

## **Table of Contents of Thesis**

### **Title: “The Therapeutic Value of Pilates in Indian Classical Dance - Bharatanatyam”**

#### **Chapter 1 Introduction**

##### 1.1. Introduction

###### 1.1.1. नाट्यक्रमः (The order)

###### 1.1.2. Method of Exercise

##### 1.2. What is Therapy?

##### 1.3. Therapeutic Value

##### 1.4. Supplementary Exercises

##### 1.5. Types of Exercises

###### 1.5.1. Yoga

###### 1.5.2. Aerobics and Endurance

###### 1.5.3. Plyometric Training

###### 1.5.4. Pilates

##### 1.6. Objective of Study

##### 1.7. Motivation and Aim of the Study

##### 1.8. Importance of the study

##### 1.9. Scope and significance

##### 1.10. Limitation of study

##### 1.11. Hypothesis

##### 1.12. Literature Review

##### 1.13. Methodology

##### 1.14. Field and Primary resources

##### 1.15. Secondary sources

##### 1.16. Conclusion

#### **Chapter 2 Bharatanatyam**

##### 2.1 Introduction

###### 2.1.1 नटनभेदाः (Kinds of Natana)

###### 2.1.2 अभिनयः (The Abhinaya)

- 2.1.3 चतुर्धाभिनयस्
- 2.2 Nritta and Angika abhinaya
- 2.3 Nritta in Bharatanatyam
  - 2.3.1 Basic Body Positions in Nritta of Bharatanatyam
- 2.4 Adavu
  - 2.4.1 Definition of Adavu
  - 2.4.2 Fundamental Rules to perform adavus
  - 2.4.3 Name and descriptions of the Adavus
  - 2.4.4 Korvai and Jathi
- 2.5 Bharatanatyam Nritta Kritis
  - 2.5.1 Alarippu
  - 2.5.2 Jathiswaram
  - 2.5.3 Thillana
- 2.6 Conclusion

### **Chapter 3 Pilates Bible: History of Joseph Pilates and technique of exercises invented by him- “Contrology” (Pilates)**

- 3.1 Introduction
- 3.2 Definitions of Pilates exercise (Contrology):
  - 3.2.1 Contrology
  - 3.2.2 Pilates (pih-lah-teez)
  - 3.2.3 Pilates is exercise
  - 3.2.4 Pilates (Contrology)
- 3.3 History of Joseph Pilates
- 3.4 Types of Pilates exercise
  - 3.4.1. Classical/Traditional Pilates
  - 3.4.2. Contemporary Pilates
  - 3.4.3. Mat Pilates
  - 3.4.4. Props Pilates
  - 3.4.5. Clinical Pilates
- 3.5 Props used in Pilates exercise method
  - 3.5.1. Small apparatus (props)
  - 3.5.2. Magic circle

- 3.5.3. Foam roller
- 3.5.4. Swiss ball
- 3.5.5. TheraBand
- 3.5.6. Reformer
- 3.5.7. Wunda chair
- 3.5.8. Spine corrector
- 3.6 Benefits of Pilates Exercise
  - 3.6.1. Alignment
  - 3.6.2. Strength
  - 3.6.3. Flexibility
  - 3.6.4 Tone and Shape
  - 3.6.5 Endurance
  - 3.6.6 The health benefits of Pilates include
- 3.7 Principles of Pilates Exercise
  - 3.7.1 Breathing
  - 3.7.2 Centering
  - 3.7.3 Concentration
  - 3.7.4 Control
  - 3.7.5 Flow
  - 3.7.6 Precision
- 3.8 Different basic positions to be maintained throughout of Pilates exercise
  - 3.8.1 Neutral position
  - 3.8.2 Imprinted position
  - 3.8.3 C-Curve
  - 3.8.4 Tabletop
  - 3.8.5 Stacking
  - 3.8.6 Peeling the spine
- 3.9 The Classics
- 3.10 Conclusion

## **Chapter 4 Integration of Pilates exercise in Nritha part of Bharatanatyam**

- 4.1 Introduction
- 4.2 Integration of Pilates in Bharatanatyam Nritha part
- 4.3 Relative study of Principles of Pilates exercise and Bharatanatyam Dance

