

**Relación Entre Los Niveles De Actividad Física, El Comportamiento
Sedentario y La Procrastinación Académica En Estudiantes De Fisioterapia
En Barranquilla**

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RESUMEN

Objetivo: Evaluar la relación entre los niveles de actividad física y la procrastinación académica en estudiantes de fisioterapia en una universidad de Barranquilla-Colombia.

Materiales y Métodos: Se realizó un estudio observacional transversal en 346 estudiantes de Fisioterapia de la Universidad Simón Bolívar. Se aplicó la escala de Tuckman para medir la procrastinación académica; el Cuestionario Internacional de Actividad Física IPAQ formato corto; el Sedentary Behavior Questionnaire SBQ-s para medir el comportamiento sedentario; y el International Study of Childhood Obesity, Lifestyle and the Environment ISCOLE para medir el sueño.

Resultados: El 61,2% de los estudiantes fueron mujeres. El 31,6% mostró niveles altos de procrastinación. Un 50,7% no cumplía con las recomendaciones de actividad física y el 61,2% cumplía con las horas recomendadas de sueño entre semana y el 92,5% durante el fin de semana. La procrastinación académica es un factor asociado con mayor inactividad física (OR 2,8; IC 95%1,8-4,4; p 0,0001).

Conclusiones: En este estudio un tercio de la población tiene niveles altos y muy altos de procrastinación académica y más de la mitad no cumplen con la actividad física recomendada. El estudio sugiere que la procrastinación actúa como una barrera para adoptar hábitos activos saludables y resalta la necesidad de implementar estrategias universitarias que integren educación en salud, motivación personal, gestión del tiempo y promoción de la actividad física, con un enfoque accesible y adaptado a las características de esta población.

Palabras Claves: Procrastinación académica, Actividad física, Estudiantes, Conducta sedentaria y Trastornos mentales.

ABSTRACT

Objective: To evaluate the relationship between physical activity levels and academic procrastination in physiotherapy students at a university in Barranquilla, Colombia.

Materials and Methods: A cross-sectional observational study was conducted with 346 Physiotherapy students from Universidad Simón Bolívar. The Tuckman Procrastination Scale was used to assess academic procrastination; the short form of the International Physical Activity Questionnaire (IPAQ) to assess physical activity; the Sedentary Behavior Questionnaire (SBQ-s) to measure sedentary behavior; and the International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE) questionnaire to evaluate sleep patterns.

Results: 61,2% of the students were female. A total of 31,6% showed high or very high levels of academic procrastination. Additionally, 50,7% did not meet the recommended physical activity guidelines. Regarding sleep, 61,2% met the recommended hours during the week and 92,5% on weekends. Academic procrastination was identified as a factor associated with greater physical inactivity (OR 2,8; IC 95%1,8-4,4; p 0,0001).

Conclusions: In this study, one-third of the population presented high or very high levels of academic procrastination, and more than half did not meet the recommended levels of physical activity. The findings suggest that procrastination acts as a barrier to adopting healthy active habits, highlighting the need to implement university-based strategies that integrate health education, personal motivation, time management, and physical activity promotion, with an accessible approach tailored to the characteristics of this population.

Keywords: Academic procrastination, Physical activity, Students, Sedentary behavior, Mental disorders.

REFERENCIAS BIBLIOGRAFICAS

1. Svartdal F, Løkke JA. The ABC of academic procrastination: Functional analysis of a detrimental habit. *Front Psychol.* 2022; 13:1019261. Available from: <https://doi.org/10.3389/fpsyg.2022.1019261>
2. Zacks S, Hen M. Academic interventions for academic procrastination: A review of the literature. *J Prev Interv Community.* 2018;46(2):117-30. Available from: <https://doi.org/10.1080/10852352.2016.1198154>
3. Johansson F, Rozental A, Edlund K, Côté P, Sundberg T, Onell C, et al. Associations between procrastination and subsequent health outcomes among university students in Sweden. *JAMA Netw Open.* 2023;6(1):e2249346. Available from: <https://doi.org/10.1001/jamanetworkopen.2022.49346>
4. Gareau A, Chamandy M, Kljajic K, Gaudreau P. The detrimental effect of academic procrastination on subsequent grades: the mediating role of coping over and above past achievement and working memory capacity. *Anxiety Stress Coping.* 2019;32(2):141-54. Available from: <https://doi.org/10.1080/10615806.2018.1543763>
5. Li C, Hu Y, Ren K. Physical activity and academic procrastination among Chinese university students: A parallel mediation model of self-control and self-efficacy. *Int J Environ Res Public Health.* 2022;19(10):6017. Available from: <https://doi.org/10.3390/ijerph19106017>
6. Carballo-Fazanes A, Rico-Díaz J, Barcala-Furelos R, Rey E, Rodríguez-Fernández JE, Varela-Casal C, et al. Physical activity habits and determinants, sedentary behaviour and lifestyle in university students. *Int J Environ Res Public Health.* 2020;17(9):3272. Available from: <https://doi.org/10.3390/ijerph17093272>
7. Tao Y, Yu H, Liu M, Wang P, Zhang J, Yang Y, et al. Procrastination and physical activity: The moderated mediating effect of grit. *J Am Coll Health.* 2024;72(4):1150-8. Available from: <https://doi.org/10.1080/07448481.2022.2068962>

