Appendix 1. Search strategy and databases

Databases	Search strategy
MEDLINE	("Pilates Practitioners"[Title/Abstract]) OR ("Young People"[Title/Abstract]) OR ("Old People"[Title/Abstract]) OR (Aged[Title/Abstract]) OR (Elderly[Title/Abstract]) OR (Young[Title/Abstract]) OR Adult [Title/Abstract] AND ("Pilates"[Title/Abstract]] OR "Pilates Training"[Title/Abstract]] OR "Pilates Based Exercises"[Title/Abstract]] OR "exercises pilates based"[Title/Abstract]] OR "Pilates Based Exercises"[Title/Abstract]] OR "Pilates Method"[Title/Abstract]] OR "Motor activity"[Title/Abstract]] OR "Pilates Exercise" [Title/Abstract]] OR "Pilates Activity" [Title/Abstract]] OR "Pilates Exercise" [Title/Abstract]] OR "Pilates Activity" [Title/Abstract]] OR "Lifestyle"[Title/Abstract]] OR "Life Quality"[Title/Abstract]] OR "Health Related Quality"[Title/Abstract]] OR "HRQOL"[Title/Abstract]] OR "Observational OR "Observational Study" OR Survey OR "Cross - Sectional" OR "Cross sectional" OR Cohort OR Association OR Relationship OR Correlation)
EMBASE	('pilates practitioners':ab,ti OR 'young people':ab,ti OR 'old people':ab,ti OR aged:ab,ti OR elderly:ab,ti OR young:ab,ti OR adult:ab,ti OR adults:ab,ti AND (pilates:ab,ti OR 'pilates training':ab,ti OR 'exercises pilates based':ab,ti OR 'pilates based exercises':ab,ti OR 'training pilates':ab,ti OR 'pilates method':ab,ti OR 'motor activity':ab,ti OR 'pilates exercise':ab,ti OR 'pilates activity':ab,ti) AND ('quality of life':ab,ti OR 'lifestyle':ab,ti OR 'life quality':ab,ti OR 'health related quality of life':ab,ti OR 'health related quality':ab,ti OR 'hrqol':ab,ti) AND (observational OR 'observational study' OR survey OR 'cross - sectional' OR 'cross sectional' OR cohort OR association OR relationship OR correlation)
WEB OF SCIENCE	AB=("Pilates Practitioners" OR "Young People" OR "Old People" OR Aged OR Elderly OR Young OR Adult OR Adults) AND AB=(Pilates OR "Pilates Training" OR "Pilates Based Exercises" OR "exercises pilates based" OR "Pilates Based Exercises" OR "training pilates" OR "Pilates Method" OR "Motor activity" OR "Pilates Exercise" OR "Pilates Activity") AND AB=("Quality of life" OR Lifestyle OR "Life Quality" OR "health related quality of life" OR "Health Related quality" OR "HRQOL") AND TS=(Observational OR "Observational Study" OR Survey OR "Cross - Sectional" OR "Cross sectional" OR Cohort OR Association OR Relationship OR Correlation)
SCOPUS	(TITLE-ABS-KEY ("Pilates Practitioners" OR "Young People" OR "Old People" OR aged OR elderly OR young OR adult OR adults) AND TITLE-ABS-KEY (pilates OR "Pilates Training" OR "Pilates Based Exercises" OR "exercises pilates based" OR "Pilates Based Exercises" OR "training pilates" OR "Pilates Method" OR "Motor activity" OR "Pilates Exercise" OR "Pilates Activity") AND TITLE-ABS-KEY ("Quality of life" OR lifestyle OR "Life Quality" OR "health related quality of life" OR "health related quality" OR "HRQOL") AND ALL (observational OR "Observational Study" OR survey OR "Cross - Sectional" OR "Cross sectional" OR cohort OR association OR relationship OR correlation)) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (SUBJAREA, "MEDI") OR LIMIT-TO (SUBJAREA, "NURS") OR LIMIT-TO (SUBJAREA, "PSYC") OR LIMIT-TO (SUBJAREA, "MULT"))
GOOGLE SCHOLAR	With all of the words: "Pilates Method" AND "Quality of life" AND "Pilates" With at least one of the words: "Pilates Practitioners" OR "Young People" OR "Old People" OR Aged OR Elderly OR Young OR Adult AND Pilates OR "Pilates Training" OR "Pilates Based Exercises" OR "exercises pilates based" OR "Pilates Based Exercises" OR "training pilates" OR "Pilates Method" OR "Motor activity" OR "Pilates Exercise" OR "Pilates Activity" AND "Quality of life" OR "Lifestyle" OR "Life Quality" OR "health related quality of life" OR "Health Related Quality" OR "HRQOL" AND Observational OR "Observational Study" OR Survey OR "Cross - Sectional" OR "Cross sectional" OR Cohort OR Association OR Relationship OR Correlation Where my words occurs: anywhere in the article 200 most relevant hits