- 4.4 Exercises suggestion for Adavus
- 4.5 For Nritha kritis
- 4.6 To concentrate on a particular part of the body
  - 4.6.1 Set 1- for abdominal muscle and spine
  - 4.6.2 Set 2- for a stronger mid-section/core
  - 4.6.3 Set-3 Side lying workout
  - 4.6.4 Set-4 Leg-core engaging workout
  - 4.6.5 Set-5 Leg workout
  - 4.6.6 Set-6 The arm toner
  - 4.6.7 Set-7 Spinal call
  - 4.6.8 Set-8 Back basics
  - 4.6.9 Set-9 Gluts
- 4.7 Stretching
- 4.8 Conclusion

## **Chapter 5 Therapeutic value Pilates for Bharatanatyam Dancers**

- 5.1 Introduction
- 5.2 Why Pilates is a Rehabilitation and Preventative exercise?
  - 5.2.1 Preventive Pilates
  - 5.2.2 A Flexible Treatment Option
  - 5.2.3 An excellent workout option
  - 5.2.4 The Advantages of a Pilates Exercise
  - 5.2.5 Pilates as rehabilitation method
- 5.3 Therapeutic Pilates and its application to Bharatanatyam
  - 5.3.1 Alignment and Core Stability
  - 5.3.2 Posture and the Shoulder Girdle
  - 5.3.3 Symmetry
  - 5.3.4 Lengthening to Avoiding Hyperextension
  - 5.3.5 Integrated and Full-Body Muscle Engagement
  - 5.3.6 Injury Rehabilitation
- 5.4 Injuries and its rehabilitation through Pilates exercise- Body part wise for Bharatanatyam dancers
  - 5.4.1 The Neck
  - 5.4.2 The Spine

5.4.3 The Shoulder

5.4.4 The Hip

5.4.5 The knee

5.4.6 The Ankle

5.5 Examples of rehabilitation through Pilates exercise

5.5.1 Case studies done by physiotherapists

5.5.2 Personal experience

5.5.3 Cases shared by dancers in Interview

5.6 Conclusion:

## **Chapter 6 Conclusion**

### **Bibliography**

## **Table of Contents of the Executive Summary**

- **Summary**
- **Brief Research methodology**
- **The key findings**
- **Conclusion**
- **Recommendation/Suggestion**
- **Bibliography**
- **Webliography**

## **“The Therapeutic Value of Pilates in Indian Classical Dance - Bharatanatyam”**

### **Summary**

India has 28 states and 8 union territories, each with its own culture, and it is the world's second most populous country. India is a country who welcomes all the religion and cultures, accepts it and practice it. This research is a result of an amalgamation of an exercise system (Pilates) and an Indian classical dance (Bharatanatyam). Bharatanatyam, which originated in Tamil Nadu, is one of India's eight classical dance forms. According to studies, Bharatanatyam dancers should engage in supplementary training/exercise for their bodies, which is accepted by dance experts, teachers, and gurus. Pilates is a growing workout regimen developed by Joseph Pilates, who lived in Germany. Following the development of this system, it was dubbed "Contrology" and later named after Joseph Pilates.

During World War I, he treated soldiers using Pilates as a rehabilitation therapy and had extraordinary results. After that, he practised it, perfected his form, and relocated to New York. Famous dancers such as George Balanchine and Martha Graham studied Pilates' method and sent their students to his classes. After reading the history of Joseph Pilates and evolution of Pilates exercise, the researcher realised that Joseph Pilates gave his entire life to physical training and developed this technique. The researcher also benefited from the exercise system and decided to educate Bharatanatyam dancers about supplementary exercises such as Pilates. Being a certified Pilates exercise trainer, researcher has developed a special combination of Pilates exercises for Bharatanatyam Adavus and Nritya kritis of Margam.

The research explores the intricate movements of Bharatanatyam, emphasizing the challenges students face in mastering adavus and coordinating both body and mind. Modern Bharatanatyam classes often lack proper warm-up exercises and healthy nutrition, prompting the need for additional body training, as acknowledged by senior practitioners.

The introduction delves into the historical evolution of Pilates exercises, highlighting their therapeutic origins during World War I. The researcher, having achieved outstanding results with Pilates during their Master's in dance, embarked on further investigation, earning certification as a Pilates trainer. Recognizing a gap in exploring the benefits of Pilates for Bharatanatyam dancers, the researcher conducted in-depth studies and interviews with Pilates trainers, dancers and physiotherapists.

