

A Brief Analysis on the Application of Fitness Yoga in Improving Sub-health Problems Among Office Workers

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Abstract

The people's quality of life has been continuously improving along with the rapid growth of China's economic level; however, the consequent health problems have been increasingly emerging. How to resist various high-tech diseases in the new situation for office workers is a common topic worth discussing at present, this paper explores the value of yoga, seeks more suitable exercise methods and fitness ways for improving the sub-health problems among office workers, creates a good yoga posture exercise and fitness plan suitable for office workers and explores the application of fitness yoga in improving sub-health problems among office workers.

Keywords

Fitness yoga; office workers; sub-health.

1. DEFINITIONS OF RELATED CONCEPTS

1.1. Definition of Yoga

In a narrow sense, yoga is the combination of spirit and body, the integration of psyche and soma. Yoga is a holistic mind-body regimen system that integrates breath control, posture practice, and meditation. While calming the mind, players use deep breathing and consciousness guidance in movement to mobilize life energy, coordinate visceral functions, enhance joint flexibility and body balance endurance. This systematic practice ultimately achieves overall coordination of physical and mental state, achieving overall harmony.

In a broad sense, yoga is a combination of philosophy, science, and art. It aims to further understand oneself through the exercise of the body, mind and spirit of human, and to achieve the harmony and unity of human body's sense and soul. Nowadays yoga we said is a way of physical and mental exercise, unlike ancient times, modern yoga mainly focuses on practice of the body to promote the people's physical, mental, and spiritual health.

1.2. Definition of Office Workers

The term "office workers" is a broad concept, mostly referring to desk-bound worker who engage in mental labor for a long time, their working hours are generally over six hours. This group includes white-collar workers, IT staff, copywriters, company employees, teachers, accountants, doctors, scientific researchers, civil servants, etc.

1.3. Definition of Sub-health

"Sub-health" is a state between health and illness, not disease. "Sub-health" is divided into physical sub-health, psychological sub-health and other aspects typically embodied as fatigue, poor sleep, dizziness and forgetfulness, dull head pain, skin problems, poor appetite, constipation, poor resistance, psychological problems, hyposexuality and other aspects. The

symptoms of "sub-health" appear intermittent, the degree varies with the individual, and the reasons for formation are more related to living habits and surrounding environment.

2. RESEARCH STATE

2.1. Research State of Sub-health Among Office Workers

The World Health Organization (WHO) says that "health is not merely the absence of disease in the body but also includes mental health, moral health, and good social adaptability." Thus, the health concept of modern people is overall health, which is broad and diverse in meaning and specifically includes physical health, social health, environmental health, etc. Physiological and psychological health are complementary, while the quality of social adaptability depends on good physical and psychological condition. Therefore, health is not merely the absence of illness, but a state of physical, mental and social adaptation in complete good and comfortable condition. As far as the level of cultural knowledge is concerned, the office workers are mostly intellectuals, mostly mental workers, such as senior staff in enterprises, researchers in research and development institutions, teachers in universities and so on, their work pressure is high and the competition mechanism is fierce. According to a recent statistical data from medical institutions, the survey of "Revelation on the Health of Chinese White-Collar Workers" show that 33% of the population face digestive system diseases such as liver diseases, chronic gastritis, gallstone and cholecystitis, and the prevalence rate increases proportionally with age; 41% of population have cardiovascular diseases such as hyperlipidemia, bradycardia or arrhythmia; 43% of the population feel that they are not ill but have poor spirits and often feel tired.

2.2. Research State of Office Workers' Participation in Physical Activities

Zhang Hanhua took some white-collar workers from small and medium-sized enterprises in Wuhan, aged between 20 and 50, as the research subjects, investigated and analyzed their sub-health conditions and physical participation conditions, the results suggested that 54.77% of the subjects were in a sub-healthy state, only 18.6% had time for physical exercise, and 39% were willing to participate in physical exercise, the proportion of sports population was only 28.43% among the surveyed population.

In the paper "A Comparative Analysis of Women's Participation in Sports at Different Ages in Ordinary Colleges and Universities", Peng Yanchun, Ding Wen, Wang Yuanfeng and Yang Gangshan took female staff and students from 30 colleges and universities as the research subjects, the results suggested that the attitudes of the surveyed group towards sports participation were all positive, the female college students and young female staff were mainly enthusiastic about jogging, yoga, aerobics, badminton, table tennis and square dance, etc., middle-aged and elderly female staff mainly tended to choose gentle and light exercise, such as walking, yoga and square dance. Yoga was the most popular among all the choices, accounting for 29.4%.

