

How to Cite:

Das, S., & Yoga, P. (2022). Effects on Pilates exercise for rowing player. *International Journal of Health Sciences*, 6(S6), 4739–4745.
<https://doi.org/10.53730/ijhs.v6nS6.11453>

Effects on Pilates exercise for rowing player

Sumitra Das

Research Scholar, Alagappa University College of Physical Education, Alagappa University, Karaikudi, Tamilnadu, India

Dr. P. Yoga

Assistant Professor, Alagappa University College of Physical Education, Alagappa University, Karaikudi, Tamilnadu, India

Abstract--Pilates is a slow and flowing exercise with deep breathing and a move which gives you time to connect body and mind to focus and relaxed the body or mind. Pilates exercises important for rowing player because it is a low impact training made up by slow movement that's enhance rower power, flexibility, stamina, strong core muscles and improve body balance and it focus on the develop smaller and dipper muscles that need rowers to improve their overall performance as well as health. Through Pilates exercise can stop muscles cramp and improve stability. Pilates moves effectively will helps to build muscles power, improve eye-hand coordination and strength, those thing helps to player comfort on the boat. Every player must be calm and comfort during the racing time. Pilates exercise helps to improve our mental health because players sit on the river so mind goes through critical situation, because rowing is a fast, balancing, coordination, or power full game. So rower needs mental strength as well as physical strength. In pilates plank is a very popular moves which used to strengthen abdominal muscles and elongate arm muscles. After Pilates workout player feel relaxed their body or build confidence level. Mostly Rowers suffer from back pain, wrist pain and ankle pain, if player regular doing Pilates they will recover soon and aware of those pain.

Keywords--exercise, pilates, rowing, players.

Introduction

Pilates is a type of exercise which is mainly focus to improve core muscles, body alignment and posture correction, improve physical strength. Pilate's method introduces by Joseph Hubertus Pilates in 1920s from Germany [1]. Pilates is a low impact exercises, slow and systematic body movements and body balance method. Pilates exercise will help to strong core strength and strong mobility.

Pilates support body posture through flexibility, balance, strength and range of motion. It can be performed with equipment or without equipment's. Now days Pilates exercise gain more popularity all over the world including India. Recently Pilates exercise mostly use celebrities or sports person for fitness as well as posture correction or day by day people aware of pilates exercise interest. Pilates is a versatile exercise you can use mat, ball or standing exercise it is attractive or interesting workout. Pilates exercise developed during the first half of twentieth century, Pilates organised a systematic exercise which connect to strength mind and human body. Pilates believed that mental health and physical health connected

About Rowing

Rowing is a water sports game and very popular game all over the world. In the oldest days, this boat was used for the purpose of transport as used to cross a river from one side to the other side. (nil rivers). And during this time school and club select rowing game as recreation activities with six oars and eight oars. But a modern day rowing is an international game can play men and women, single or doubles. Rowing game totally different form other water sports game because of boat size, design or playing technique which helps to makes unique and interesting. Player hold the paddle in one hand to move boat and paddle design also different, paddle set alternate side one right or one left side and there is a blade at the end of the paddle which help to push water to move boat forward. Regular stroke process divided into four phase catch, derived, release and recovery. Rowing game is very attractive game because player sitting style is different and rowers have their own sit which is move forward and backward through two tracks which is fixed into the boat and when rowers sit on the boat they must lock their feet with strapped shoes which fix on the boat name (stationary foot plates). When Rower catch the water with the help of paddle at the same time player knee bend or close to body, body position forward bend, elbow straight front of the chest and push the water boat goes back side and knee also extend, elbow bend both hand close to the chest and body slightly bend back side this is the process of continuous the game. Player needs more strength, power, flexibility and coordination for better performance. When player push the oars from the water boat goes back side. That's why they need to apply equal power and coordinate to each other. All the players doing same work at same time with same power and maintain the boat balance [2]

Pilates exercise helps to rowers

Pilates is a new form of exercise which works our body in effective ways. Pilates can control player body and mind through slow movements with breathing practice. For rowers proper breathing is important because every stroke player need to breath in or breath out. When player breath inhale body bend backward and when breath out body bends forward, this is the continuous process going on during the match. And if you want to maintain these continuous process rowers should have strong lower body part, good shoulder strength, eye-hand coordination and power. Here rowers can improve through pilates exercise as we know that pilates good for flexibility, improve muscular strength, balance, power

and coordination etc. now days if you asked anyone they will give advised to add pilates training in your routine.

