Comparison of Academic Procrastination in University Health and Social Science Students

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Ferdinand Ceballos-Bejarano Universidad Nacional de San Agustin de Arequipa Academic procrastination in university students of social and health sciences was compared according to socio-academic variables, such as: age, gender, occupation, area and year of study. The research was descriptive-comparative, quantitative, non-experimental; 1000 university social and health sciences students intentionally selected according to quotas participated. The information was collected with a duly validated instrument about academic procrastination. It was observed that: the majority of students perceive high academic procrastination (62%), low academic self-regulation (41%) and high procrastination of activities (74%). Concluding that the trend of academic procrastination is mostly present in students of social sciences, in male students, in the first years or academic cycles and in those who are studying while working. Therefore, most students who procrastinate avoid prioritizing the development of academic activities for others that are of particular interest such as: excessive use of technology, social networks, dependence on cell phones and work.

Keywords: academic procrastination, university students, social sciences, health sciences

INTRODUCTION

When students enter university, they are involved in situations that require immediate deployment of resources such as: adapting to new academic requirements and demands, schedules, assignments and evaluations; these academic demands can often be postponed and quickly become difficult to perform, causing personal and academic problems in the student (Duché et al., 2020).

In addition, the student usually exhibits behavior that voluntarily postpones activities that should be completed in a given time (Monroy & Gonzales-Geraldo, 2022), due to the effects of family dysfunction at an early age that compromised self-esteem and frustration tolerance, as well as, the choice of activities with immediate achievement, academic stress or also, for performing activities that have more beneficial consequences in the short term than in the long term (Calizaya-López et al., 2022).

In this regard, avoiding tasks, promising to do them later, excusing or justifying delays and avoiding guilt when facing academic tasks are associated with academic procrastination (Corrales et al... 2022), 2022). Therefore, this behavior is related to the voluntary action of the student to postpone the academic activities demanded by the university, especially the absence of punctuality, lack of timely response, failure to meet deadlines, lack of ability to disagree and lack of concentration to perform study activities, bringing as an effect low academic performance (Altamirano & Rodriguez, 2021; Hidalgo-Fuentes et al., 2021).

In addition, there are other indicators that delay the student's academic responsibility such as: laziness (lack of energy and desire to do the task), rebellion against control (feeling uncomfortable performing a task when someone else assigned it), feeling overwhelmed (under pressure to perform an important task), poor time organization (poor time management to perform activities), task aversion (student's rejection of the amount of academic work), fear of failure (perceived threat for not achieving the objectives) and poor assertiveness (no ability to ask for information or help when required); situations that procrastinate the student when he/she feels apathy and reluctance to study (Estremadoiro & Schulmeyer, 2021; Domínguez-Lara et al., 2023).

In Peru, no studies were found that compare academic procrastination in students according to their area of study (social sciences and health). However, studies have been conducted on academic procrastination related to academic stress and the psychological well-being of the student, finding that the relationship between these variables significantly harms the psychological well-being of the student (Delgado-Tenorio et al., 2021). Procrastination was also related to academic self-efficacy in Peruvian students, finding that students who begin their undergraduate studies have higher levels of procrastination than students who are about to complete their studies and this situation leads to academic failure (Burgos-Torre & Salas-Blas, 2020). Also, a study of procrastination and academic stress in medicine students was found, explaining that students of this discipline due to the high academic load tend to present high levels of stress and academic procrastination, being younger and male students who develop more of this symptomatology (Orco et al., 2022). While Duda-Macera and Gallardo-Echenique (2022) note that Peruvian students who procrastinate have certain common characteristics such as: absence of study habits,

dependence on technology and personal demotivation that generates high levels of anxiety and stress. Finally, Domínguez et al. (2019) investigated gender differences in the influence of personality on academic procrastination in Peruvian students, finding that female students are more responsible compared to male students (high levels of academic procrastination).