The five-chapter research covers fundamental principles of Bharatanatyam and Pilates, the history of Pilates, integration of Pilates in Bharatanatyam Nritya, and therapeutic applications. The focus is on creating awareness among Bharatanatyam dancers about 34 preventative and

rehabilitation exercises derived from Joseph Pilates' "Contrology." This research aims to establish awareness about Pilates as a valuable tool for Bharatanatyam dancers.

- **Brief Research methodology**

This study employs an art exercise framework, physical analysis, Verbal Interviews, being a Pilates trainer-researcher's own Experience and an information-based method with an invention perspective. Before projecting their usage, a conscious effort will be made to analyze all of the sources. The planned study will use qualitative research methodologies and procedures, using Joseph Pilates's workouts, and interpretative analysis. This is a three-part study using Indian texts and Pilates exercises as a foundation, including literary analysis, interpretation, reconstruction, and the combination of exercises for Bharatanatyam dancers.

1. Textual study - Pilates books and journals, Bharata's Natya Shastra- English translation by Manmohan Ghosh, English translation of Nandikeshvara's Abhinaya Darpanam by Manmohan Ghosh
2. Relative study of Bharatanatyam and Pilates-and Rehabilitation techniques given by physiotherapists-
3. Exercise combinations of Pilates, for Adavus and Kritis of Margam are included in the thesis.

Field and Primary resources:

The researcher was encouraged to undertake Pilates exercises and tried different combinations of exercises to attain a better result. This was the researcher's own invention that doing Pilates exercises in different combinations rather than doing them as prescribed in the book for specific parts of the body would be more beneficial for dancers, and the researcher herself has created some combinations for different adavus and kritis of margam to make it easier for dancers and dance teachers to perform.

Books by physiotherapists who use Pilates as a rehabilitation. Scholarly books that give a critical analysis: These books, written by scholars and subject experts, are based on primary source data and they analyze, critique, report, summaries, interpret and restructure the data from primary sources. Natya Shastra by Bharat Muni-English translation by Manmohan Ghosh, Abhinaya Darpanam of Nandikeshwara- English translation by Manmohan Ghosh, Nrutya Saurabh by Dr. Manjiri Shriramdev, Nrityatmika by Dr. Sucheta Chapekar.

The Pilates Handbook a Young Woman's Guide to Health and Well-Being- Roger Brignel, Pilates and Dance: A Reformer for the Art by Gabriella Berkow, Pilates – A Teachers' Manual



-by Geweniger and Bohlander are some of the subject experts and researchers whose books have been referred for this research.

- Interviews of Bharatanatyam dancers
- Interviews of Pilates experts
- Interviews of physiotherapists
- Researcher's own experience

Secondary sources:

Published thesis available on UGC website Infilbnet and various other universities have been referred. Some of the online sources are also consulted for this research.

Magazines and journals: Research journals, both print and online, such as South Asian Dance, Dance research, Journal of Sangeet Natak Academy, Music Academy 28 Journal, Attendance, Narthanam, Narthaki, Sangeet galaxy, Sangitikarasikpriya etc. which publish research papers on dance. These papers give inputs regarding the issues faced by a dance researcher and the tools and methods they used to deal with such issues. These papers were downloaded from different websites and the details of the same are given as and when required in the body of the thesis.

The necessary data gathered from the above mentioned primary and secondary sources are analyzed systematically and accurately.

### ● **The Key Findings**

Bharata Muni explains in Natyashastra that exercise is important for dancers but not mentioning any name of the exercise. Supplementary exercise is important. And according to textual evidence, Joseph Pilates who was a very sick child, learnt different types of physical exercises like yoga, Zen yoga, boxing, he was a gymnast, after learning all these types of exercise he invented his own rehabilitation method called "Contrology". Few cross-training exercise/supplementary exercises are explained. If Bharatanatyam dancers use Pilates as a supplementary exercise in their routine they can achieve incredible fitness, avoid injuries, and recover rapidly if they are already injured. It is important for classical dancers to get exposed to such a therapy which will motivate their confidence and career length.

Bharatanatyam is an elaborate and comprehensive art. Its origin can be traced back to the Vedic period. The three major categories- Nritya, Nritya, and Natya can be used to discuss the Bharatanatyam technique. In this chapter, the researcher's focus is on the nritya part. We all understand what adavu is and how to perform it. We are all familiar with nritya kritis.