In conclusion: it is found that the office population is very extensive at present by consulting a great deal of information, their range basically from 20 to 50 years old, in a sedentary working environment, they often stoop for most of the day, although the ways of participating in sports are gradually diversifying, their level of participation is not high. Among the people willing to participate, men mainly focus on sports such as running, walking, and ball games; women mainly concentrate on aerobics, yoga, and body shaping training, etc. However, the main reasons that prevent this group from participating in Physical activity widely include limited leisure time, high work pressure, and expensive sports facilities. Therefore, how to solve these problems and encourage more office workers to actively participate in Physical activity is precisely the direction this paper embarks on.

3. APPLICATION OF FITNESS YOGA IN IMPROVING SUB-HEALTH PROBLEMS AMONG OFFICE WORKERS

3.1. Understanding the Physical Health Conditions of Office Workers

The parts of the body that office workers feel uncomfortable with are investigated and ranked, such as the neck, shoulder, waist, eyes, back, wrist, buttock, and limbs. For office workers, the long sitting during work is an inevitable factor that threatens the decline of muscle strength and endurance. Long incorrect body postures, such as slouching over and lowering the head, posing a high risk of occupational disease injuries to the neck, shoulders, waist, and eyes,, and have varying degrees of impact on chronic diseases in different parts of the body,the formation process of sub-health problems such as body aches and poor blood circulation in office workers is a long accumulation process, and it is crucial to develop good body postures, correct exercise methods, understand how to alleviate and prevent the invasion of chronic diseases in daily work and life.

3.2. The Role of Yoga Practice in Alleviating Sub-health among Office Workers

Yoga is a holistic practice method that integrates the mind, body, emotion, and spirit. Engaging in yoga can improve the people's mental and physical capabilities, achieving a core unity of the mind, spirit, and body, it is of common significance to the topic of this paper which explores the role of yoga in alleviating sub-health among office workers. Yoga can shape the body, pull ligaments, and stretch via its unique training methods and movements, moreover, the breathing techniques in yoga training can positively play a positive role in body shaping, flexibility, and balance of the people who sit for long time. Yoga can train the breathing of office workers and practice their cardiopulmonary function, the primary breathing method in yoga is a combination of thoracic and abdominal breathing. During yoga practice, office workers should be able to breathe naturally, gradually calm down through continuous inhalation and exhalation. At the same time, the lungs take in a large amount of oxygen, which is convenient gas exchange and improving cardiopulmonary function.

3.3. Analysis of the Effects of Fitness Yoga Posture Creation for Office Workers

Office workers has long been on the mechanical modern public life, resulting in reduced body flexibility, joint flexibility declines, the decline in joint flexibility is associated with aging and is a sign of accelerated aging. Yoga practice encompasses forward bending, backward bending, left-right lateral bends, stretches, twists, support, inversions, and breathing, which can train basic physical qualities such as strength, balance, and flexibility. From the perspective of sports anatomy, yoga movements can be classified into four types based on joint movement: extension and flexion, abduction and adduction, and rotation and circumduction. Therefore, it can be known that yoga practice is conducive to improve body flexibility and joint flexibility, contributing to health. The daily sitting posture of office workers is that their back and spine are in a long-term stretching state, and their hip and knee joints are in a flexed state. In order to alleviate long occupational diseases of office workers, the postures created in this paper mainly selects inversions of sitting postures. The inversions involves stretching the iliopsoas muscle, strengthening the exercise of back muscles, and the exercise of the muscles behind the legs; yoga practices that involve body backward bending, including locust style, cobra style, bow style, upper wheel style, and bridge style. Emphasis is placed on exercising the spine, shoulders, strength, and flexibility, comprehensively exercising all parts of the body to alleviate symptoms of modern civilization diseases caused by work or unhealthy living habits.

3.4. Application of Fitness Yoga Posture Creation

3.4.1 Determining the Basis for Creation

The various mechanical movements of the human body in daily life rely on the execution of the body movement system, which is an important theoretical support for creation. The relationship between human bones, bone joints, muscles, ligaments and yoga posture practice is started at the anatomical level. The arrangement of the body's bones follows the principle of anatomical sequence and the normal movement range of the body's bone joints in yoga practice. Muscles work in accordance with the principles of sport biomechanics, and yoga postures are based on the scientific principles of muscle contraction and extension antagonism. Yoga postures cover practice for all parts of the body and all directions, In the practice of yoga postures, any limb movement that involves lifting legs or raising hands are completed by taking bones as levers, bone joints as keys, and skeletal muscles as the driving force for joint contraction and stretch. According to anatomical principles, yoga postures are analyze and select , and scientific practice of postures is performed on the basis of the movement angle of bone joint. For instance, avoiding hyperextension of the knee and elbow joints; following its four physiological curvatures when exercising the spine: the cervical curvature is forward, the thoracic zone is backward, the lumbar curvature is forward, and the sacral curve is backward. According to the common physical illnesses of office workers, borrowing existing yoga routines, different postures have different effects. Each class sets different main practice areas, purposefully creates the main contents of the practice and highlights key parts. The schedule is arrangd, choosing the postures based on the subject, and forming creation mode based on exercises in each module. Making exercises more diverse, avoiding boredom, monotonous movements, excessive physical fatigue, or no effect.