In this sense, there is little scientific evidence to help understand and compare academic procrastination according to the socio-academic variables of Peruvian students, and there is a need to fill the theoretical gap. In addition, the theoretical and practical implications of the results should be discussed, as well as the need to restructure curricular plans to enhance resources and reduce the factors that affect students' behavior.

Therefore, it was proposed to compare academic procrastination in university students of social and health sciences according to socio-academic variables, such as: age, gender, occupation, area and year of study.

METHODOLOGY

The STROBE cross-sectional reporting guidelines were used and are detailed below:

A descriptive-comparative, quantitative, non-experimental, cross-sectional or transectional study, the data was collected during the months of April, May and June 2023.

Participants

A total of 1000 university students from the social sciences (n=500) and health sciences (n=500) of a Peruvian university were involved. Participants were intentionally selected by quotas, including students enrolled in 2023, regular attendance, from the areas of social and health sciences, male and female students, all academic cycles, and students who did not wish to participate in the research were excluded.

Instrument

Busko's academic procrastination scale (EPA by its Spanish acronym) adapted by Álvarez (2010) was applied. It comprises 16 items with five response options (Never, Rarely, Sometimes, Most of the times and Always), assigning each question a score from 1 (Never) to 5 (Always). The psychometric properties in the study of adaptation in schoolchildren indicate an adequate internal consistency (Cronbach's alpha of .80) and a unidimensional structure, i.e., a single factor that explains 23.89% of the total variance of the instrument. The validation for university students was performed by Domínguez et al. (2013), in the factorial structure through exploratory factor analysis, the one-factor and two-factor solution presented factorial saturations greater than .30 in the one-factor structure, and greater than .40 in the two-factor structure, which is an indicator, in both cases, of robustness at the factorial level (Zwick & Velicer, 1986). Likewise, with regard to unidimensionality, the minimum value required is 20% of common variance explained to conclude that it exists (Carmines & Zeller, 1979). The results show that the factor loadings belonging to the general factor are lower than those corresponding to the specific factors, which indicates that the second-order factor is not empirically important since most of the variance is explained by the two first-order factors (52.3% and 11.9% each), with only 35.8% being explained by the second-order factor. Regarding reliability, using Cronbach's alpha coefficient, adequate values are observed both for the total scale and for the first factor, Academic Self-Regulation, given that for Campo Arias and Oviedo (2008) the optimal reliability indicator is between .80 and .90, a range in which the reliability coefficients of the other studies reviewed that used the instrument are also found. In addition, the reliability analysis of the scale was performed on the local sample, using Cronbach's Alpha statistical test, finding values above 0.70, obtaining an alpha of 0.92 considered as high reliability of the data.

Procedure

For the evaluation of the instrument among the students, authorization was requested from the directors of the educational institution, and coordination was made with the teachers to establish an appropriate timetable for its application. Likewise, the instrument was applied directly and individually, informing the original author's guide, in addition, the student was informed about the research purpose, the instructions

of the scale, the confidentiality of the data provided, and was informed that he/she could request his/her results individually. Informed consent was given as a formality of acceptance of their participation, including the students who signed the informed consent.

Data Analysis

The data were analyzed considering the normality distribution through the Kolmogórov-Smirnov test, finding that the data do not show normal distribution (p<0.000). The mean, asymmetry, kurtosis and standard deviation were analyzed. A descriptive analysis of academic procrastination in university students was also carried out in order to determine the level of procrastination, in addition, student procrastination was compared according to socio-academic variables: gender, occupation, area and cycle of studies.

For comparing the levels of academic procrastination of university students according to socioacademic variables, contingency tables were used, in addition, the Chi² statistical test was used in order to determine the association of variables or to test or reject the hypotheses of independence between variables (Cerdal & Villaroel, 2021). Finally, the statistical program Jamovi (Version 2.3) was used for data analysis.