Shoulder Bridge

In this position knees will be bent, the feet are open inner hip distance apart, and the knees are open inner hip distance apart. And arms will press down into the mat. Curl your tailbone lift up your hips to a bridge position and hold it here. It's not an arched rib cage that may find in other modalities like yoga, but in pilates the ribs are always softening and pulling together. From here, bend your right knee and extend the right leg toward the ceiling and stretch the heel after lower your leg down knee-to knee. Do it 5 to 6 repeat and change the leg. Shoulder bridge exercise is high level exercise it will helps to strong hamstring, improve hip movement and leg flexibility. That need rower because rowing is a fast event and during the match player continuously leg pushing or paddling so shoulder bridge exercise helps to strong those muscles.

Roll up

Roll up works on continuing to strengthen your core while stretching the spine and then we'll start to articulate through the spine now, articulate is very specific word professional trainer used this word because we want to go bit, by bit, in this case, through the spin or leg. Lay down to the mat then reach your arms up towards the ceiling, inhale to prepare then exhale, curl your chin towards your chest and roll up off the mat legs are together, body is like a c shape. This exercise helps to strong core muscles, improve flexibility and improve breathing pattern and body control. This exercise important because rower bend their body forward and backward every stroke

Pulling Straps

Pulling straps exercise cover various benefits like shoulder power, lower back, strong abdominal and griping. Pulling straps is an equipment exercise which is made by heavy spring and long box. You can do it in sitting position then Start with hold the straps with hand by hoking palm and raping over, sit straight and try to reach forward and backward by pushing straps. These exercises mostly focus to improve biceps, triceps muscles, and its helps to strong spinal movement, shoulder strong and improve breathing system. Pulling straps regular practice will increase length of the stroke and those things important for rowing player. Because player want to continuously paddling during the events so they need more arms power and proper spin movement.

Wall Chair

Take a sit in a chair position with the support of wall. And hold this position for few minutes. This exercise continuous practice will help to improve back muscles, hamstring, strengthens ankles, builds stamina and tones abdominal organs. This exercise benefits for rowers because they need more stamina, strength and strong back muscles. During the match player want to sit in particular position to move boat forward.

Common rower sports injuries

- **Lower back pain (lumbar):** pelvic tilt or imprinting, chest lift, hamstring and hip flexor stretch - This is simple exercise but effective exercise for back pain which support your lower back. Gets the deep core muscle switched on and builds strength in the support system of spine.
- **Shoulder impingement:** It was happening due to repetitive overuse may cause shoulder impingement. Through pilates practitioner try to improve quality of shoulder movement in a pain free range of motion. This exercise helps to teach awareness of the scapula on the ribs.
- **Iliotibial band friction syndrome:** It is a connective tissue that connects the pelvis to tibia bone. Its runs across the knee and helps to stabilize it. It happened because of exclusive knee bending causes of friction, pain and irritating outside of the knee. This injury happens due to repetitive movement.
- **Stress fractures of the ribs:** Due to the repetitive load lifting of every stroke rower feel stress their ribs and too much training can lead to injury. Roll up exercise will help to recover stress fractures of the ribs injury.
- **Extensor tenosynovitis of the wrist:** Mostly this problem seen because of continuous paddling or rower hands and wrist may the start pain because of more pressure or regular movement.

Advantage of Pilates Exercise for Rowers

- It increases length of stroke.
- Strong lower body parts.
- Its helps to improve body balance.
- Improve power and stamina.
- Improve shoulder and hip flexibility and core strength.
- Develop concentration power. .
- Improving breathing system.
- Improve muscle power.
- Correct body posture.
- Build confidence.
- Reduce stress or prevent injuries

Conclusion

Pilates exercise very popular now day's especially for young youth, sports persons, celebs and rehabilitation purpose because pilates is very attractive exercise or less effort exercise which helps maintain physical health. Pilates exercise well for health it is not only for sports persons. It is a challenging low impact exercise which helps to improve rower playing skills or technique. Regular practice will helps to improve freely movements with full strength that exactly player need for better performance. Pilates exercise helps to improve flexibility, power, strength and coordination. Daily Pilates exercise helps to prevent injury or rehabilitation. Mostly rowers faced after long time they feel back pain, wrist, ankle and shoulder pain. If every day player practice pilates exercise then players feel good and create body awareness after the practice. Pilates helps to relax the rower

body as well as mind. When your form is best then you can really take the advantages during the events that are the most important achievement of player life.

