
Kriyā Yoga session. A way to support health professions students

Sesión de Kriya Yoga. Un proyecto de apoyo a los estudiantes de las profesiones sanitarias

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Abstract

For centuries, yoga has benefited and promoted wellbeing in all its forms. The recent literature review presents positive yoga effects on a psychophysiological level, decreasing the stress level in students. Fundamental principles of yoga are presented and confronted with last evidence. A project of the Kriyā Yoga session is proposed to help health professions students manage stress and promote wellbeing.

Keywords: yoga; education; health professionals; stress; promote wellbeing.

Resumen

Desde hace siglos, el yoga otorga beneficios y promueve el bienestar en todas sus formas. Una reciente revisión de la literatura presenta efectos positivos del yoga a nivel psicofisiológico, disminuyendo el nivel de estrés en los estudiantes. Se presentan los principios fundamentales del yoga y se confrontan con las últimas evidencias. Se propone un proyecto de sesión de Kriyā Yoga para ayudar a los estudiantes de las profesiones de la salud a manejar el estrés y promover el bienestar.

Palabras clave: yoga; educación; profesiones sanitarias; estrés; bienestar.

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“Whenever we are in doubt, let us take a break.”

Desikachar, 1999

Introduction

Yoga is one of the *darśana* Indian systems› thoughts, which means vision or a certain way to see, especially inside us. The term *yoga* has several meanings, among with prevails to link the mind wires and obtain unobtainable before. Each change could be considered yoga (Desikachar, 1999).

The Yoga Sutra by Patañjali is the first and most crucial text introducing yoga, and it describes the discipline as the skill to drive thoughts without distractions. Yoga’s practice includes body, breath, and mind to unify them: in the different methods, these elements are combined in different ways.

The body is linked to the positions (*āsana*) and the skill to maintain them comfortably. The breath (*prāṇāyāma*) requests a consciousness as a meditation that involves the mind (*Ibidem*). Buddha said that concentration is how to clean the mind by obstacles, producing energy that brings us above (Rāhula, 1974).

Yoga means bringing attention to what we are doing to be present in the specific moment we live. The first step in yoga practise is to connect breath and body consciously. The main rule is to release and expand the body when inhaling and contract it when exhaling. A way to maintain the consciousness on the breath is a short break at the end of each movement because it brings attention to both movement and respiratory phases (Desikachar, 1999).

Different authors (Lemay *et al.*, 2019; Tripathi *et al.*, 2018; McConville *et al.*, 2017; Saoji, 2016) presented studies about yoga’s positive effects on a psychophysiological dimension, decreasing the students stress level, especially in health professionals (HP) degree courses. Various yoga practices are also beneficial in enhancing performances and getting psychological and physical benefits (Saoji, 2016).

One of the most critical stressors among students in health professions is the examination (*Ibidem*). However, not only: does stress characterizes students’ daily life because they are usually requested to meet rigorous academic standards, to be able to answer the professional role, and to manage the related stress (Stillwell, 2017; Yazdani *et al.*, 2014). Nevertheless, only a few students seek help to get out of this condition (Fares *et al.*, 2016).

In addition to this, it is known that stress can affect global wellness, influencing both learning and clinical performances, but even personal life; that is why students’ wellbeing should be considered as a core curriculum outcome (McConville *et al.*, 2017).

A literature review

To summarize the yoga opportunities used to reduce stress in university health care students, a scoping review (Ghirotto, 2020) was planned using *Pubmed* data bank. The research keywords were *yoga; education; health; stress; student*. A number of 74 articles

came out, so limits have been introduced, as abstract availability and publication in the last five years. From the remained 44 articles, have been eliminated: nine articles because not related to yoga, seven because related to children or undergraduate students, five because pertaining to students of other disciplines (e.g. music, sport), two because analyzing yoga for the management of diseases (e.g. trauma-related synthons, diabetes). A total of 21 articles have been analyzed separately¹ from two researchers to explore the current issue (Figure 1).