RESULTS

TABLE 1 LEVEL OF ACADEMIC PROCRASTINATION AND STUDY DIMENSIONS

| Academic procrastination and study dimensions | | Tr. 4 v.1 | | |
|---|------|-----------|-----|-------|
| | High | Middle | Low | Total |
| Academic procrastination | 62% | 30% | 8% | 100% |
| Academic self-regulation | 35% | 24% | 41% | 100% |
| Procrastination of activities | 74% | 21% | 5% | 100% |

In table 1. It was found that most students perceive high academic procrastination (62%), low academic self-regulation (41%) and high procrastination (74%). Therefore, most students who procrastinate avoid prioritizing the development of academic activities for others that are of particular interest such as: excessive use of technology, social networks, dependence on cell phones and work.

TABLE 2
COMPARISON OF ACADEMIC PROCRASTINATION AND STUDY DIMENSIONS
ACCORDING TO AREA OF STUDY

| Academic procrastination and study dimensions | Area o | T-4-1 | |
|---|-----------------|-----------------|-------|
| | Social sciences | Health sciences | Total |
| Academic procrastination | 64% | 36% | 100% |
| Academic self-regulation | 42% | 58% | 100% |
| Procrastination of activities | 66% | 34% | 100% |

In table 2, when comparing the results of the level of academic procrastination according to the area of study, it was found that social science students procrastinate to a greater extent than health science students,

noting that social science students tend to procrastinate academic activities, while health science students self-regulate academic activities.

TABLE 3
COMPARISON OF ACADEMIC PROCRASTINATION AND STUDY DIMENSIONS
ACCORDING TO STUDENT GENDER

| Academic procrastination and study dimensions | Gei | Gender | | |
|---|-----|--------|-------|--|
| | Man | Woman | Total | |
| Academic procrastination | 63% | 37% | 100% | |
| Academic self-regulation | 47% | 53% | 100% | |
| Procrastination of activities | 71% | 29% | 100% | |

In table 3, the levels of academic procrastination were compared according to the gender of the students; it was found that male students are the ones who procrastinate academically to a greater extent compared to female students, likewise, students justify procrastination to a greater extent and female students are the ones who better self-regulate academically.

TABLE 4
COMPARISON OF ACADEMIC PROCRASTINATION AND STUDY DIMENSIONS
ACCORDING TO STUDENT OCCUPATION

| A so domic muconostination and atudy dimensions | О | Total | | |
|---|----------|----------------------|------|--|
| Academic procrastination and study dimensions | Studying | Studying and working | | |
| Academic procrastination | 38% | 62% | 100% | |
| Academic self-regulation | 49% | 51% | 100% | |
| Procrastination of activities | 35% | 65% | 100% | |

In table 4, when comparing the levels of academic procrastination according to students' occupation, it was found that there is a tendency to procrastinate academically in students who study and work compared to those who only study, observing that students mark the tendency to procrastinate in relation to occupation, when in addition to studying the students work.

TABLE 5
COMPARISON OF ACADEMIC PROCRASTINATION AND STUDY DIMENSIONS
ACCORDING TO YEAR OF STUDY

| A - d : | Year of study | | | | | T-4 m1 |
|---|---------------|-----|-----|-----|-----|--------|
| Academic procrastination and study dimensions | | 2nd | 3rd | 4th | 5th | Total |
| Academic procrastination | 44% | 31% | 12% | 8% | 5% | 100% |
| Academic self-regulation | 9% | 16% | 14% | 28% | 33% | 100% |
| Procrastination of activities | 58% | 26% | 11% | 3% | 2% | 100% |

In table 5, the results of academic procrastination according to the year of studies show that students in the first years are the most procrastinating academically compared to students in the last years, considering that these students are in the process of academic adaptation, and it is difficult to adapt to this process, postponing their academic activities and demonstrating low academic self-regulation.