8. Katzmarzyk PT, Friedenreich C, Shiroma EJ, Lee IM. Physical inactivity and non-communicable disease burden in low-income, middle-income and high-income countries. *Br J Sports Med.* 2022; 56(2):101-6. Available from: <https://doi.org/10.1136/bjsports-2020-103640>
9. García-Hermoso A, Saavedra JM, Escalante Y, Domínguez AM, Martínez-Gómez D. Prevalencia de factores de riesgo comportamentales modificables asociados a enfermedades no transmisibles en estudiantes universitarios de América Latina: una revisión sistemática. *Nutr Hosp.* 2017;34(5):1184-92. Spanish. Available from: <https://doi.org/10.20960/nh.242>
10. Vera-Villarroel P, Celis-Atenas K, Silva J, Pavez P, Díaz N. Prevalencia de factores de riesgo de enfermedades crónicas no transmisibles en estudiantes de medicina de la Universidad de Valparaíso. *Rev Chil Pediatr.* 2002;73(5):485-92. Spanish. Available from: <https://doi.org/10.4067/S0370-41062002000500005>
11. Suárez-León MV, Castrillón-Rendón BS, Castrillón-Escudero JE, Ayala-Zuluaga CF. Calidad de vida y actividad física en estudiantes universitarios relacionados con el desarrollo de enfermedades crónicas no transmisibles. *Retos.* 2025;62:1085-96. Spanish. Available from: <https://doi.org/10.47197/retos.v62.110725>
12. Organización Mundial de la Salud (OMS). *Actividad física*. Geneva: OMS; 2022. Available from: <https://www.who.int/es/news-room/fact-sheets/detail/physical-activity>
13. Shi M, Zhai X, Li S, Shi Y, Fan X. The relationship between physical activity, mobile phone addiction, and irrational procrastination in Chinese college students. *Int J Environ Res Public Health*. 2021;18(10):5325. Available from: <https://doi.org/10.3390/ijerph18105325>
14. Mollinedo M, Rivas A, Díaz J, Díaz M, Díaz J. Comportamiento sedentario en estudiantes universitarios. *Rev Latinoam Hipertens.* 2018;13(2):151-8. Spanish. Available from: <https://www.redalyc.org/journal/1702/170263002004/>

15. Muñoz-Ospina B, Carvajal-Henao S, Osorio-Bolaños J, Melo-Escobar L, Rueda-Toro JS. Actividad física y trastornos del estado de ánimo en estudiantes universitarios. *Rev Psicol Univ Antioquia*. 2022;14(1):e343533. Spanish. Available from: <https://doi.org/10.17533/udea.rp.e343533>
16. Villagómez-Vacacela DC, Moreano-Jara LJ, Chavez-Contreras DM. Procrastinación académica y dependencia al dispositivo móvil en estudiantes universitarios. *Rev Eugenio Espejo*. 2023;17(3):42-51. Spanish. Available from: <https://doi.org/10.37135/ee.17.3.10>
17. Cjuno J, Palomino-Ccasa J, Silva-Fernandez RG, Soncco-Aquino M, Lumba-Bautista O, Hernández RM. Academic Procrastination, Depressive Symptoms and Suicidal Ideation in University Students: A look during the Pandemic. *Iran J Psychiatry*. 2022;18(1):1-12. Available from: <https://doi.org/10.18502/ijps.v18i1.11416>
18. Gutiérrez-Chavez MA, Peña-Chavez FP. Actividad física y sedentarismo en estudiantes universitarios. *Cienc Lat*. 2022;6(1):1373-85. Available from: https://doi.org/10.37811/cl_rcm.v6i1.1681
19. Acosta Chávez GI. Niveles de Actividad Física y Conductas Sedentarias en Estudiantes Universitarios. *Mentor [Internet]*. 2025 [citado el 22 de junio de 2025];4(10):886–910. Disponible en: <https://revistamentor.ec/index.php/mentor/article/view/9112>
20. García T, Pérez A. Niveles de actividad física y conductas sedentarias en estudiantes universitarios. *MENTOR Revista de Investigación Educativa y Deportiva*. 2025 Ene;4(10):886–910. doi:10.56200/mried.v4i10.9112 .
21. Wang Z, Jiang B, Wang X, Li Z, Wang D, Xue H, Wang D. Relationship between physical activity and individual mental health after traumatic events: a systematic review. *Eur J Psychotraumatol*. 2023;14(2):2205667. doi: 10.1080/20008066.2023.2205667. PMID: 37134018; PMCID: PMC10158556.
22. Yang L, Liu Z, Shi S, Dong Y, Cheng H, Li T. The mediating role of perceived stress and academic procrastination between physical activity and depressive symptoms among Chinese college students during the COVID-19 pandemic. *Int*