Through this chapter, the researcher explains the major muscles usage while performing adavus so that in the fourth chapter, application of Pilates exercise for an adavu can be easily understood. Bharatanatyam dancers mostly follows Abhinaya Darpanam. Second chapter brief about Adavus, different hand and leg gestures, Jati, Korvai, Tirmanam, Alaripu, Jathiswaram, and Thillana. We will be incorporating Pilates exercises, which are explained in detail in the fourth chapter, into the Nritha element of Bharatanatyam, which is mentioned in second chapter. In third chapter Pilates exercise is explained. Joseph Pilates first developed

The "Contrology" technique that later became "Pilates" technique. Pilates is a fun and Energizing, functional exercise routine that can help in improving overall fitness, core strength, and performance. It teaches how to maintain body and mind in sync while improving physical stability, strength, and flexibility. Before starting Pilates routine, knowing about the method, its origin and basics is necessary. As Bharatanatyam dancers learns more about the Pilates method, they may realize that it's a fantastic workout program that allows you to sculpt the body without adding bulk and build your muscles without risking injury. Ballet dancers Martha Graham and George Balanchine first realised the Pilates for dancers' advantages. They were the first in the dance community to recognise the deliberate and deliberate movements of Pilates exercise. In this chapter,

1. Definition of Pilates
2. History of Joseph Pilates
3. Types of Pilates exercise
4. Props used in Pilates exercise
5. Benefits of Pilates exercise
6. Principles of Pilates exercise
7. The classics (exercises invented by Joseph Pilates)

Is explained.

Integration of mentioned exercises in Nritha part of Bharatanatyam is given in the fourth chapter. Integration involves applying one technique to enhance another. Bharatanatyam dancers, focusing on rigorous practice, often neglect physical fitness. Supplemental exercises, particularly for stress-inducing movements on muscles, like Tatta adavu, are crucial for lower back, ankle, and knee readiness. Unfortunately, many dancers overlook body strengthening, impacting stage confidence and aesthetics. In this chapter the researcher has explained,

1. Relative study of principles of Pilates exercise and Bharatanatyam dancers
2. Exercises suggestion for adavu
3. Exercise suggestion for particular part of the body

#### 4. Stretching exercises

Pilates, known for enhancing muscle awareness, aids dancers in delivering their best Bharatanatyam performance by reinforcing core muscles. This chapter explores integrating Pilates exercises into the Nritha segment explained earlier in second chapter, emphasizing their role in achieving strength and agility essential for Bharatanatyam dancers. In this chapter Researcher applied Pilates workouts for multiple basic stances, Bharatanatyam adavus, and diverse body areas to prevent injury. Pilates training can help Bharatanatyam dancers, professionals, and teachers improve their physical strength and flexibility by emphasising balance, breathing, flexibility, and postural alignment. Pilates is recommended because it develops the necessary capacities for performance while keeping the artistic component in mind, and teachers should be aware of the importance of conditioning outside of dance sessions, not only to improve performance but also to protect dancers from injury. By stressing breathing, alignment, position, and abdominal exercises, Pilates exercise can help the dancers enhance ideal dance technique, explore and increase one's physical potential, and avoid and rehabilitate injuries. In fifth chapter common dance injuries, Pilates as a preventative exercise and rehabilitation technique of Pilates for Bharatanatyam dancers is explained in detail. Points like,

1. Why Pilates is a Rehabilitative and preventative exercise?
2. Therapeutic Pilates and its application to Bharatanatyam
3. Injuries and its rehabilitation through Pilates exercise- body part wise for Bharatanatyam dancers
4. Examples of rehabilitation through Pilates exercise

is discussed.

Different case studies done by the doctors are also included in this chapter for evidence. This chapter will help readers know, how Pilates exercise can be used as rehabilitative and preventative exercise for Bharatanatyam dancers. After reading mentioned things, Bharatanatyam dancers will know the therapeutic value of Pilates in Indian classical dance- Bharatanatyam.