TABLE 6
CHI-SQUARE TEST BETWEEN ACADEMIC PROCRASTINATION AND SOCIO-ACADEMIC VARIABLES

| Variable | Test | Area | Year | Gender | Occupation |
|--------------------------|-------|---------|---------|---------|------------|
| Academic procrastination | p | 0.001 | 0.000 | 0.000 | 0.000 |
| | X^2 | 14.123ª | 14.956ª | 14.683ª | 14.658ª |
| | gl | 4 | 4 | 4 | 4 |

Note. p=p value (0.05); $X^2=$ (Chi-square) value of the statistic; g= Degrees of freedom

In table 6, it was found that the significance values (p) are less than 0.05, therefore, the hypothesis of independence of the variables is rejected, in that sense, the socio-academic variables of the students are significantly associated with academic procrastination, there being a trend that to the extent that the students are of social sciences, are in the first years or academic cycles, of male gender, who study and work at the same time, they develop more academic procrastination compared to their peers.

CONCLUSIONS

According to the objective, comparing academic procrastination in university students of social sciences and health sciences based on socio-academic variables, such as: age, gender, occupation, area and year of study. It is concluded that there is a high level of academic procrastination among university students. Likewise, the trend of academic procrastination is mostly present in social sciences students, in male students, in the first years or academic cycles and in those who study and work at the same time.

The absence of study habits significantly influences academic procrastination, observing in students a greater attention and interest in technology dependence mainly regarding the use of cell phones and social networks, spending more hours of distraction and leisure in these activities than in academic ones, causing high levels of anxiety and stress, which can increase low performance.

The characteristics and interests of male students differ from those of female students; therefore, in addition to excessive use of technology, male students seek other leisure activities to a greater extent, such as sports, video games and social gatherings.

Some participants postpone or interrupt academic-related activities because of work, either personally or voluntarily due to lack of family financial support, or also because of obligation when there is family demand.

The academic procrastination is not a new concept at the university level; however, it has not been addressed in educational institutions, understanding that the new teaching and learning methods focus on the student, therefore, teachers must adapt didactic approaches to understand and motivate students mainly those who present low performance to try to reduce the high levels of procrastination.

Based on the results found, the areas of academic tutoring should be implemented and strengthened in order to identify the different problems that students experience, both academic and emotional, which may have some significance in academic procrastination.

Likewise, motivational workshops should be implemented for students, using support strategies (educational coaching) to reduce procrastination of academic activities, incorporating habits that will improve academic performance.

Finally, more research on academic procrastination in larger and more diversified samples is needed to continue accumulating knowledge and to better understand student behavior so that educational authorities can improve student welfare policies to address their real academic, personal and institutional problems.

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REFERENCES

- Altamirano, C.E., & Rodríguez, M.L. (2021). Procrastinación académica y su relación con la ansiedad. *Revista Eugenio Espejo*, 15(3), 16–28. https://doi.org/10.37135/ee.04.12.03
- Álvarez, O. (2010). Procrastinación general y académica en una muestra estudiantes de secundaria de Lima. *Persona*, *13*, 159177.
- Burgos-Torre, K., & Salas-Blas, E. (2020). Procrastinación y Autoeficacia académica en estudiantes universitarios limeños. *Propósitos y Representaciones*, 8(3), e790. https://dx.doi.org/10.20511/pyr2020.v8n3.790
- Calizaya-López, J., Pinto-Pomareda, H., Lazo-Manrique, M.C., Bellido-Medina, R., Miaury-Vilca, A.R., & Ceballos-Bejarano, F. (2022). Comparación del Estrés Académico en Estudiantes de Universidades Públicas y Privadas del Perú. *Revista de Teoría y Práctica de la Educación Superior*, 22(18), 36–44. https://doi.org/10.33423/jhetp.v22i18.5697
- Campo-Arias, A., & Oviedo, H. (2008). Propiedades psicométricas de una escala: La consistencia interna. *Revista de Salud Pública*, *10*(5), 831–839.
- Carmines, E., & Zeller, R. (1979). Reliability and validity assessment. London: Sage.
- Cerdal, J., & Villarroel, L. (2021). Interpretación del test de Chi-cuadrado (X²). *Revista Chilena de Pediatria*, 78(4), 414–417.
- Corrales-Reyes, I., García-Raga, M., Villegas-Maestre, J., Valdés-Gamboa, L., Vitón-Castillo, A., Tusell-Hormigó, D., & Mejia, C. (2022). Factores asociados a la procrastinación académica en estudiantes de Estomatología de siete universidades cubanas. *Revista Cubana de Medicina Militar*, 51(2), e1972. Retrieved from https://revmedmilitar.sld.cu/index.php/mil/article/view/1972
- Delgado-Tenorio, A., Oyanguren-Casas, N., Reyes-González, A., Zegarra, Á., & Cueva, M. (2021). El rol moderador de la procrastinación sobre la relación entre el estrés académico y bienestar psicológico en estudiantes de pregrado. *Propósitos y Representaciones*, *9*(3), e1372. https://dx.doi.org/10.20511/pyr2021.v9n3.1372

