

A Comparison on the Procedure and Benefits of Namaz and Surya Namaskar as Physical Activities

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Abstract

Prayer and yogic practices have long been recognized as integral components of human life, contributing not only to spiritual fulfillment but also to physical and mental well-being. This study aims to compare the procedures and benefits of Namaz (Islamic prayer) and Surya Namaskar (Sun Salutation) as forms of physical activity. Namaz, the second pillar of Islam, is performed five times daily and involves a sequence of postures such as standing, bowing, prostration, and sitting, combined with spiritual focus and controlled movements. Similarly, Surya Namaskar is a traditional yogic practice consisting of twelve postures performed in a rhythmic sequence, integrating breathing techniques and mindfulness. The study adopts a descriptive and comparative approach based on secondary data from books, journals, and scientific literature. Findings indicate that both Namaz and Surya Namaskar offer significant physical, physiological, psychological, and spiritual benefits, including improved flexibility, muscular strength, cardiovascular efficiency, mental relaxation, and enhanced concentration. Although they differ in cultural origin, purpose, and mode of practice, both can be considered effective low-to-moderate intensity physical activities that contribute to holistic health and well-being.

Keywords: Namaz, Surya Namaskar, Physical Activity, Prayer, Yoga, Health Benefits, Physiological Benefits, Psychological Well-being, Flexibility, Mind–Body Coordination

INTRODUCTION

There are many forms of prayers and salutations in the world, as old as human civilization itself, which combine spiritual devotion with structured physical activity. Among these, Namaz is a significant form of prayer and constitutes the second pillar of Islam, performed by Muslims as an essential act of faith and obedience. It is obligatory for a believer to offer Namaz five times a day at prescribed times: Fajr (before sunrise), Zuhar (midday), Asar (afternoon), Maghrib (after sunset), and Isha (night). These prayers are not only spiritual obligations but also involve a sequence of physical movements, mental focus, and relaxation. Namaz requires ablution (Wudu), which prepares the individual both physically and psychologically for prayer. The structured movements in Namaz—including standing (Qiyam), bowing (Ruku), prostration (Sujood), and sitting (Jalsa)—are performed in a calm and composed manner, contributing to physical fitness and mental well-being (Reza et al., 2002; Sayeed & Prakash, 2013).

The repeated performance of Namaz, comprising a minimum of seventeen Rakaa daily, results in a considerable amount of low-to-moderate intensity physical activity. These movements resemble stretching, strengthening, and relaxation exercises that promote flexibility, muscular endurance, and proper posture. Studies have shown that such prayer-based movements can enhance blood circulation, stimulate internal organs, and contribute positively to rehabilitation and quality of life (Reza et al., 2002; Al-Abdulwahab & Kachanathu, 2012). Furthermore, the integration of mindfulness, controlled breathing, and spiritual focus during Namaz helps reduce stress, improve concentration, and enhance psychological stability (Sayeed & Prakash, 2013; Raub, 2002).

Similarly, Surya Namaskar (Sun Salutation) is an ancient and sacred yogic practice originating in India, performed as a gesture of gratitude to the sun. It is typically practiced at sunrise while facing the sun and consists of a sequence of twelve postures (asanas), with certain poses repeated in a cyclic manner. These include Pranamasana, Hasta Uttanasana, Padahastanasana, Ashwa Sanchalanasana, Chaturanga Dandasana, Ashtanga Namaskara, Bhujangasana, and Adho Mukha Svanasana. Surya Namaskar integrates physical movement with synchronized breathing and mental awareness, making it a comprehensive form of exercise that enhances flexibility, strength, and endurance (Saraswati, 1983; Bhutkar et al., 2011).

Scientific studies have demonstrated that Surya Namaskar significantly improves cardiorespiratory fitness, increases energy expenditure, and enhances metabolic efficiency (Sinha et al., 2004; Bhutkar et al., 2011). It also contributes to improved musculoskeletal function, posture, and balance, while promoting mental relaxation and emotional stability (Madanmohan et al., 2002; Raub, 2002). Additionally, yoga practices, including Surya Namaskar, have been recognized for meeting recommended levels of physical activity intensity and contributing to overall health and well-being (Hagins et al., 2007; World Health Organization, 2020; American College of Sports Medicine, 2018).