Source of fund

The present study did not get any financial support.

Conflict of interest: None

Acknowledgment: None

References

1. Alaguraja, K. (2019). Analyze of combined asanas pranayama practices on psycho social parameter among sports people". *Indian Journal of Applied Research*, 9(10), pp.73-74.
2. Alaguraja, K., & Yoga, P. (2017). Influence of yogasana practice on flexibility among obese adolescent school boys. *International Journal of Yoga Physiotherapy and Physical Education*, 2(7), pp.70-71.
3. Alaguraja, K., & Yoga, P. (2017). Influence of yogic practice on vo2 max among school students, *International journal of innovative knowledge concepts*, 5(6), pp. 18-20.
4. Alaguraja, K., & Yoga, P. (2018). Effect of core stability training on dynamic strength among college male students. *International Journal of Yogic Human Movement and Sports Sciences*, 3(2), pp. 436-437.
5. Alaguraja, K., & Yoga, P. (2019). A sequence of combined effect of saq training and yogic package on self confidence among handball players. *International Journal of Sports, Exercise and Physical Education*, 1(1), pp. 15-17.
6. Alaguraja, K., & Yoga, P. (2019). A study effect of combined yoga and naturopathy on triglycerides among stressed people. *International Journal of Physiology, Exercise and Physical Education*, 1(1), pp. 09-11.
7. Alaguraja, K., & Yoga, P. (2019). A study on yogic package on body mass index among rural school boys. *International Journal of Physical Education, Exercise and Sports*, 1(2), pp. 07-09.
8. Alaguraja, K., & Yoga, P. (2019). Analysis the effect of yogic package on low density lipoprotein among trained handball players. *International Journal of Physiology, Exercise and Physical Education*, 1(1), pp. 09-11.
9. Alaguraja, K., & Yoga, P. (2019). Analyze of pranayama technique on physiological parameter among rural school students. *Journal of Information and Computational Science*, 9(8), pp.545-550.
10. Alaguraja, K., & Yoga, P. (2019). Combined pranayama and meditation practices on self confidence. *International Journal of Physical Education, Exercise and Sports*, 1(2), pp. 01-03.
11. Alaguraja, K., & Yoga, P. (2019). Effect of yogic practice on resting pulse rate among school students. *Indian journal of Applied Research*, 9(7), pp. 43-44.
12. Alaguraja, K., & Yoga, P. (2019). Impact of yogic package on body mass index among obese people. *International Journal of Physical Education, Exercise and Sports*, 1(2), pp. 04-06.
13. Alaguraja, K., & Yoga, P. (2019). Mindfulness meditation on stress among

- working men". *International Journal of Physiology, Sports and Physical Education*, 1(1), pp. 09-11.
14. Alaguraja, K., & Yoga, P. (2019). Pranayama package on self efficacy among middle ages unemployed women. *International Journal of Sports, Exercise and Physical Education*, 1(1), pp. 18-20.
 15. Alaguraja, K., & Yoga, P. (2019). Pranayama package on systolic blood pressure among middle ages unemployed women. *International Journal of Sports, Exercise and Physical Education*, 1(1), pp. 18-20.
 16. Alaguraja, K., & Yoga, P. (2019). Yogic therapy treatment on high density lipoprotein among high school boys. *International Journal of Physiology, Exercise and Physical Education*, 1(1), pp. 09-11.
 17. Alaguraja, K., Yoga, P., Balamuralikrishnan, R., & Selvakumar, K. (2019). A scientific study on efficacy of yogic package on resting pulse rate among obese school students. *Journal of Information and Computational Science*, 9(8), pp.483-487.
 18. Alaguraja, K., Yoga, P., James Rathinaraj, S., & Selvakumar, K. (2019). A study on yoga intervention on maximal oxygen uptake among stress patient. *Indian Journal of Applied Research*, 9(9), pp.38-39.
 19. Balasubramanian, K., & Yogaraj, P. (2009). Effect of weight training and physical exercises on bio-chemical variables among college football players, *International journal of Physical Education*, 2(1 &2), pp. 1-4.
 20. Das, Sumitra., Yoga, P., Alaguraja, K., Selvakumar, K., Rai, Marina., Consequence of Yoga and Rowing. *International Journal of Advanced Science and Technology*, 29(03), (2020), pp. 7079 – 7084.
 21. Malgorzata, Eliks., Malgorzata., zgorzalewicz stactowiak., krystyna zenczak praga, Application of Pilates-based exercises in the treatment of chronic non-specific low back pain: state of the art, *Postgrad Medical Journals*, 95(1119), (2019), pp. 41–45.
 22. Marinar Rai., Yoga, P., Alaguraja, K., Selvakumar, K., & Sumitra Das. (2020). The power of yoga. *International journal of advanced science and technology*, 29(03), pp.6225-6229.
 23. Parmin, P., Suarayasa, K., & Wandira, B. A. (2020). Relationship between quality of service with patient loyalty at general polyclinic of kamonji public health center. *International Journal of Health & Medical Sciences*, 3(1), 86-91. <https://doi.org/10.31295/ijhms.v3n1.157>
 24. Selvalakshmi, S., & Yogaraj, P. (2009). Effect of varied yogic practices on haemoglobin and blood sugar among obese women, *asian journal of physical education & Computer Science in Sports*, 1(1), pp. 262-264.
 25. Sumitra Das., & Yoga, P. (2019). A study on effect of combined yoga and naturopathy on triglycerides among high school girls, *Journal of Information and Computational Science*, 9(8), pp.450-454.
 26. Sumitra Das., & Yoga, P. (2019). Effect of yogic package on body mass index among rural school girls, *Journal of Information and Computational Science*, 9(8), pp.462-467.
 27. Sumitra Das., Yoga, P., Alaguraja, K., Selvakumar, K., & Marinar Rai. (2020). Consequence of yoga and rowing. *International journal of advanced science and technology*, 29(03), pp.7079-7084.