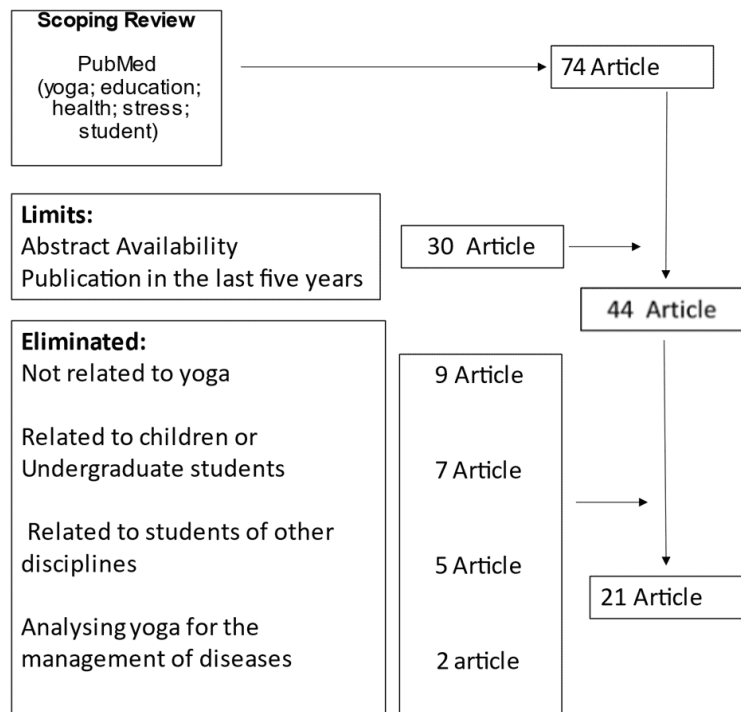


Figure 1. Articles' selection

A literature qualitative analysis assessed the effectiveness of meditation, yoga, and mindfulness on depression, anxiety, and stress' symptoms in students. It emerged that most studies were poor of quality and they found out moderate effects, but any negative side ones (Breedvelt *et al.*, 2019). A systematic review on eight studies, showed varied interventions from a stress management course, such as yoga, conscious breath, meditation, and mindfulness. All analyzed studies assessed stress using the *Perceived Stress Scale*, which demonstrated a reduction in students' stress perception (Stillwell *et al.*, 2017). Another review examined the effectiveness of yoga on mental and physical disorders in health professionals and students. The analyzed twenty-five studies reported a reduction of stress level, but even of anxiety, depression, and musculoskeletal pain. The review also recommended guidelines to guarantee quality in the use of discipline for educational contexts (Ciezar-Andersen *et al.*, 2021).

¹ This work is related to the intervention presented in the abstract books of the CIVINEDU Conference 2021.

A view to single experiences made some interesting elements emerge. As a library event series in the US, yoga midday exercise breaks have been proposed to health sciences professionals and students, considered particularly stressed and needed mental health benefits. Informal evaluation of the experience gave good feedback (Casucci & Baluchi, 2019).

A study comparing methods emerged that yoga is better than fitness exercises in reducing stress. These findings may guide students' future interventions in stress management (Tong *et al.*, 2021).

More than a hundred mental health and nursing students have been involved in a mixed-methods study to assess the effects of experiential learning about self-care. Students have been exposed to different techniques, including yoga (deep breathing, progressive muscle relaxation, mindfulness, aromatherapy, guided imagery). Students were supposed to apply the methods at home and write a free text about the experience each week. Narratives have been analyzed with qualitative content analysis. At the same time, *the Beck Anxiety Inventory*, *Ten-Item Personality Inventory*, and *the Skovholt Practitioner Professional Resiliency and Self-Care Inventory* were used to quantitatively evaluate stress and resilience. Considering that moderate to strong negative correlations between emotional stability and anxiety scores emerged, proposed strategies have been used to alleviate anxiety and promote relaxation before sleep (Moore *et al.*, 2021).