Both Namaz and Surya Namaskar, though rooted in different cultural, religious, and historical contexts, share notable similarities as structured sequences of body movements combined with mental focus and rhythmic breathing. They contribute to holistic development by improving physical fitness, physiological functioning, psychological well-being, and spiritual awareness. Despite these similarities, they differ in their purpose, timing, orientation, and method of performance. Therefore, a comparative analysis of Namaz and Surya Namaskar as physical activities provides valuable insights into their role in promoting a balanced and healthy lifestyle.

RELATED LITERATURE

Several research studies have highlighted the physical and psychological benefits of both Namaz and Surya Namaskar as structured forms of physical activity. A study by Reza et al. (2002) demonstrated that the movements involved in Namaz can be effectively utilized as a short-duration and frequent exercise, particularly beneficial for elderly and rehabilitative populations by improving mobility, circulation, and neuromuscular coordination. Similarly, Al-Abdulwahab and Kachanathu (2012) reported that regular prayer movements contribute positively to physical fitness and quality of life. In the context of yoga, Sinha et al. (2004) found that Surya Namaskar involves moderate energy expenditure and produces significant cardiorespiratory responses, indicating its effectiveness as a form of aerobic exercise. Bhutkar et al. (2011) further confirmed that consistent practice of Surya Namaskar improves cardiovascular endurance and overall physical fitness. Moreover, Madanmohan et al. (2002) observed improvements in respiratory efficiency, muscular strength, and reaction time following regular yoga

practice. Studies on yoga and mind-body interventions also suggest enhanced mental health, reduced stress, and improved cognitive functioning (Raub, 2002; Hagins et al., 2007). Collectively, these studies support the view that both Namaz and Surya Namaskar are not only spiritual practices but also scientifically supported methods for promoting physical health, mental well-being, and functional fitness.

METHODOLOGY

The present study adopted a descriptive and comparative research design to analyze the procedures and benefits of Namaz and Surya Namaskar as forms of physical activity. The study was primarily based on secondary data collected from various sources such as research journals, books, published articles, and authenticated online resources related to physical education, yoga, and religious practices. Relevant literature focusing on the physiological, psychological, and biomechanical aspects of both Namaz and Surya Namaskar was carefully reviewed to understand their structure, sequence, and health benefits.

For the procedural comparison, the standard steps involved in Namaz (including Rakaa components such as Qiyam, Ruku, Sujood, and Jalsa) and the twelve postures of Surya Namaskar were systematically analyzed. Each posture was examined in terms of body movement, muscle involvement, duration, and intensity. The benefits associated with both practices were categorized under physical, physiological, psychological, and spiritual domains to ensure a comprehensive comparison.

A qualitative approach was used to interpret the similarities and differences between the two practices. The collected information was organized and compared using thematic analysis, focusing on key variables such as posture, movement pattern, frequency, duration, and health outcomes. No experimental intervention or primary data collection was conducted in this study; instead, it relied entirely on existing scholarly evidence to draw meaningful conclusions. This methodology helped in providing a structured comparison of Namaz and Surya Namaskar as holistic physical activities contributing to overall well-being.

DISCUSSION

NAMAZ (PRAYER)

Namaz (prayer) is performed by Muslim believer at least five times a day with 17 Rakaa. A Rakaa consists of Takbir, Qiyam (standing), Ruku (bowing), Quama (straight standing), Sujood (prostration), Jalasa (sitting), Thasleem to right and Thasleem to left with respective duration and recitation of Quran and other Ziker (manthra). Some believers add ten more Rakaa. The time of each Namaz is prescribed in the Holy Quran. A perfect Namaz requires ablution (purification) and Niyya (intention)

Ablution (Purification and Preparation)

A Muslim worshiper makes an intention and performs physical cleansing and ready himself spiritually for performing Namaz a devotee should take Wodu (ablution) by washing hand, mouth and nose, face and feet, rubbing head and ears. Wodu (ablution) cleans a person physically and prepare individual mentally to perform Namaz. Wodu is not only washing the body parts but also a type of water massage which stimulate hands, face, head, ear and feet and nervous system and circulatory system (Reza et al, 2002).