Appendix 2. Excluded articles and reasons for exclusion

Author, Year, Reference				
BAIS & PHANSOPKAR, 2021 [1];	1			
CRUZ-FERREIRA et al., 2011 [2]; ULUĞ et al., 2018 [3]; LIM & HYUN, 2013 [4]; ALTAN et al., 2012[5]; SHEA & MORIELLO, 2013[6]; STAN et al., 2012 [7]; SHARMA et al., 2018 [8]; KOMATSU et al., 2016 [9]; DUARTE et al., 2017 [10]; MELLO et al., 2018 [11]; KLAUTAU et al., 2020 [12]; ARAÚJO - GOMES et al., 2018 [13]; RRECAJ- MALAJ et al., 2020[14]; FONSECA et al., 2016 [15]; MENDONÇA et al., 2013 [16]; RODRIGUÉZ - FUENTES et al., 2014 [17]; ABASIYANIK et al., 2020 [18]; LEOPOLDINO et al., 2011 [19]; VIEIRA et al., 2013 [20].	2			
RUIZ- MONTERO et al., 2019 [21]; MC GRATH, O'MALLEY & HENDRIX, 2010 [22]; GASKELL, WILLIANS & PREECE, 2019[23]; LIPKO & DARMAS, 2015 [24].	3			

Legend: (1)The study has not been completed, only the expectation of what is expected from the results has been presented. (2) Did not assess the outcome of interest; (3) Methodology is not applicable to the proposed objective.