An RCT examined medical students who participated in a 12-weeks project, based on one-hour wellness sessions of yoga, mindfulness, or walking, twice a week. Students' anxiety and perceived stress were assessed using a standardized psychological assessment, compared with a control group. Results underlined a significant difference between pre and post-intervention, and between the two groups, with any negative impact on the study path (Waechter *et al.*, 2021). A randomized Wait List Control (WLC) trial evaluated the effectiveness of eight weeks of yoga on hundred nursing students. Data have been collected with *Freiburg Mindfulness Inventory (FMI)*, *Self-Compassion Scale- Short Form (SCS-SF)*, *Connor-Davidson Resilience Scale (CD-RISC)*, *Satisfaction with Life Scale (SWLS)*, *Jefferson Scale of Empathy HPS-Version (JSE-HPS)*, and *Perceived Stress Scale (PSS)*. From results emerged a significantly improving self-compassion, mindfulness, resilience, but any statistically significant modification of life satisfaction and perceived stress (Mathad *et al.*, 2017). In addition to this suggestion, to improve self-care, which can influence the burnout risks, an innovative holistic-integral nursing curriculum supported future nurses in creating caring-healing contexts using yoga (Clark, 2018). Another project focused on improving self-care was a seminar on a yoga-inspired biopsychosocial-spiritual model of self-care to manage anxiety, self-compassion, mindfulness, depression, and stress in graduate healthcare students. A 5-week seminar (60-minute sessions) has been proposed using mixing breathing, conscious movement, meditation, and education. Emerged results described changes in perceived anxiety, self-compassion, mindfulness, depression, and stress (Klawonn *et al.*, 2019).

A group of self-selected nursing students participated in a quasi-experimental study, offering a one-hour yoga class, once a week for 12 weeks, to lower stress and provide coping skills. Results show statistically significant increases in perceived stress, while physical health scores (QOL) decreased from the beginning to last week. It means students experienced stress, regardless of yoga practice. This article is fascinating because it tries to consider students' stress related to academic expectations, even when planning to reduce stress. Another point to consider is that students can expect higher benefits, respect ones really reachable, or –again- for those not familiar with yoga, first experiences could be not easy (Kinchen *et al.*, 2020).

The literature describes different types of proposed methodologies. A US University offered a six-week pilot program of *vinyasa* flow yoga classes, once weekly, to reduce stress perception anxiety levels, preceding final examinations, and improve mindfulness skills. Students participating in the planned guided meditation completed a pre-and post-questionnaire which demonstrated a reduction in stress and anxiety levels (Lemay *et al.*, 2019). *Ashtanga vinyasa* yoga comes from hatha yoga, and it is based on positions that make the session physically and rhythmically intense.

Lower period sessions do not confirm the same efficacy: as an example, a fifteen-minutes yoga movement proposed to health sciences students, previous exams, do not show evidence of statistical significance compared to the control group (Kanderis Lane *et al.*, 2021).

To assess the yoga *Nidra's* effects on life stress and self-esteem in university students, a small group participated in one hour sessions, twice a week, for eight weeks. With an equivalent control group, life stress intensity was assessed with a *Visual Analog Scale* and self-esteem using *Rosenberg's Self-Esteem Scale*. The yoga *Nidra* group significantly decreased the life stress intensity and increased self-esteem scores (Sang Dol, 2019). This method comes from *Tantra*, and it teaches how to relax consciously: sleep is not considered as rest but a more profound consciousness experience (Saraswati, 2003).

Mastering the emotions technique is one of the yoga-based meditations using emotions' control. Seventy-two college students have been requested to use this technique for a 45 minutes session a day in 2 weeks. The emotional *Regulation Questionnaire (ERQ)*, *The Positive and Negative Affect Schedule (PANAS)*, *Self-Compassion Scale (SCS)*, and *Mindful Attention Awareness Scale (MAAS)* have been administrated before and after the project. Results showed a significant increase of positive effects (e.g. cognitive reappraisal, self-compassion, mindful attention) (Patel *et al.*, 2018).

A study aimed to assess knowledge, attitude, and practice of *the Kundalini Activation Process (KAP)* in medical students (Hegde *et al.*, 2018). Kundalini is an obstacle to the passage of vital energy, and KAP is based on a set of spontaneous movements that let the energy free to flow (Desikachar, 1999). More than 70% of participants perceived benefits from this type of yoga. An interesting point of this study is that a pretty big part of the sample previously practised yoga. However, most of them discontinued the practice because of perceived barriers (e.g. lack of time, places, company) (Hegde *et al.*, 2018).