- Domínguez, S., Villegas, G., & Centeno, S. (2013). Procrastinación académica: Validación de una escala en una muestra de estudiantes de una universidad privada. *Liberabit*, 20(2), 293–304. Retrieved from http://www.scielo.org.pe/pdf/liber/v20n2/a10v20n2
- Domínguez-Lara, S., Sánchez-Villena, A.R., Aranda, M., Fuentes, V., & García-Domingo, M. (2023). Influencia de la dependencia al smartphone sobre la procrastinación académica en estudiantes universitarios: Diferencias según sexo. *Salud y Drogas*, *23*(2), 117–135. https://doi.org/10.21134/haaj.v23i2.769
- Domínguez-Lara, S.A., Prada-Chapoñan, R., & Moreta-Herrera, R. (2019). Diferencias de género en la influencia de la personalidad sobre la procrastinación académica en estudiantes universitarios peruanos. *Acta Colombiana de Psicología*, 22(2), 125–136. https://doi.org/10.14718/ACP.2019.22.2.7
- Duché, A., Paredes, F., Gutiérrez, O., & Carcausto, L. (2020). Transición secundaria-universidad y la adaptación a la vida universitaria. *Revista de Ciencias Sociales*, 26(3), 244–258. https://doi.org/10.31876/rcs.v26i3.33245
- Duda-Macera, B., & Gallardo-Echenique, E. (2022). Caracterización de la procrastinación académica en estudiantes universitarios peruanos. *Revista Electrónica Educare*, *26*(2), 1–17. https://doi.org/10.15359/ree.26-2.20
- Estremadoiro, B., & Schulmeyer, M. (2021). Procrastinación académica en estudiantes universitarios. *Revista Aportes de la Comunicación y la Cultura*, (30), 51–66. Retrieved from http://www.scielo.org.bo/scielo.php?script=sci_arttext&pid=S2306-86712021000100004&lng=es&tlng=es
- Hidalgo-Fuentes, S., Martínez-Álvarez, I., & Sospedra-Baeza, M.J. (2021). Rendimiento académico en universitarios españoles: El papel de la personalidad y la procrastinación académica. *European Journal of Education and Psychology*, 14(1), 1–13. https://doi.org/10.32457/ejep.v14i1.1533
- Jamovi. (2022). *The Jamovi Project (Version 2.3)* [Computer Software]. Retrieved from https://www.jamovi.org.
- Monroy, F., & González-Geraldo, J.L. (2022). Diseño de una escala de procrastinación en español y medición de los niveles de procrastinación de estudiantes de educación. Bordón. *Revista de Pedagogía*, 74(2), 63–76. https://doi.org/10.13042/Bordon.2022.93054
- Orco, E., Huamán, D., Ramírez, S., Torres, J, Figueroa, L., Mejía, C., & Corrales, I. (2022). Asociación entre procrastinación y estrés académico en estudiantes peruanos de segundo año de medicina. *Revista Cubana de Investigaciones Biomédicas*, 41, e704. Retrieved from http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0864-03002022000100005&lng=es&tlng=es
- Zwick, W., & Velicer, W. (1986). Comparison of five rules for determining the number of components to retain. *Psychological Bulletin*, 99, 432–442.