The thesis' main findings are that, although warm-up exercises are performed in dance classes, dancers should also follow a proper fitness regimen, as recommended by natyashastra. Pilates, a therapeutic and dancer's workout, gives dancers the right level of fitness, body structure, balance, and flexibility—all in much less time than any other additional exercise. It contributes to physical strength and increased endurance. It can also be highly beneficial for Bharata Natyam dancers, as there have been cases when Pilates

exercises have been used to regain paralysis. Relative study of principle of Pilates and Bharatanatyam is given by the researcher, and combination of Pilates exercises are also explained in the thesis. With the help of case studies done by the physiotherapists, usage of Pilates for rehabilitation of injury is given in the thesis to aware Bharatanatyam dancers.

- **Conclusion:**

We can conclude that this thesis aims to emphasis on the importance of supplementary exercise for Bharatanatyam dancers, focusing on introducing and detailing the benefits, methods, and therapeutic aspects of Pilates. The conclusion emphasizes the need for additional exercise to enhance performance, prevent injuries, and prolong careers. The researcher explores various supplemental exercises, particularly emphasizing Pilates, and presents a systematic integration into Bharatanatyam, including recommendations for each adavu.

The historical evolution of Pilates, along with Joseph Pilates' principles and 34 exercises, is discussed. The researcher recommends Pilates for Bharatanatyam dancers based on case studies, interviews, and personal experiences, highlighting its role in strengthening core and hip muscles.

The study concludes that Pilates, offering functional training, enhances physical fitness and boosts confidence for Bharatanatyam dancers.

In conclusion, the research contributes for the awareness and application of Pilates exercise among Bharatanatyam dancers, emphasizing its potential to enhance skills, prevent injuries, and contribute to a dancer's long and successful career.

- **Recommendation/Suggestion:**

This study suggests Pilates as a systematic methodology for physical therapy, filling a gap in Bharatanatyam-related texts. Pilates, aligned with dance principles, promotes ideal technique, physical potential, injury prevention, and healing.

The thesis underlines the synergy between Bharatanatyam and Pilates, focusing on core muscle engagement for posture and performance improvement. Therapeutic Pilates is proposed as beneficial, with recommendations for incorporating Pilates principles in various dance styles. The provided Pilates method emphasizes conscious breathing, balanced muscle development, mental focus, precise movements, and an effective start from a center.

With the help of further and specific study we can do relative study of any other Indian/Asian-classical, folk or tribal dance form which can be very beneficial for dancers across the globe

- **Bibliography:**

Bibliography Reference Books in Gujarati

1. Upadhyay, Dr. Amrut, Abhinaya Darpanam, Saraswati pustak Bhandaar, Ahemdabad, first edition 2010.
2. Shastri, Dr. P.U. Natyashastra ma Nrutya ane sangit nirupanam, Saraswati pustak Bhandaar, Ahemdabad, First edition 2012.

Reference Books in Hindi/Marathi

1. Chapekar, Sucheta Bhide., Nrityatmika, continental Publication Vijayanagar pune, first edition, 2007
2. Deo Shreeraam, Manjari, Nrityasaurabh, Dr. Manjiri, Shreeram deo Publication, 2022.

Reference Books in English

1. Ghosh, Manmohan. Translator Natyashastra-A Hindu Dramaturgy and Histrionics Vol. I chukhambha Surbharati prakashan, edition 2020.
2. Vatsyayan, Kapila. Indian Folk Dance, Publications Division Government of india, fifth edition 2018.
3. Gupta, Dr. Roxanne Kamayani. A yoga of Indian classical dance, Publisher Inner Traditions Bear and Company, Original edition 2000.
4. Dey, Sreeti. Therapeutic advantages of Bharatanatyam, Notion Press, First edition 2021
5. Vivekananda, swami. Patanjali yoga sutras, Fingerprint Publishing, Prakash Books India Pvt Ltd, 2019.
6. Koch, Liz. Core awareness, North Atlantic Books Berkeley, California, Revised edition 2012.
7. Eisen, Isabel. Anatomy of Pilates, Human Kinetics Second edition 2019
8. Lademann, Amy & Rick Lademann, Pilates and conditioning for athletes, Human Kinetics, First edition 2018
9. Craig, Colleen. Pilates on the ball, Healing Arts Press; Pap/DVD edition 2003
10. Isacowitz, Rael & Karen S. Clippinger, Pilates anatomy, Human Kinetics Publishers; 1st edition 2011.
11. Winsor, Mari. The Pilates Powerhouse, perseus books, Da Capo Press, 1999, Cambridge 162
12. Ungaro, Alycea. Pilates body in motion, Dk Publishers, 2000
13. Zatsiorsky, Vladimir M. & William J. Kraemer, Science and practice of strength training,
14. Keshavan, Gayatri. Bharatanatyam Adavus, Notion press Channai, Tamil nadu First edition 2020.
15. Wood, Samantha. Pilates for Rehabilitation, Human Kinetics; 1st edition, 2018
- 16.