Laughter yoga combines self-induced laughter with yoga breathing techniques. Laughter begins artificially, then it changes to natural, increasing oxygen saturation, safety feeling, self-belief, and distraction from negative thoughts (Kataria, 2020).

To evaluate the effect of laughter yoga on mental symptoms and cortisol levels in nursing students, a randomized controlled study analyzed the pre/post administration of the *Brief Symptom Inventory* and students' saliva samples to measure the cortisol levels, using a control group. In the intervention group compared with control one, the inventory showed a significant decrease of both brief symptoms, and salivary cortisol levels, demonstrating that this methodology can help students cope with stress (Ozturk & Tezel, 2021).

Some studies tried to analyze the yoga benefits during the Covid-19 pandemic. A few articles (three) have been left out because they exclusively related to mindfulness. Considering the restrictions of the lockdowns, a study analyzed yoga as one of the strategies to promote physical activity and prevent sedentary behaviours in university students, increasing 80% of the activities (Rodrigues-Larrad *et al.*, 2021). During the pandemic, most interventions to promote well-being focused on individual strategies, such as mindfulness, meditation, yoga, and sleep. Responses are ambivalent, so the authors suggested that students' general well-being is not the ideal goal to be reached. Instead, it is necessary to focus on three specific domains: the context (school or work), students themselves, and life in general, all elements connected to well-being (Slavin, 2021).

From ancient texts to last evidence

It is impossible to practice yoga if we do not integrate mind, body, and breath; in fact, breath quality is an indicator of a good movement or position. The practice cycle should start from slow and easy positions to warm up the body and include an active part.

The mind has to be prepared for the session. During the practice, attention has to be maintained to respect the physical skills and not stress the body. Even if studies emerged that yoga reduces stress more than fitness (Tong *et al.*, 2021), it is necessary to remember the attention to breathing. Some types of yoga (e.g. Hatha) are more pointed to physical exercise, but they can not be considered yoga if not related to breath. The first part of Yoga Sutra (*Samadhipadah*) starts suggesting «*atha (...) yogah*», which means, now I stop, I do yoga (Kyiyānanda, 2014).

There are different strategies to keep the attention on the breath. Holding the breath after exhaling improve the āsana benefits (empty pause); holding after inhaling empowers the chest (full pause). The exercise to extend the exhaling time has a purifying effect on the body. The breath should remain the only process under attention, for example, trying to feel the part of the body in which we perceive the breath itself. Another strategy to keep this attention is to count seconds on inhale and exhale, gradually increasing the exhalation duration to be double that of inhalation (Desikachar, 1999).

The yoga theory is impressive and huge, considering how long it has been practised and how many teachers gave different interpretations of philosophical concepts and practices. The element that should remain fundamental is the importance of having a the-

oretical base no matter what type of yoga we decide to practice. Only by understanding the basic principles on which breath and body practices are based, we can arrive at the consciousness yoga requests.

Yoga has to be well prepared with dedicated time and place to get benefits. The last literature emerged that too-shorts sessions do not have the expected results (Kanderis Lane *et al.*, 2021). In addition to this, some experiences underline an increase of stress doing yoga, because of expectations, especially in people who do not have previous knowledge of the discipline (Kinchen *et al.*, 2020). Maintaining an āsana (position) for a long time could be problematic (sometimes painful), and remaining concentrated on breath could be challenging, especially the first time. These issues should remind us to pay attention to the type of yoga chosen or proposed, but even on evaluating the benefits. If the evaluation process is too stiff, it could increase expectations and stress levels. Yoga could be full of benefits, but it is not easy to approach it deeply, and it needs to be guided the first times to erase the barriers reported by the literature (Hegde *et al.*, 2018).

The yoga session

Considering previous reflections about ancient and modern teachings, a Kriyā Yoga project is now proposed to help health professions students manage stress and be more performant during the exams. Although the most used practices in the West are focused on practical activities (e.g., Hata Yoga), the Kriyā approach considers the yoga elements in their globality of body, breath, and mind. Āsana and *prānāyāma* help to relieve physical and mental tensions, to start the self-knowledge process (Desikachar, 1999).