Niyya (Intention)

It very essential in Islam, for the success of all deeds as taught by the Prophet (PBUH). Thus Namaz requires Niyya (Intention) after Wodu (ablution). Without Niyyath (intention) no deed is accepted or re-

arded (Reza et al, 2002).

1. **Takbir** (duration 3 to 5 second). After standing in a balanced position feet apart at shoulder level, bring hands, palms open and place thumb behind ear lobes as “Allahu Aakber” is uttered and hands are kept on the chest and hold the left hand by the right hand. This movement of hand and shoulder muscles increases the flow of blood towards torso and also gives a straight upright and balanced posture (S A Sayeed and A Prakash 2013).
2. **Qiyam (standing)** (duration more than 13 second). In Qiyam body weight is equally distributed, so that the back does not take all strain, and the neck and shoulders are relaxed. Focus the eyes steadily on the spot of Sujood (prostration). Body and mind are relaxed. Back bone is straight and good posture is maintained which ensure blood flow of the lower portion of the body. It is also a good exercise to strengthen lower limb muscles (S A Sayeed and A Prakash 2013).
3. **Ruku (bowing)** (this action may takes 10 second). Bent the body 90 degree forward at the waste level without bending the knees and place the palms on the knees and focus eyes’ on the spot of Sujood. This position stretches the lower back and hamstring muscles and strengthens the core muscles by maintaining a flexed waist for 10 to 15 second. It reduces back pain and knee pain and improves body balance and pumps fresh blood to the brain (S A Sayeed and A Prakash 2013).
4. **Quama (Standing Straight)**. This is the shortest position in Namaz. It may last for 3 to 6 seconds. While returning from Ruku (bowing) to this position the performer raises his hands as does in Takbir and keeps arms at side. It is a dynamic posture which involves standing up without any support, the whole body weight equally distributed on both feet. This position exercises the back bone and back muscle and thighs, knees and leg muscles. The blood circulation to the upper body return to the normal level thus the entire body gets relaxation (S A Sayeed and A Prakash 2013).
5. **Sujood (prostration)** duration 10 to 12 second. Lowers himself slowly in to kneeling position ,then keeps palms at the shoulder level fingers straight and together then touches forehead on the ground in Sujood 7 body parts forehead, both palms, both knees and both toes touch the ground this strengthen the hand and neck muscles and stretches the lower back muscles. The blood flow to the brain increased thus the brain is nourished. which is good for concentration, memory, vision and cognitive abilities.it is strengthen the internal organs and reproductive system of both genders(S A Sayeed and A Prakash 2013)..
6. **Jalsa (sitting)** duration 4 to 6 second in between 2 Sujood and 30 to 40 second last sitting. This is similar to Vajrasana in yoga. It stretches the thigh muscles and helps to keep upper body in an upright relaxed position which relaxes the spine.it reduces in digestion and constipation, and it is peptic ulcer and other stomach problem (S A Sayeed and A Prakash 2013).
7. **Thasleem to Right (Peace to the right)**. This is the final pose and movement at the end of Namaz, turning the head to the right slowly and pauses there a while, increases the mobility and flexibility of neck and massages it. It is a very good form of exercise to the upper vertebra (S A Sayeed and A Prakash 2013).
8. **Thasleem to Left (Peace to the left)**. This is the continuation of Thasleem to the Right at the end of Namaz, turning the head to the left slowly increases the mobility and flexibility of neck and massages it. It is a very good form of exercise to the upper vertebra (S A Sayeed and A Prakash 2013).