REFERENCES

- 1. Bais A, Phansopkar P. Impact of pilates training versus progressive muscle relaxation technique on quality of life in menopausal women-a comparative study. Indian J Forensic Med Toxicol [Internet]. 2021;15(1):7–11. Available from:https://www.scopus.com/inward/record.uri?eid=2-s2.0-85099917644&doi=10.37506%2Fijfmt.v15i1.13366&partnerID=40&md5=c31620 cca457c2c83aba955619c025a1
- 2. Cruz-Ferreira A, Fernandes J, Gomes D, Bernardo LM, Kirkcaldy BD, Barbosa TM, et al. Effects of pilates-based exercise on life satisfaction, physical self-concept and health status in adult women. Women Health. 2011;51(3):240–55.
- 3. Uluğ N, Yilmaz ÖT, Kara M, Özçakar L. Effects of pilates and yoga in patients with chronic neck pain: A sonographic study. J Rehabil Med [Internet]. 2018;50(1):80–5. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85040549369&doi=10.2340%2F16501977-2288&partnerID=40&md5=5f1a41586efec4b5e9bd218d41547ec6
- 4. Lim E-J, Hyun E-J. The Impacts of Pilates and Yoga on Health-Promoting Behaviors and Subjective Health Status. Int J Environ Res Public Health. 2021 Apr;18(7).
- 5. Altan L, Korkmaz N, Dizdar M, Yurtkuran M. Efect of Pilates training on people with ankylosing spondylitis. Rheumatol Int. 2012;32(7):2093–9.
- 6. Shea S, Moriello G. Feasibility and outcomes of a classical Pilates program on lower extremity strength, posture, balance, gait, and quality of life in someone with impairments due to a stroke. J Bodyw Mov Ther [Internet]. 2014;18(3):332–60. Available from: http://dx.doi.org/10.1016/j.jbmt.2013.11.017
- 7. Stan, D. L., Rausch, S. M., Sundt, K., Cheville, A. L., Youdas, J. W., Krause, D. A., Boughey, J. C., Walsh, M. F., Cha, S. S., & Pruthi, S. (2012). Pilates for breast cancer survivors. Clinical Journal of Oncology Nursing, 16(2), 131–141. https://doi.org/10.1188/12.CJON.131-141.
- 8. Sharma, D., Kaur, J., Rani, M., Bansal, A., Malik, M., & Kulandaivelan, S. (2018).EFFICACY OF PILATES BASED MAT EXERCISE ON QUALITY OF LIFE, QUALITY OF SLEEP AND SATISFACTION WITH LIFE IN TYPE 2 DIABETES MELLITUS. Rjdnmd.Org. https://doi.org/10.2478/rjdnmd-2018-0017
- 9. Komatsu, M., Avila, M., Colombo, M., Dor, K. G.-S.-R., & 2016, undefined. (n.d.). Pilates training improves pain and quality of life of women with fibromyalgia syndrome. SciELO Brasil. Retrieved May 11, 2021, from https://www.scielo.br/scielo.php?pid=S1806-00132016000400274&script=sci_arttext

- 10. Da, D., Duarte, S., Arlindo De Sousa, C., Roberto, C., & Nunes, O. (2017). Effect of Pilates method and conversation circles on the health of older adults Efeito do método Pilates e das rodas de conversa na saúde de idosos. Fisioter. Mov, 30(1), 39–48. https://doi.org/10.1590/1980-5918.030.001.AO04
- Mello, N., Costa, D., ... S. V.-R. B., & 2018, undefined. (n.d.). The effect of the Contemporary Pilates method on physical fitness, cognition and promotion of quality of life among the elderly. SciELO Brasil. Retrieved May 11, 2021, from https://www.scielo.br/scielo.php?pid=S1809-98232018000500597&script=sci_arttext.
- 12. Klautau, A. V., da Silva Pinto, D., Santana, B. B., Freitas Queiroz, M. A., Rangel da Silva, A. N. M., Vieira Cayres-Vallinoto, I. M., Ishak, R., & Rosário Vallinoto, A. C. (2020). Pilates exercise improves the clinical and immunological profiles of patients with human T-cell lymphotropic virus 1 associated myelopathy: A pilot study. Journal of Bodywork and Movement Therapies, 24(3), 1–8. https://doi.org/10.1016/j.jbmt.2020.02.012
- 13. Araújo-Gomes, R. C., Valente-Santos, M., Vale, R. G. S., Drigo, A. J., & Borba-Pinheiro, C. J. (2019). Effects of resistance training, tai chi chuan and mat pilates on multiple health variables in postmenopausal women. Journal of Human Sport and Exercise, 14(1), 122–139. https://doi.org/10.14198/jhse.2019.141.10
- 14. Rrecaj-Malaj, S., Beqaj, S., Krasniqi, V., Qorolli, M., & Tufekcievski, A. (2020). Outcome of 24 Weeks of Combined Schroth and Pilates Exercises on Cobb Angle, Angle of Trunk Rotation, Chest Expansion, Flexibility and Quality of Life in Adolescents with Idiopathic Scoliosis. Medical Science Monitor Basic Research, 26, e920449. https://doi.org/10.12659/MSMBR.920449
- 15. Da Fonseca, J. M. A., Radmann, C. S., De Carvalho, F. T., & De Andrade Mesquita, L. S. (2016). The influence of the Pilates method on muscular flexibility, symptoms, and quality of life in women with primary dysmenorrhea. Scientia Medica, 26(2), 1–7. https://doi.org/10.15448/1980-6108.2016.2.23052
- 16. Mendonça, T., Terreri, M., Silva, C., ... M. N.-A. of physical, & 2013, undefined. (n.d.). Effects of Pilates exercises on health-related quality of life in individuals with juvenile idiopathic arthritis. Elsevier. Retrieved May 11, 2021, from https://www.sciencedirect.com/science/article/pii/S0003999313004577
- 17. Rodríguez-Fuentes, G., de Oliveira, I. M., Ogando-Berea, H., & Otero-Gargamala, M. D. (2014). An observational study on the effects of Pilates on quality of life in women during menopause. European Journal of Integrative Medicine, 6(6), 631–636. https://doi.org/10.1016/j.eujim.2014.08.003
- 18. Abasıyanık, Z., Yiğit, P., Özdoğar, A., EXPLORE, T. K.-, & 2020, undefined. (n.d.). A comparative study of the effects of yoga and clinical Pilates training on walking, cognition, respiratory functions, and quality of life in persons with multiple sclerosis:

 a. Elsevier. Retrieved May 11, 2021, from https://www.sciencedirect.com/science/article/pii/S1550830720302329
- 19. Leopoldino, A., Avelar, N., ... G. P. J.-J. of bodywork and, & 2013, undefined. (n.d.). Effect of Pilates on sleep quality and quality of life of sedentary population. Elsevier. Retrieved May 11, 2021, from https://www.sciencedirect.com/science/article/pii/S1360859212002227
- 20. Vieira, F., Faria, L., Wittmann, J., ... W. T.-J. of B. and, & 2013, undefined. (n.d.). The influence of Pilates method in quality of life of practitioners. Elsevier. Retrieved May

 11,
 2021,
 from https://www.sciencedirect.com/science/article/pii/S1360859213000557
- 21. Ruiz-Montero PJ, Ruiz-Rico Ruiz GJ, Martín-Moya R, González-Matarín PJ. Do health-related quality of life and pain-coping strategies explain the relationship between older women participants in a pilates-aerobic program and bodily pain? A multiple mediation model. Int J Environ Res Public Health [Internet]. 2019;16(18). Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071777152&doi=10.3390%2Fijerph16183249&partnerID=40&md5=a088bcc6d

- 3fd28ac69e2450991a803b3
- 22. McGrath JA, O'Malley M, Hendrix TJ. Group exercise mode and health-related quality of life among healthy adults. *J Adv Nurs*. 2011;67(3):491-500. doi:10.1111/j.1365-2648.2010.05456.x
- 23. Gaskell L, Williams A, Preece S. Perceived benefits, rationale and preferences of exercises utilized within Pilates group exercise programmes for people with chronic musculoskeletal conditions: A questionnaire of Pilates-trained physiotherapists. Musculoskeletal Care. 2019 Sep;17(3):206–14.
- 24. Lipko, M., & Darmas, A. (2015). Physical activity as a pro-health behaviour in the opinion of adult women. BALTIC JOURNAL OF HEALTH AND PHYSICAL ACTIVITY, 7(2), 83–95.



Appendix 3. Avaliação do risco de viés dos estudos do tipo experimental (JBI Critical Appraisal Checklist for Analytical experimental Studies).