The project is divided into different sessions/days, and it gradually increased the complexity, considering meditation the most challenging part, especially for young people who never tried yoga before. Each following step is introduced in the conclusion of the previous one, giving students the possibility to stop or leave if they do not feel comfortable. A dedicated space (e.g. a large classroom) is needed, possibly set up with carpet on the floor and pillows. Students should dress comfortably.

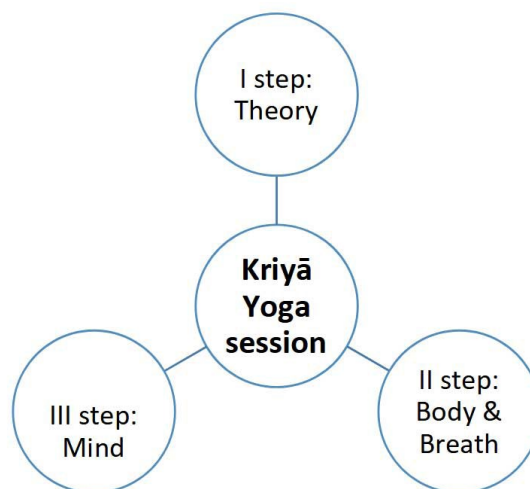


Figure 2. Kriyā Yoga session

First step: Theory

In the first step (one hour), the meaning and the aim of Kriyā yoga is briefly introduced. This session has been considered fundamental to explaining the discipline's purpose and aims, especially for young people at their first experience. Explanation and training about the deep and conscious breath are helpful tools during anxiety moments. A few exercises to improve consciousness on the breath are given to students to exercise at home.

Second step: Body & Breath

The second step consists of three sessions of āsana exercises (one hour each), explaining to students not to concentrate on physical performance but body messages at that moment: am I comfortable? What part of the body is not? What am I feeling?.

In the second and third meetings, the breath is introduced, with the (apparently) easy exercise to listen at the breath, just focusing on it: Can I feel the airflow? How is it long? What is the relation between in and out-breath?. These small exercises help in empty minds by thoughts, even if it is just for a while.

In these two sessions, the suggestion of closing eyes is necessary, first to ease the attention process, second to do not feel observed by others. A mandate of exercises at home, with simple positions, is suggested to students.

Third step: Mind

The third step included two meditation exercises (one hour each), made in two different moments. Both were introduced by 15-minutes warm-up exercises (Body & Breath), considered fundamental to link body, breath, and mind, as yoga requests (Desikachar, 1999).

A brief accompanied meditation has been suggested, starting from the point that the mind's attention is intermittent. We have to be thankful for the few consecutive minutes we can keep its attention inside us.

From the *Buddha Divine Adobes* suggested for the *Vipassana* meditation, *Metta* has been proposed, meaning kindness toward ourselves. *Metta* focuses thoughts on the good placed in each of us, wishing good thoughts to others. The *Metta* of this session suggests recognizing the good that could be found in everything and that we can manage and obtain.

The evaluation

The session is dedicated to students; formal evaluations are not suggested to do not stress them. At the beginning and the end of each session, students have the possibility to share doubts feelings or ask questions.

Conclusion

Yoga helps to change the vision and perspective of problems, and it allows in looking in a new way (Desikachar, 1999). As emerged from ancient texts and today's literature, experiencing yoga could be an excellent example of improving students' global well-being, allowing them to work on their stress levels.