SURYA NAMASKAR

Surya Namaskar is a very old Indian traditional practice and now it is accepted widely in the universe because of its Para physical benefits. Modern medical professionals also recommend the performance of Surya Namaskar as alternative treatment methods to avoid side effect of modern medicines in some diseased conditions. Sun Salutation is a cheap, safe and natural alternative therapeutic method to replace the side effect of modern medicines in some extent. There are a few studies on the effect of Surya Namaskar (Sun Salutation) on physical, physiological and psychological parameters. The aim of this present review to analyze and compare steps and benefits of Surya Namaskar to Namaz (prayer). (Bryan.T, Edwin. A, 2009).

- 1. Pranamasana (Prayer pose) 1st & 12th Pose:** The first or starting and twelfth or ending pose of Surya Namaskara is Pranamasana or the Prayer Pose. Stand straight and fold hands close to the chest and palms are held together in the form of prayer pose. Look straight forward, exhale then breathe normally. A sense of relaxation, calmness and concentration in the mind may be created at beginning the Surya Namaskara (S A Sayeed and A Prakash 2013). It also strengthens the upper and lower limbs while and core muscles while keeping the body erected for a while with proper breathing.
- 2. Hasta Uttanasana (Raised arms pose) 2nd & 11th pose:** Second and eleventh step of Surya Namaskar is Hasta Uttanasana or the raised arms pose. . Raise both the hands up above the head as placed the arms near to the ears from Pranamasana pose. Inhale the normally while raising the hands. Bend the trunk and neck slightly backward. This pose strengthens and tones the abdominal and chest musculature. It improves digestive process and supports respiratory system too (Robert. B, 2014).
- 3. Padahasthasana (Hand to Foot pose) 3rd & 10th pose:** Padahasthasana or the Hand to Foot pose is part of the Surya Namaskara series of asana come at 3rd and the 10th steps. Bend forward from Hasta Uttanasana pose and try to touch the floor with your both hands. Exhales breathe normally while bending forward. Padahasthasana makes the body flexible and strengthen, helps to decrease excess abdominal fat and very beneficial for the gastrointestinal and nervous system (Robert. B, 2014).
- 4. Ashwa Sanchalanasana (The Equestrian Pose) 4th & 9th pose:** Ashwa Sanchalanasana or the Equestrian pose is part of the Surya Namaskara series of asana come at 4th and the 9th steps. Stretch the left leg as far back as possible from Padahasthasana pose while inhaling the breath normally. At the same time, bend the right knee. While looking straight ahead the hands should be kept straight with fingers touching the floor. Arch the back a little with head tilted back. The same steps should be repeated with left knee in the second round of Surya Namaskara. Ashwa Sanchalanasana tones the abdominal organs; it gives flexibility to the body and balances central nervous system(S A Sayeed and A Prakash 2013).
- 5. Chaduranga Dandasana (Four Limbed Staff Pose) 5th pose:** Begin in a Plank position with the shoulders over your wrists. Shift your weight forward onto your toes. Soften your elbows slightly to open your chest, pull your shoulders back, and anchor your shoulder blades to your back body Chaduranga Dandasana strengthens muscles: it strengthens core, arms, shoulders, back, and legs. It also improves wrist and hand strength and flexibility. It improves balance. It stimulates the digestive system, and improves posture. This pose tones abdomen, which can help with weight loss. This pose can improve spinal flexibility, which can help align body properly.
- 6. Ashtanga Namaskara (Eight-Limbed salutation) – 6th pose:** Ashtanga Namaskara or the Eight-Limbed salutation is part of the Surya Namaskara series of asana come at 6th step. In this pose, the

body touches the ground in eight locations –the head, the chest, the two palms, the two knees, and the two toes. In Sanskrit grammar, —ashta means eight and —anga means part. Hence this asana is known as Ashtanga Namaskara . Lower the body to the ground from Parvatasana pose in such a way that it touches the floor at eight locations – the head, the chest, the two palms, the two knees, and the two toes, Suspended the breath for a while. Try to lift other parts in air. It strengthens the muscles of the both upper and lower limbs and strengthens respiratory system (S A Sayeed and A Prakash 2013).