Table S2. Risk of bias for each individual study assessed by Joanna Briggs Institute critical appraisal checklist for Randomized Controlled Trials

	Criteria												
Studies —											12*	13*	
Altan et al (2012)	Υ	U	Υ	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	N
Angın E, Erden Z,	N	U	U	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	N
Can F (2015)	IN	0	0	0	0	0	ı	ı	T	ĭ	ī	ı	
Borges et al (2014)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Campos de Oliveira,													
Gonçalves de	Υ	U	Υ	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	U
Oliveira, Pires-	•	Ü	•	Ü	Ü	O	•	•	•		' ')
Oliveira (2015)													
Eyigor et al (2010)	Υ	U	Υ	U	U	U	Υ	Y	Υ	Υ	Υ	Υ	N
Gandolf1 et al	N	N	Υ	N	N	N	Υ	Υ	NA	Υ	Υ	Υ	Υ
(2012)			•	.,							<u>, </u>		
García - Soidán et al (2014)	N	N	Υ	U	U	U	Υ	Υ	NA	Υ	Υ	Υ	N
Karaman et al	V	V				11	ν,				٧.	V	
(2017)	Υ	Υ	Υ	U	U	U	Υ	Y	Υ	Υ	Υ	Υ	N
Kheirkhah et al	Υ	Υ	Y	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	N
(2016)	Y	Y	Y	U	U	U	Y	Υ	Y	Y	Y	Y	IN
Kofotolis et al	Υ	Υ	N	N	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ
(2016)	Y	ř	IN	IN	IN	IN		Y	Ť	Y	Y	Ť	
Kovách et al (2013)	U	U	Υ	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	N
Küçük et al (2016)	Υ	U	Υ	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	U
Kuuckcakır et al (2013)	Υ	Υ	Υ	Υ	U	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Lim, Park (2019)	U	Ú	Υ	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	N
Liposcki et al (2018)	Υ	Υ	Υ	Υ	Υ	U	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Medeiros et al			7	A .			.,			.,		.,	
(2020)	Y	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Natour et al (2014)	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Odynets, Briskin,	1, 1		.,		.,		.,	.,	.,	.,	.,	.,	
Todorova (2019)	Υ	Υ	Υ	U	Υ	U	Υ	Υ	Υ	Υ	Υ	Υ	N
Oliveira et al (2018)	Υ	Υ	Υ	N	Υ	N	U	Υ	Υ	Υ	Υ	Υ	Υ
Oliveira et al (2019)	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Özyemişci Taşkiran		.,					.,	.,	.,	.,	.,	.,	
et al (2014)	Υ	Υ	N	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	N
Rahimimoghadam et	V	V	v	11			v	٧,	٧/	v	v	W	
al (2018)	Υ	Υ	Υ	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	Y
Rodrigues et al (2009)	Υ	Υ	Υ	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	U
Saltan, Ankaralı	Υ	Υ	Υ	U	U	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y
(2020)													
Surbala et al (2013)	Υ	Υ	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Surbala et al (2014)	Υ	N	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	N
Vancini et al (2017)	Υ	Υ	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Yentür et al (2020)	Υ	Υ	Υ	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	N
Yucel H, Uysal O	Υ	U	Υ	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	U
(2016)	-		•				•	•	•	•	•	•	
Yun, Park, Lim	U	U	Υ	U	U	U	Υ	Υ	Υ	Υ	Υ	Υ	U
(2017)													

Y = Yes, N = No, U = Unclear, NA = Not applicable

- 1. True randomization was used for assignment of participants to treatment groups
- 2. Allocation to treatment groups was concealed
- 3. Treatment groups were similar at the baseline
- 4. Participants were blind to treatment assignment
- 5. Those delivering treatment were blind to treatment assignment
- 6. Outcomes assessors were blind to treatment assignment
- 7. Treatment groups were treated identically other than the intervention of interest
- 8. Follow up was complete and if not, were differences between groups in terms of their follow up adequately described and analyzed
- 9. Participants were analyzed in the groups to which they were randomized
- 10. Outcomes were measured in the same way for treatment groups
- 11. Outcomes were measured in a reliable way
- 12. Appropriate statistical analysis was used
- 13. The trial design was appropriate, and any deviations from the standard RCT design (individual randomization, parallel groups) accounted for in the conduct and analysis of the trial