- J Environ Res Public Health. 2022;20(1):773. Available from:
<https://doi.org/10.3390/ijerph20010773>
23. Steel P. The nature of procrastination: A meta-analytic and theoretical review. Psychol Bull. 2007;133(1):65-94. <https://doi.org/10.1037/0033-2909.133.1.65>
24. Ram AL, Conroy DE. Physical activity reduces procrastination. Br J Health Psychol. 2015;20(4):745-59. <https://doi.org/10.1111/bjhp.12140>
25. Hogan CL, Mata J, Carstensen LL. Exercise holds immediate benefits for affect and cognition in younger and older adults. Psychol Aging. 2013;28(2):587-94. <https://doi.org/10.1037/a0032634>
26. González-Brignardello MP, Sánchez-Elvira Paniagua A, López-González MÁ. Academic Procrastination in Children and Adolescents: A Scoping Review. Children (Basel). 2023 Jun 5;10(6):1016. doi: 10.3390/children10061016.
27. Ferrari JR, Diaz-Morales JF. Procrastination and mental health: A cross-cultural analysis. J Cross Cult Psychol. 2014;45(5):768-80. Available from:
<https://www.redalyc.org/journal/4596/459661106005/html/>
28. Flett GL, Hewitt PL, Dyck DG. Procrastination, perfectionism, and distress: A review of the literature and research findings. Can Psychol. 2012;53(1):12-21. <https://doi.org/10.1037/a0026643>
29. Klingsieck KB. Procrastination and chronic stress: Investigating the role of perfectionism and self-regulation in university students. Learn Individ Differ. 2013;23:82-8. <https://doi.org/10.1016/j.lindif.2012.10.004>
30. Sirois FM, Melia LG, O'Connor DB. The role of procrastination and emotion regulation in predicting academic success. Educ Psychol. 2013;33(2):121-39. <http://dx.doi.org/10.1002/per.2098>
31. Pychyl TA. Procrastination and self-regulation: An overview. In: Pychyl TA, Sirois FM, editors. Procrastination, health, and well-being. 1st ed. San Diego: Elsevier Academic Press; 2013. p. 63-79.

32. Shallcross LJ, Flett GL, Hewitt PL. Perfectionism and procrastination: The role of the self-conscious emotions. *Pers Individ Dif.* 2013;55(5):396-401.
<https://doi.org/10.1016/j.paid.2013.03.021>
33. Solomon LJ, Rothblum ED. Academic procrastination: Frequency and cognitive-behavioral correlates. *J Couns Psychol.* 1984;31(4):503-9.
<https://doi.org/10.1037/0022-0167.31.4.503>
34. Universidad de Chile. Los beneficios del ejercicio para la salud mental . Santiago: INTA; 2021. Available from: <https://inta.uchile.cl/noticias/192777/los-beneficios-del-ejercicio-para-la-salud-mental>
35. Ministerio de Sanidad (España). Estilos de vida saludable - ¿Qué es el sedentarismo?. Madrid: Gobierno de España; 2020. Available from: <https://estilosdevidasaludable.sanidad.gob.es/actividadFisica/sedentarismo/queEs/home.htm>
36. De Almeida JRV, Barros GVS, da Silva Valente VJMB, Santana WL, dos Santos ECF, Aguiar JLP, Farah BQ, Lins Filho OL. Effect of physical exercise on sleep quality and depressive symptoms in adults: a systematic review and meta-analysis. *Sleep Sci.* 2025;18(1):e1806954. doi:10.1055/s-0045-1806954.
37. Ma H, Wang A, Pei R, Piao M. Effects of habit formation interventions on physical activity habit strength: meta-analysis and meta-regression. *Int J Behav Nutr Phys Act.* 2023 Sep 12;20(1):109. doi: 10.1186/s12966-023-01493-3. PMID: 37700303; PMCID: PMC10498635.
38. Zhao Z, Kou Y. Effect of short video addiction on the sleep quality of college students: chain intermediary effects of physical activity and procrastination behavior. *Front Psychol.* 2024; 14:1287735. Available from: <https://doi.org/10.3389/fpsyg.2023.1287735>
39. Zhai Y, Xue Y, Li H. Testing physical activity level as determinant of procrastination in exercise: Will this direction work? *Rev Psicol Deporte.* 2021;30(1):18-30.

