher socioeconomic level only have the responsibility of studying, therefore they have time to dedicate themselves to leisure activities such as access to the Internet and social networks, participation in online games, watch series on television, among others. However, many students from medium and low socioeconomic levels, in addition to their academic responsibilities, have to work to cover the basic needs associated with their studies and their maintenance.

The result obtained differs from that reported in Ecuador, where they found that there was an inverse association between socioeconomic level and levels of academic procrastination. Students with low socioeconomic levels had higher levels of academic procrastination (37).

Currently, the field of study of academic procrastination faces multiple challenges, either in terms of definition, understanding of the mechanisms, and prevention or treatment efforts, therefore, it is necessary to take a new look at this problem that considerably affects college students.

In the present investigation, relevant and original findings were made, since a recurring and complex problem in university higher education was addressed. However, it is necessary to mention that there are some limitations, such as the homogeneity of the sample, as well as the characteristics of the data collection instrument, aspects that could mean that generalizations

would be important for future research to increase the size of the sample, including students from other universities, and to use complementary data collection techniques and instruments to give greater objectivity to the aforementioned process. **CONCLUSION** 

> Academic procrastination is considered a problem that interferes with the proper development of academic activities since it causes intentional delay and could negatively affect academic performance, academic self-efficacy, quality of life, and the well-being of students.

> cannot be made, and that there are social

desirability biases, respectively. Therefore, it

In this sense, in the present investigation, it was found that the students were characterized by presenting moderate levels of academic procrastination, academic self-regulation, and postponement of activities. Among the main delaying behaviors were preparing for exams at the last minute, carrying out the assigned academic activities with little time left, and postponing the tasks of the courses they did not like. On the other hand, it was found that the level of academic procrastination was significantly associated with the gender, age group, and socioeconomic level of the students.

Finally, it is necessary to design psychoeducational programs aimed at developing skills such as academic self-regulation, time management and organization, and metacognitive strategies so that students avoid resorting to delaying practices and develop their academic responsibilities in a timely manner.

## REFERENCES

- 1. Domínguez S. Prevalencia de procrastinación académica en estudiantes universitarios de Lima metropolitana y su relación con variables demográficas. Psicología. 2017;7(1):81-95.
- Estrada E, Gallegos N, Huaypar K. Procrastinación académica en estudiantes peruanos de educación superior pedagógica. Rev Ciencias Pedag Inno. 2020;8(2):57-65.

- 3. Mejía C, Ruiz F, Benites D, Pereda W. Factores académicos asociados a la procrastinación. Rev Cubana Med Gen Integr. 2019;34(3):61-70.
- Garzón A, Gil J. Gestión del tiempo y procrastinación en la educación superior. Univ Psychol. 2017;16(3):1-13.
- Estrada E, Mamani M, Gallegos N, Mamani H, Zuloaga M. Estrés académico en estudiantes universitarios peruanos en tiempos de la pandemia del COVID-19. Arch Ven Farmacol Ter. 2021;40(1):88-93.
- Domínguez S. Datos normativos de la Escala de Procrastinación Académica en estudiantes de psicología de Lima. Rev Eval. 2016;16(1):27-38.
- Estrada E, Mamani H. Procrastinación académica y ansiedad en estudiantes universitarios de Madre de Dios, Perú. Apunt Univ. 2020;10(4):322-337.
- 8. Atalaya, C, García L. Procrastinación: Revisión teórica. Rev Investig Psicol. 2019;22(2):363-378.
- García V, Silva M. Procrastinación académica entre estudiantes de cursos en línea. Validación de un cuestionario. Apertura. 2019;11(2):122-137.
- Rodríguez A, Clariana M. Procrastinación en estudiantes universitarios: Su relación con la edad y el curso académico. Rev Colomb Psicol. 2017;26(1):45-60.
- López A, Toca L, Gonzáles J, Matías B, Alonso M. Reducción de la procrastinación académica mediante la Terapia de Aceptación y Compromiso: un estudio piloto. Clín Contemp. 2020;11(e4):1-16.
- Burgos K, Salas, E. Procrastinación y autoeficacia académica en estudiantes universitarios limeños. Propós Represent. 2020;8(3):e790.
- Quant D, Sánchez A. Procrastinación, procrastinación académica: concepto e implicaciones. Rev Vang Psicol. 2012;3(1):45-59.
- Gil L, Botello V. Procrastinación académica y ansiedad en estudiantes de Ciencias de la Salud de una Universidad de Lima Norte. CASUS: Rev Inves y Casos en Salud. 2018;3(2):89-96.
- Trujillo K, Noé M. La escala de Procrastinación Académica (EPA): validez y confiabilidad en una muestra de estudiantes peruanos. Rev Psicol Educ. 2020;15(1):98-107.
- Schouwenburg H. Procrastination in Academic Settings: General Introduction. USA: American Psychological Association; 2004. Available from https://doi.org/10.1037/10808-001
- Clariana M. Procrastinación académica. España: Servei de publicacions de la Universitat Autónoma de Barcelona; 2009. Available from https://dialnet. unirioja.es/servlet/libro?codigo=602953