Kenyon, Jonathan & Karen Kenyon, The Physiotherapist's Pocket Book, Elsevier; 3rd edition, 2018.

17. Ramchandrasekhar, P. Dance gestures English translation of Abhinaya Darpanam, giri tradindg Agency Pvt. Ltd. First edition 2007

18. Ghosh, Manmohan. Nandikeshwar's Abhinaya Darpanam, indian Mind/Dist. by Indica, third edition 1975

19. Sarabhai, Mrinalini. understanding of Bharatanatyam, Darpana Academy of Performing Arts 1981 20. Khokar, Mohan. The Splendor of Indian Dance, Hyperion Books 1986,

21. Menon, Bhaskar Radha Bhaskar, Anantha Nrityam, Mudra Publications, 2000

22. Chapekar, Sucheta Bhide. Nrutyatmika, Bookmark Publications 2018.

23. Geweniger & Bohlander, Pilates– A teachers' manual: Exercises with mats and equipment for prevention and rehabilitation. Springer, edition 2014.

24. Sile, Brooke. The Women's Health Big Book of Pilates: The Essential Guide to Total Body Fitness, Rodale Books 2013.

25. Gallagher, Sean P. & Romana Kryzanowska the Pilates method of body conditioning, Bainbridge Books Philadelphia, Illustrated edition 1999

26. Isacowitz, Rael & Karen Clippinger, Pilates Anatomy, Human Kinetics Publishers, First edition 2011

27. Gallagher, Sean P. & Romana Kryzanowska, The Complete Writings of Joseph H. Pilates: Return to Life Through Contrology and Your Health, Bainbridge Books 2000.

28. Friedman, Philip. & Gail Eisen, The Pilates Method of Physical and Mental Conditioning, Studio publication 2004.

29. Pilates on the Ball: The World's Most Popular Workout Using the Exercise Ball, Craig, Colleen. Healing Arts Press, Rochester, Vermont, Original edition 2001 163

30. Lademann, Amy. & Rick Lademann, Pilates and Conditioning for Athletes: An Integrated Approach to Performance and Recovery, Human Kinetics, First edition 2019.

31. Delavier, Frederic. & Michael Gundill, The strength Training Anatomy workout Starting Strength with Bodyweight Training and Minimal Equipment, Human Kinetics publication 2011.

32. Clippinger, Karen. Dance anatomy and kinesiology, Human Kinetics, Second edition 2016.

33. Massey, Paul. The anatomy of Pilates. Berkeley, North Atlantic Books, First edition 2009.

34. Siler, Brooke. The Pilates Body: The Ultimate At-Home Guide to Strengthening, Lengthening and Toning Your Body- Without Machines, Harmon, first edition, 2000.

35. Zatsiorsky Vladimir M , William J. Kraemer Science and practice of strength Training, Human Kinetics, second edition, 2006.
36. Friedman, Philip., Gail Eisen, The Pilates Method of Physical and Mental Conditioning, Publisher Studio, 2004
37. Craig, Colleen., Pilates on the ball, Healing Arts Press; Original edition, 2001.