40. Topuzoğlu A, Özel F, Meral Z, Ülgen MA, Aslan SÖ. Procrastinación académica y evaluación de factores predictores en estudiantes universitarios. *Turk J Child Adolesc Ment Health*. 2022;29(3):146-51.
41. Codina N, Pestana JV, Valenzuela R, Giménez N. Procrastination at the core of physical activity (PA) and perceived quality of life: A new approach for counteracting lower levels of PA practice. *Int J Environ Res Public Health* . 2020;17(10):3413. Available from: <https://doi.org/10.3390/ijerph17103413>
42. Galindo-Contreras J, Olivas-Ugarte LO. Escala de Procrastinación de Tuckman (ATPS): evidencias psicométricas y datos normativos en estudiantes de secundaria de Lima, Perú. *Propós Represent* . 2022;10(1):e1381. Available from: <https://doi.org/10.20511/pyr2022.v10n1.1381>
43. caravalí-Mezza NY, Bacardí-Gascón M, Armendáriz-Anguiano AL, Jiménez-Cruz A. Validación del Cuestionario de Actividad Física del IPAQ en Adultos Mexicanos con Diabetes Tipo 2. *J Negat No Posit Results*. 2016;1(3):93–99. doi:10.19230/jonnpr.2016.1.3.1015.
44. Montoya-González S, Mera-Mamián AY, Mondragón-Barrera MA, Muñoz-Rodríguez DI, Gonzalez-Gomez D. Propiedades psicométricas del Cuestionario de Comportamiento Sedentario (SBQ-s) en universitarios colombianos. *Retos* . 2022;46:745–57. Available from: <https://doi.org/10.47197/retos.v46.94103>
45. Katzmarzyk PT, Barreira TV, Broyles ST, Champagne CM, Chaput JP, Fogelholm M, et al. The International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE): design and methods. *BMC Public Health*. 2013; 13:900. doi:10.1186/1471-2458-13-900.
46. Rozental A, Forsström D, Hussoon A, Klingsieck KB. Procrastination Among University Students: Differentiating Severe Cases in Need of Support from Less Severe Cases. *Front Psychol*. 2022;13:783570. <https://doi.org/10.3389/fpsyg.2022.783570>
47. Sirois FM, Molnar DS, Hirsch JK. A meta-analytic and conceptual update on the associations between procrastination and multidimensional perfectionism. *Eur J Pers*. 2022;36(4):470-88. <http://dx.doi.org/10.1002/per.2098>

48. Ferreira Silva RM, Mendonça CR, Azevedo VD, Raof Memon A, Noll PRES, Noll M. Barriers to high school and university students' physical activity: A systematic review. *PLoS One*. 2022 Apr 4;17(4):e0265913. doi: 10.1371/journal.pone.0265913.
49. Zhang Y, Dong S, Wang H, Wang Z. Academic procrastination and physical activity in college students: A cross-lagged panel analysis. *PLoS ONE*. 2022;17(3):e0265226. <https://doi.org/10.1371/journal.pone.0265226>
50. Liu C, Zhang J. The Effects of Aerobic Exercise on Executive Function: A Comparative Study Among Active, Passive, and Non-Procrastinating College Students. *Behav Sci*. 2025;15(2):225. doi:10.3390/bs15020225
51. Exelmans L, Meier A, Reinecke L, Van den Bulck J. Procrastination as a self-regulation failure: the role of bedtime procrastination, media use, and sleep. *Sleep Health*. 2021;7(3):301-7. <https://doi.org/10.1016/j.sleh.2021.02.007>
52. Wang Y, Xu Y, Lin H, Wu Q. The Relationship Between Sedentary Behaviors, Mobile Phone Addiction, Procrastination, And Mental Health Among College Students: A Moderated Mediation Analysis. *Med Sci Sports Exerc*. 2022;54(9S):505. doi:10.1249/01.mss.0000881408.35499.6f