References

- Breedvelt, J. F., Amanvermez, Y., Harrer, M., Karyotaki, E., Gilbody, S., Bockting, C. L. H., Cuijpers, P., Ebert, D. B. (2019). The Effects of Meditation, Yoga, and Mindfulness on Depression, Anxiety, and Stress in Tertiary Education Students: A Meta-Analysis. *Front Psychiatry, Apr 24*, 10, 193. doi: 10.3389/fpsy.2019.00193.
- Casucci, T., Baluchi, D. A. (2013). Health sciences library promotes wellness with free yoga. *J Med Libr Assoc, Jan;107(1)*, 80-88. doi: 10.5195/jmla.2019.475.
- Ciezar-Andersen, S. D., Hayden, K. A., King-Shier, K. M. (2021). A systematic review of yoga interventions for helping health professionals and students. *Complement Ther Med., May;58*: 102704. doi: 10.1016/j.ctim.2021.102704.
- Clark, C. S. (2018). A Radical RN- BS Nursing Class: Outcomes from an Integrative Yoga Elective. *Int J Nurs Educ Scholarsh, Jun 13, 15(1)*, /j/ijnes.2018.15.issue-1/ijnes-2017-0073/ijnes-2017-0073.xml. doi: 10.1515/ijnes-2017-0073.
- Desikachar, T. K. V. (1999). *The heart of yoga: Developing a personal practice*. New York, US: Simon and Schuster.
- Fares, J., Al Tabosh, H., Saadeddin, Z., El Mouhayyar, C., Aridi, H. (2016). Stress, burnout and coping strategies in preclinical medical students. *N Am J Med Sci, 8*, 75–81.
- Ghirotto, L. (2020). *La systematic review nella ricerca qualitativa*. Roma, Italy: Carocci Editore.
- Hegde, S. V., Rao, S. K., Menezes, R. G., Kotian, S. M., Shetty, S. (2018). Knowledge, Attitude, and Practice of Yoga in Medical Students: Assessment of Anthropometry and Lifestyle Factors. *Int J Yoga Therap, Nov 28(1)*, 9-14. doi: 10.17761/2018-00005R1.
- Kanderis Lane, C. L., Gurenlian, J. R., Freudenthal, J., Denner, P. R. (2021). A 15-Minute Yoga Intervention to Reduce Entry-Level Dental Hygiene Student Stress. *J Dent Hyg, Apr 95(2)*, 63-70.
- Kataria, M. (2020). *Laughter Yoga: Daily Practices for Health and Happiness*. London, UK: Penguin Books.
- Klawonn, A., Kernan, D., Lynskey, J. (2019). A 5-Week Seminar on the Biopsychosocial-Spiritual Model of Self-Care Improves Anxiety, Self-Compassion, Mindfulness, Depression, and Stress in Graduate Healthcare Students. *Int J Yoga Therap, Nov 29(1)*, 81-89. doi: 10.17761/D-18-2019-00026.
- Kinchen, E., Loerzel, V., Portoghese, T. (2020). Yoga and perceived stress, self-compassion, and quality of life in undergraduate nursing students. *J Educ Health Promot, Oct 30, 9*, 292. doi: 10.4103/jehp.jehp_463_20.
- Kriyananda, S. (2014). *Patanjali rivelato*. Perugia, Italy: Ananda Edizioni.
- Lemay, V., Hoolahan, J., Buchanan, A. (2019). Impact of a Yoga and Meditation Intervention on Students' Stress and Anxiety Levels. *J Pharm Educ, Jun, 83(5)*, 7001. doi: 10.5688/ajpe7001.
- Mathad, M. D., Pradhan, B., Sasidharan, R. K. (2017). Effect of Yoga on Psychological Functioning of Nursing Students: A Randomized Wait List Control Trial. *J Clin Diagn Res, May 11(5)*, KC01-KC05. doi: 10.7860/JCDR/2017/26517.9833.