- Domínguez S, Villegas G, Centeno S. Procrastinación académica: validación de una escala en una muestra de estudiantes de una universidad privada. Liberabit. 20(2):293-304.
- 19. Steel P. The nature of procrastination: A metanalytic and theoretical review of quintessential self-regulatory failure. Psychol Bull. 2007;133(1):65-94.
- Lim A, Javadpour S. Into the unknown: Uncertainty and procrastination in students from a life history perspective. Front Psychol. 2021;12:717380.
- Doğanülkü H, Korkmaz O, Griffiths M, Pakpour A. Fear of COVID-19 lead to procrastination among Turkish university students: The mediating role of intolerance of uncertainty. BMC Psychol. 2021;9(1):178.
- Morais E, Pallini A, Vallerand R, Rahimi S, Silva M. The role of passion for studies on academic procrastination and mental health during the COVID-19 pandemic. Soc Psychol Educ. 2021;24(3):877-893.
- Garzón A, Gil J, De la Fuente J. Rasgos demográficos, académicos y personales asociados a tres tipos de procrastinación en el alumnado universitario. Bordón. 72(1):49-65.
- Vlachopanou, P, Tsiampalis T, Karagiannopoulou E. The relationship between causes of procrastination and sociodemographic factors. Eur J Public Health. 2019;29(4): ckz186.584.
- 25. Balkis, M, Duru E. Gender differences in the relationship between academic procrastination, satisfaction with academic life and academic performance. Electron. J Res Educ. 2017;15(1):105-125.
- Beutel M, Klein E, Aufenanger S, Brähler E, Dreier M, Müller K, et al. Procrastination, distress and life satisfaction across the age range - A German representative community study. PLoS One. 2016;11(2):e0148054.
- He S. A multivariate investigation into academic procrastination of university students. Open J Soc Sci. 2017;5(10):12-24.
- Hernández R, Mendoza, C. Metodología de la investigación: las rutas cuantitativa, cualitativa y mixta. México: McGraw-Hill; 2018.
- 29. Busko D. Causes and consequences of perfectionism and procrastination: A structural equation model. University of Guelph; 1998.
- Estrada E, Mamani D, Manrique Y, Gallegos N, Paredes Y, Quispe R. Procrastinación académica y estrés académico en estudiantes de educación superior pedagógica. Arch Ven Far Ter. 41(4):271-278.
- Castro S, Mahamud, K. Procrastinación académica y adicción a internet en estudiantes universitarios de Lima Metropolitana. Av Psicol. 2017;25(2):189-197.

- 32. Svartdal F, Klingsieck K, Steel P, Gamst T. Measuring implemental delay in procrastination: Separating onset and sustained goal striving. Pers Individ Differ. 2020;156:109762.
- Steel P, Svartdal F, Thundiyil T, Brothen T. Examining Procrastination Across Multiple Goal Stages: ALongitudinal Study of Temporal Motivation Theory. Front Psychol. 2018;9:327.
- Svartdal F, Dahl T, Gamst T, Koppenborg M, Klingsieck K. How study environments foster academic procrastination: Overview and recommendations. Front Psychol. 2020;11:540910.
- 35. Lu D, He Y, Tan Y. Gender, socioeconomic status, cultural differences, education, family size and procrastination: A sociodemographic meta-analysis. Front Psychol. 2022;12:719425.
- 36. Dominguez S, Prada R, Moreta R. Diferencias de género en la influencia de la personalidad sobre la procrastinación académica en estudiantes universitarios peruanos. Acta Colomb Psicol. 2019;22(2):125-136.
- Ramos C, Jadán J, Paredes L, Bolaños M, Gómez A. Procrastinación, adicción al internet y rendimiento académico de estudiantes universitarios ecuatorianos. Estud Pedagóg. 2017;43(3):275-289.