### **Paper/Articles**

1. Ahearn, E. L., Greene, A., & Lasner, A. (2018). Some Effects of Supplemental Pilates Training on the Posture, Strength, and Flexibility of Dancers 17 to 22 Years of Age. In Journal of dance medicine & science : official publication of the International Association for Dance Medicine & Science (Vol. 22, Issue 4, pp. 192– 202). <https://doi.org/10.12678/1089-313X.22.4.192>
2. Berkow, G. (2006). Pilates and Dance: A Reformer for the Art. Aahperd.Confex.Com, 96–97. [http://aahperd.confex.com/aahperd/2011/webprogram/Handout/Session49856/Pilates and Dance manuscript PDF.pdf](http://aahperd.confex.com/aahperd/2011/webprogram/Handout/Session49856/Pilates_and_Dance_manuscript_PDF.pdf)
3. Bolsanello, P. D. (2014). Is Pilates a Somatic Education Method? Brazilian Journal on Presence Studies, 1, 101–126.
4. Brenton, S., & Kozai, A. (2017). The Importance of a Good Warm-Up : Are you warm enough to start dancing ? Iadms, 1–5. <https://www.iadms.org/blogpost/1177934/General?tag=warmup>
5. Challis Jasmine, & Stevens Adrienne. (2019). RESOURCE FOR DANCERS AND 164 TEACHERS Nutrition Resource Paper. International Association for Dance Medicine and Science, 1–39. <http://www.mayoclinic.org/healthy>
6. Chapter I: INTRODUCTION. (1972). Acta Medica Scandinavica, 191(527 S), 9–12. <https://doi.org/10.1111/j.0954-6820.1972.tb18460.x>
7. Hampton, L. (2022). Therapeutic Exercise - Physiopedia. In [www.Physiopedia.com](http://www.physio-pedia.com/Therapeutic_Exercise). [https://www.physio-pedia.com/Therapeutic\\_Exercise](https://www.physio-pedia.com/Therapeutic_Exercise)
8. Irvine, S., Redding, E., & Rafferty, S. (2011). Dance Fitness. International Association for Dance Medicine and Science, 1–5. [www.DanceScience.org](http://www.DanceScience.org)
9. Sally A.,Radell Ma,Mfa,& IADMS Dance Educators'committee. (2019). Mirrors in the Dance class: Help or hindrance. International Association for Dance Medicine & Science.
10. The Benefits of Supplementary Training for Dancers | Trinity Laban. (n.d.). [https://trinitylaban.wordpress.com/2015/11/28/the-benefits-of-supplementary\\_training-for-dancers/](https://trinitylaban.wordpress.com/2015/11/28/the-benefits-of-supplementary_training-for-dancers/)

11. Wilmerding, M. V., & Krasnow, D. (2011). Dance pedagogy: Myth versus reality. *International Symposium on Performance Science*, 283–289.
12. Wilmerding, V., & Krasnow, D. (2009). Resource papers for dancers and teachers *Motor Learning and Teaching Dance*.
13. Woodyard, C. (2011). Exploring the therapeutic effects of yoga and its ability to increase quality of life. *International Journal of Yoga*, 4(2), 49. <https://doi.org/10.4103/0973-6131.85485>
14. Ann,McMillan. Luc Proteau & Rose Marie Lebe, The Effect of Pilates-based Training on Dancers' Dynamic Posture, *Journal of Dance Medicine & Science*, Volume 2, Number 3,101-107
15. Diet, nutrition and the prevention of chronic diseases: report of a joint WHO/FAO expert consultation, Geneva, 28 January -- 1 February 2002.
16. Elizabeth Lowe Ahearn, (2006),The Pilates Method and Ballet Technique: Applications in the Dance Studio,*Journal of Dance Education*,92-99.
17. Berkow Gabriella.,“Pilates and Dance: A Reformer for the Art” Pg.1
18. Bittar, A/Melo, R/Noieto, R/Lemos T/The effects of Fletche Pilates in the respiratory systems of young female ballet dancers/from a public dance school/In: IADMS 27thAnnual Conference, 2017/ Houston. 165

## Links

- 1.[https://www.trinitylaban.wordpress.com/2015/11/28/the-benefits-of-supplementary training-for-dancers/](https://www.trinitylaban.wordpress.com/2015/11/28/the-benefits-of-supplementary-training-for-dancers/)
- 2.Thottappilli,Madhu/“Dancing is NOT aerobicexercise!”<https://narthaki.com/info/healthtip/ht33.html>
3. [https://post.greatist.com/wp-content/uploads/sites/2/2016/06/GRT\\_Pilates\\_Leg\\_1200x628-Facebook.jpg](https://post.greatist.com/wp-content/uploads/sites/2/2016/06/GRT_Pilates_Leg_1200x628-Facebook.jpg)
4. Anand,Chandra. Education in Spiritual Values through Bharatanatyam, Part VIII, Maxims of teaching and the adavus of Bharatanatyam, <https://narthaki.com/info/articles/art382.html>
5. [https://www.researchgate.net/publication/340952611\\_IMPORTANCE\\_OF\\_FITNESS\\_FOUNDATIONS\\_TOWARDS\\_BHARATHANATYAM\\_PERFORMANCE](https://www.researchgate.net/publication/340952611_IMPORTANCE_OF_FITNESS_FOUNDATIONS_TOWARDS_BHARATHANATYAM_PERFORMANCE)
6. [www.futurefit.co](http://www.futurefit.co)
- 7.[https://post.greatist.com/wp-content/uploads/sites/2/2016/06/GRT\\_Pilates\\_Leg\\_1200x628-Facebook.jpg](https://post.greatist.com/wp-content/uploads/sites/2/2016/06/GRT_Pilates_Leg_1200x628-Facebook.jpg)
- 8.[https://www.trinitylaban.wordpress.com/2015/11/28/the-benefits-of-supplementary training-for-dancers/](https://www.trinitylaban.wordpress.com/2015/11/28/the-benefits-of-supplementary-training-for-dancers/)