28. Suryasa, I. W., Rodríguez-Gámez, M., & Koldoris, T. (2021). The COVID-19 pandemic. *International Journal of Health Sciences*, 5(2), vi-ix. <https://doi.org/10.53730/ijhs.v5n2.2937>
29. Yoga, P. (2013). Effect of varied integrated modules of yogic practices on platelets count among women type ii diabetic patients, *Asian Journal of Physical Education & Computer Science in Sports*, 9(1), pp. 47-49.
30. Yoga, P. (2014). Effect of varied integrated modules of yogic practices on white blood cell count among women type ii diabetic patients, *International journal of Physical Education Sports Management and Yogic Sciences*, 4(1), pp. 33-36.
31. Yoga, P. (2014). Effect of varied integrated modules of yogic practices on red blood cell count among women of type ii diabetic patients, *International journal of Sports Technology, Management and Allied Sciences*, 3(1), pp.70-74.
32. Yoga, P. (2014). Effect of varied packages of yogic practices on white blood cell count among college men students, *International Journal of Health, Physical Education & Computer Science in Sports*, 15(1), pp.47-49.
33. Yoga, P. (2015). Efficacy of sectional breathing and nadi suddhi pranayama on red blood cell count among college men students, *International Journal of Information Research and Review*, 2(3), pp.537-539.
34. Yoga, P. (2015). Influence of varied packages of yogic practices on cardio vascular endurance among college men students, *International Journal Engineering Research & Sports Science*, 2(2), pp.33-34
35. Yoga, P. (2018). Effect of circuit training on respiratory frequency among male handball players, *International journal of health, physical education & computer science in sports*, 29(2), pp.153-155.
36. Yoga, P., & Ranjith, V P. (2019). Efficacy of sectional breathing and nadi suddhi pranayama on white blood cell count among college men students, *International Journal of Health, Physical Education & Computer Science in Sports*, 17(2), pp. 16-18.
37. Yoga, P., Balamuralikrishnan, R., & Alaguraja, K. (2018). Influence of cyclic meditation on selected physiological parameter. *International Journal of Advanced Education and Research*, 4(1), pp.17-18.
38. Yogaraj, P., & Elangovan, R. (2011). Effect of Varied Packages of Yogic Practice on Selected Bio-Chemical Variables of College men Students, *International journal of Physical Education Sports Management and Yogic Sciences*, 1(1), pp. 35-39.
39. Yogaraj, P., Ramaraj, P., & Elangovan, R. (2010). Effect of Selected Yogic Practices Physical Exercises on Bio-Chemical Variables among College Women Students, *Asian Journal of Physical Education & Computer Science in Sports*, 3(1), pp. 27-29.
40. Yogaraj, P., Ramaraj, P., & Elangovan, R. (2010). *Effects of selected asanas on serum cholesterol and functions of adrenal gland in college women*, *Asian Journal of Physical Education & Computer Science in Sports*, 2(1), pp. 206-208.