7. **Bhujangasana (The Cobra Pose)- 7th pose:** Bhujangasana is also famous as a cobra pose in yoga. The meaning of Bhujanga in Sanskrit means cobra (snake) and Asana means Pose. In this asana person’s head and trunk resembles a cobra with raised hood, hence the name Bhujangasana. It is a major backward bending asana used in yoga. It appears as the 7th pose in the Surya Namaskara series asana. While inhaling raise the body by using the hands from Ashtanga Namaskara pose. Arch your head backward. This position looks like the cobra which has raised its hood. Bhujangasana strengthens the whole back musculature especially lower back; it improves the flexibility of the spine and surrounding muscles, good for the gastrointestinal, reproductive and urogenital system (Robert. B, 2014).
8. **Parvatasana (Mountain Pose)- 8th pose:** Parvatasana or the Mountain pose is part of the Surya Namaskara series of asana and come at 5th and the 8th step. In Sanskrit terminology, —Parvata means mountain and this pose looks like a mountain so it is known as Parvatasana. While exhaling, take the right leg backward from Ashwa Sanchalanasana pose and place it parallel to the left leg, raise the buttocks at the same time. Place the hands straight supporting the weight of the body. The head should be placed between the hands. Parvatasana strengthens the muscles of both upper and lower limbs, maintains the blood circulation to Central nervous system and tones peripheral nervous system (Robert. B, 2014).

NAMAZ (PRAYER) – 8 MAIN POSITIONS		SURYA NAMASKAR (SUN SALUTATION) – 8 MAIN POSES	
A series of postures and movements with physical, physiological and spiritual benefits.		A series of yogic postures with physical, physiological and spiritual benefits.	
<ol style="list-style-type: none"> 1. Takbir (3-5 sec) Raise hands to the ears saying "Allahu Akbar", then place right hand over left on the chest. 2. Qiyam (Standing) (≥13 sec) Stand upright, hands on chest, focus on the spot of Sujood. 3. Ruku (Bowing) (≈10 sec) Bend forward 90°, place palms on knees, keep back straight. 4. Quama (Standing Straight) (3-5 sec) Return to standing position, hands by the sides. 5. Sujood (Prostration) (10-12 sec) Go down on knees, then place forehead, palms, knees and toes on the ground. 6. Jalsa (Sitting) (4-6 sec between 2 Sujood; 30-40 sec final sitting) Sit on heels, keep back straight and hands on thighs. 7. Thasleem to Right (Peace to Right) Turn head to the right slowly. 8. Thasleem to Left (Peace to Left) Turn head to the left slowly. 	<p>KEY BENEFITS</p> <p>Physical</p> <ul style="list-style-type: none"> Improves posture, flexibility and muscle strength. Enhances blood circulation. Strengthens core, back and lower limbs. <p>Physiological</p> <ul style="list-style-type: none"> Stimulates internal organs. Improves digestion and respiratory function. Reduces back and knee pain. <p>Psychological</p> <ul style="list-style-type: none"> Reduces stress and anxiety. Improves concentration, memory and mental clarity. <p>Spiritual</p> <ul style="list-style-type: none"> Increases self-discipline, mindfulness and closeness to Allah. 	<ol style="list-style-type: none"> 1. Pranamasana (Prayer Pose) (1st & 12th pose) Stand straight, hands folded at chest. Breathe normally. 2. Hasta Uttanasana (Raised Arms Pose) (2nd & 11th pose) Raise arms up, bend back slightly. Inhale. 3. Padahasthasana (Hand to Foot Pose) (3rd & 10th pose) Bend forward, touch the floor. Exhale. 4. Ashwa Sanchalanasana (Equestrian Pose) (4th & 9th pose) Step one leg back, other knee bent. Look forward. Inhale. 5. Chaturanga Dandasana (Four Limbed Staff Pose) (5th pose) Body in a straight line, lower down with elbows bent. 6. Ashtanga Namaskara (Eight-Limbed Salutation) (6th pose) Knees, chest, chin and palms on ground. Hold breath for a while. 7. Bhujangasana (Cobra Pose) (7th pose) Raise chest, arch back, look up. Inhale. 8. Parvatasana (Mountain Pose) (8th pose) Lift hips up, body is inverted 'V' shape. Exhale. 	<p>KEY BENEFITS</p> <p>Physical</p> <ul style="list-style-type: none"> Improves flexibility, strength and endurance. Tones muscles and improves posture. Supports weight management. <p>Physiological</p> <ul style="list-style-type: none"> Enhances digestion and metabolism. Improves cardiovascular and respiratory health. Balances hormonal function. <p>Psychological</p> <ul style="list-style-type: none"> Reduces stress and fatigue. Improves concentration, memory and positive mood. <p>Spiritual</p> <ul style="list-style-type: none"> Promotes mental peace, harmony and inner awareness. Develops gratitude and discipline.