- McConville, J., McAleer, R., Hahne, A. (2017). Mindfulness Training for Health Profession Students-The Effect of Mindfulness Training on Psychological Well-Being, Learning and Clinical Performance of Health Professional Students: A Systematic Review of Randomized and Non-randomized Controlled Trials. *Explore (NY), Jan-Feb, 13(1)*, 26-45. doi: 10.1016/j.explore.2016.10.002.
- Moore, M. F., Montgomery, L., Cobbs, T. (2021). Increasing student success through in-class resilience education., *Nurse Educ Pract, Jan 50*, 1029-48. doi:10.1016/j.nepr.2020.102948.
- Ozturk, F. O., Tezel, A. (2021). Effect of laughter yoga on mental symptoms and salivary cortisol levels in first-year nursing students: A randomized controlled trial. *Int J Nurs Pract., Apr 27(2)*, e12924. doi: 10.1111/ijn.12924.
- Patel, N. K., Nivethitha, L., Mooventhan, A. (2018). Effect of a Yoga Based Meditation Technique on Emotional Regulation, Self-compassion and Mindfulness in College Students. *Explore (NY), Nov 14(6)*, 443-447. doi: 10.1016/j.explore.2018.06.008.
- Rāhula, W. (1974). *What the Buddha taught* (Vol. 641). New York, US: Grove Press.
- Rodríguez-Larrad, A., Mañas, A., Labayen, I., González-Gross M., Espin, A., Aznar, S., Serrano-Sánchez, J. A., Vera-García, F. J., González-Lamuño, D., Ara, I., Carrasco-Páez, L., Castro-Piñero, J., Gómez-Cabrera, M. C., Márquez, S., Tur, J. A., Gusi, N., Benito, P. B., Moliner-Urdiales, D., Ruiz, J. R., Ortega, F. B., Jiménez-Pavón, D. H., Casajús, D. H., Irazusta J. Impact of COVID-19 Confinement on Physical Activity and Sedentary Behaviour in Spanish University Students: Role of Gender. *Int J Environ Res Public Health, Jan 6, 18(2)*, 369. doi: 10.3390/ijerph18020369.
- Sang Dol, K. (2019). Effects of a yoga nidra on the life stress and self-esteem in university students. *Complement Ther Clin Pract, May 3*, 232-236. doi: 10.1016/j.
- Saoji, A.A. (2016). oga: A Strategy to Cope up Stress and Enhance Wellbeing Among Medical Students. *N Am J Med Sci, Apr 8(4)*, 200–202. doi: 10.4103/1947-2714.179962.
- Saraswati, S. S. (2003). *Yoga Nidra*. Rimini, Italy: Edizioni Satyananda Ashram Italia.
- Slavin, S. (2021). Reimagining Well-Being Initiatives in Medical Education: Shifting From Promoting Wellness to Increasing Satisfaction. *Acad Med, 2021 May 1, 96(5)*, 632-634. doi: 10.1097/ACM.0000000000004023.
- Stillwell, S.B., Vermeesch, A.L., Scott, J.C. (2017). Interventions to Reduce Perceived Stress Among Graduate Students: A Systematic Review With Implications for Evidence-Based Practice. *Worldviews Evid Based Nurs, Dec 14(6)*, 507-513. doi: 10.1111/wvn.12250.
- Tripathi, M.N., Kumari, S., Ganpat, T.S. (2018). Psychophysiological effects of yoga on stress in college students. *J Educ Health Promot, Mar 1, 7, 3*. doi: 10.4103/jehp.jehp_74_17.
- Tong, J., Qi, X., He, Z., Chen, S., Pedersen, S. J., Cooley, P. D., Spencer-Rodgers, J., He, S., Zhu, X. (2021). The immediate and durable effects of yoga and physical fitness exercises on stress.. *J Am Coll Health, Aug-Sep 69(6)*, 675-683. doi: 10.1080/07448481.2019.1705840.
- van der Riet, P., Levett-Jones, T., Aquino-Russell, C. (2018). The effectiveness of mindfulness meditation for nurses and nursing students: An integrated literature review. *Nurse Educ Today, Jun, 65*, 201-211. doi: 10.1016/j.nedt.2018.03.018.
- Waechter R., Stahl G., Rabie S., Colak B., Johnson-Rais D., Landon B., Petersen K., Davari S., Zaw T., Mandalaneni K., Punch B. (2021). Mitigating medical **student stress** and anxiety: Should schools mandate participation in wellness intervention programs?, *Med Teach. 2021 Aug 43(8)*, 945-955. doi: 10.1080/0142159X.2021.1902966.
- Yazdani, M., Esmailzadeh, M., Pahlavanzadeh, S., Khaledi, F. (2014). The effect of laughter Yoga on general health among nursing students. *Iranian Journal of Nursing and Midwifery Research, January-February, 19(1)*, 36-40.

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