9. [www.academia.com](http://www.academia.com)
10. [www.iadms.org](http://www.iadms.org)
11. <https://www.betterhealth.vic.gov.au/health/HealthyLiving/dancing-preventing-injury>
12. <https://www.futurefit.co.uk/content-hub/pilates-benefits-for-dancers/>
13. [https://www.losaltosonline.com/health/pilates-a-physical-therapy-alternative/article\\_aa25bc4f-6349-558a-9bf9-eb4fe1325615.html](https://www.losaltosonline.com/health/pilates-a-physical-therapy-alternative/article_aa25bc4f-6349-558a-9bf9-eb4fe1325615.html)
14. <https://www.youtube.com/watch?v=SMKwgNRX8qw&t=250s>
15. <https://www.amazon.in/STOTT-PILATES-Foam-Roller-Soft/dp/B00KU5NTU8>
16. [https://www.gaiam.com/products/05-51980\\_2](https://www.gaiam.com/products/05-51980_2)
17. <https://complete-pilates.co.uk/resistance-band/>
18. Stamina Pilates Magic Circle-Pilatesology
19. [Pilates\\_based\\_exercise\\_in\\_muscle\\_disbalances\\_prevention\\_and\\_treatment\\_of\\_sports\\_injuries.pdf](#)
20. <https://narthaki.com/info/healthtip/ht35.html>
21. <https://photos.app.goo.gl/GoW25YEsD2f8XSpr9>
22. Image of Magic circle. <https://pilatesology.com/product/stamina-pilates-magic-circle/> 166
23. Image of Foam roller. <https://www.amazon.in/STOTT-PILATES-Foam-Roller-Soft/dp/B00KU5NTU8>
24. Image of [https://www.gaiam.com/products/05-51980\\_2](https://www.gaiam.com/products/05-51980_2)
25. Image of TheraBand. <https://complete-pilates.co.uk/resistance-band/>
26. Image of Reformer machine. <https://www.womenshealthmag.com/fitness/g32850611/best-pilates-reformer-machine/>
27. Image of Wunda chair. <https://www.pilates.com/store/pilates-equipment/chairs/wunda-pilates-chair-system/>
28. Image of 0Spinecorrector: [https://www.merrithew.com/shop/ProductDetail/ST01011\\_Spine-Corrector](https://www.merrithew.com/shop/ProductDetail/ST01011_Spine-Corrector)
29. The Anatomy of Exercise and Movement for the Study of Dance - Jo Ann Staugaard Jones
30. The Anatomy of Exercise and Movement for the Study of Dance books.google.co.in › books
31. The Bharathanatomy Series: Anatomical Movements and Directions Sneha Rajagopalan <https://narthaki.com/info/healthtip/ht47.html>
32. McKinnon, M., & Etlin-Stein, H. (2015, November 09) Pilates: A natural choice for dancers [Web log post]. Retrieved from <http://www.iadms.org/blogpost/1177934/231658/Pilates-A-natural-choice-for-dancers>

33. Rajagopalan Sneha/The Bharathanatomy Series: Anatomical Movements and Directions/  
<https://narthaki.com/info/healthtip/ht47.html>
34. Basavarajaiah Veena/Bangalore/Warm-up for Bharatanatyam dancers  
<https://narthaki.com/info/healthtip/ht16.html>
35. Kefallonitou, M, M., (2014). The effects of Yin Yoga practice on dancers' range of joint motion: a biomechanical and perceptual investigation (Unpublished thesis). Trinity Laban Conservatoire of Music and Dance, London

**(Vrushika Jigar Dave)**