Figure 1 Steps and benefits of Namaz and Surya Namaskar

COMPARISON BETWEEN NAMAZ AND SURYA NAMASKAR

Similarities

Namaz and Surya Namaskar, though originating from different religious traditions, share several common features as structured physical activities. Both involve a sequence of postures performed with mindfulness, controlled movements, and a calm state of mind. They are practiced regularly, often in relation to solar timing, and contribute to the overall physical, mental, and spiritual development of individuals. These similarities highlight their importance as simple and effective practices for maintaining health and well-being.

1. Both activities are basically performed by the believers.
2. Timing of both activities is connected to solar (sun) movements.
3. Both activities help in wholesome development of individuals.
4. Both of them are performed by calm and cool situation to attain the maximum results.
5. Both Namaz and Surya Namaskar have eight important poses.
6. In the both activities the performer utters mantras (verses).
7. Both activities are preferably performed with bare footed.
8. Both activities are performed with own body weight.

Differences in Namaz and Surya Namaskar

Although Namaz and Surya Namaskar share certain similarities as structured physical activities, they differ significantly in their origin, purpose, and method of practice. Namaz is a religious obligation in Islam performed as an act of worship at specific times of the day, whereas Surya Namaskar is a yogic practice aimed at physical fitness and mental well-being. Differences can also be observed in their sequence of movements, duration of postures, orientation, and cultural significance. These distinctions highlight the unique identity and objectives of each practice.

Table 1 Differences in Namaz and Surya Namaskar

Namaz	Surya Namaskar
Part of Islamic faith to pray to the God.	Part of ancient yogic technique of India to express gratitude to the sun.
Done at various time	Usually done at the sun rise
Performer faces towards Kaaba (Holy Masjid in Mekkah)	Performer faces towards the sun.
Duration of position differs one another	Duration of different poses remain same.
In the last pose turn head to both sides	In all poses keep head in forward line.
It is done with prescribed clothing (covering Owrath)	It's done in minimal clothing for sun bathe.
Women during menses period and at bleeding after delivery are exempted.	Women during menses period and pregnancy and patients of hernia and high BP are exempted.
At the final activity, turns the head right and left with a mild pause in between.	At the final pose the performer returns to the first pose

CONCLUSION

1. Namaz and Surya Namaskar, though originating from different religious and cultural backgrounds, function as structured physical activities that contribute to overall health and well-being.
2. Both practices involve a sequence of postures that promote flexibility, muscular strength, balance, and proper body alignment.
3. Regular performance of Namaz and Surya Namaskar supports physiological functions such as improved blood circulation, digestion, respiratory efficiency, and nervous system regulation.
4. Both activities provide significant psychological benefits, including stress reduction, improved concentration, mental clarity, and emotional stability.
5. The integration of breathing patterns, controlled movements, and mindfulness in both practices enhances mind–body coordination.
6. Namaz emphasizes spiritual discipline through devotion and regularity, while Surya Namaskar combines physical exercise with yogic and meditative elements.
7. Both practices are simple, cost-effective, and can be performed without equipment, making them accessible to individuals of different age groups and fitness levels.
8. Despite similarities, differences exist in terms of purpose, timing, orientation, sequence, and cultural significance, highlighting their unique identities.
9. Incorporating either or both practices into daily routine can contribute to a holistic lifestyle by improving physical fitness, mental health, and spiritual well-being.
10. Overall, Namaz and Surya Namaskar can be recognized as complementary forms of low-to-moderate intensity physical activity that promote a balanced and healthy life.

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