3.4.2 Determining the Principles of Creation

First, the principle of pertinence: selecting the most suitable movements based on the practice parts, for instance, the standing forward bend is suitable for people with poor flexibility to practice, while the boat practice for abdominal strength is more suitable for men; second, the principle of gradual improvement: the movement adaptation is divided into two levels to ensure that the practice posture varies with the individual, and correspondingly lowering or increasing the difficulty and intensity on the basis of the original yoga postures; third, the principle of integrity, ensuring the smoothness of yoga practice and paying more attention to the connection and transition between movements. a set of yoga posture practice should take into account the multiple muscles, joints, and tissues of office workers with sub-health problems, the creation of yoga postures is flexible and diverse, as long as it does not violate the movement direction of body anatomy, one posture can be adapted into multiple practice methods.

3.4.3 Determining the Subject Elements

Subject I: using the spine as the subject

Long sitting posture can easily deform the spine and disrupt its natural curvature. The survey results suggest that most people have problems with cervical and lumbar vertebrae, while the spine consists of the cervical, thoracic, lumbar, and coccygeal vertebrae. Therefore, the spine as the main subject pertinently, which is used to practice spine and relieve discomfort in various parts of the spine. For instance, forward head posture and lumbar disc herniation mentioned in the questionnaire are both caused by the disruption of the spine's natural curvature. The shoulders and neck are the first areas that office workers need to improve, the shoulders tied to the back, and the cervical vertebrae is an important part of the spine, the movements of the spine include stretch, flexion, lateral bending, and rotation. Therefore, in yoga practice, corresponding posture practice should be selected in accordance with the movement direction of the spine.

Subject II: the limbs and waist as the subjects

Office workers who sit for long time suffer from a significant loss of muscle strength and a decline in physical fitness. Strength is derived from the strength of muscles to overcome

resistance; muscle tissue is the material basis of human movement, which has the role of protecting bones and maintaining body temperature. Muscle tissue is mainly composed of muscle fibers, muscle fibers are thin and long, which has the function of unity of opposites: contraction and stretch. Ligaments are tied to the quality of flexibility, ligaments connect two adjacent bones and play a role in connecting, protecting, strengthening and limiting the movement angle of joint. Therefore, the creation of this section includes muscle contraction and antagonistic muscle stretch, with a focus on exercising the strength and flexibility of the limbs and waist of the office workers.

Subject III: shoulder and back exercises as the subjects

Joint: The movements of joints are various movements produced by the movement link of body around the movement axis of a certain joint. The yoga posture for the shoulder joint stretch is the movement of stretching the arms backwards, in the office one can hold the arms back to the back of the chair; the movement of shoulder joint flexion is the movement of lifting the arm, such as the skyscraper, downward-facing dog pose, chair pose in yoga, etc., the abduction movement of shoulder joint is to spread the arm sideways, such as the horizontal lift on both sides of the arm, the second pose of the soldier, etc., the adduction movement of shoulder joint is to embrace oneself with the arm inward, such as the eagle pose; outward rotation and inward rotation of shoulder joint is to do arm rotation, the arm rotates towards the thumb is the outward rotation of the arm; turning the arm towards the little finger is inward rotation of arm. The following creation includes all the practice directions of the shoulder joint.

Subject IV: eyes as the subject

The eyes are the window to the soul, exercises for the eyes are relatively convenient, and can be done at any time and place. Exercises for the eyes are movements of the eyeballs and the muscles around the eyes. In addition to daily eye care, one should pay attention to eye hygiene and adopt the correct way of using the eyes. This subject gives references for daily practice, and there is no practice in the experiments of the later subject mode.

4. CONCLUSION

4.1. Fitness Yoga is Beneficial for Improving the Sub-health Problems Among Office Workers

After fitness yoga practice, office workers with sub-health problems can reduce body fat accumulation, enhance physical strength, balance and flexibility, increase the flexibility of joint movement, which can effectively relieve common physical illnesses, etc. The creation practice of yoga postures can exercise the muscles and bones of the whole body to the greatest extent, stimulate different muscles and joints of the body, and have varying degrees of effect on alleviating the sub-health state of office workers.

4.2. Fitness Yoga is Helpful to Improve the Mental Sub-health Problems Among office people

After yoga practice, office workers with sub-health problems can improve their negative emotions, achieve a pleasant mood, and enhance their physical and mental health, especially the practice of yoga breathing and relaxation techniques can relax the body and mind, regulate the balance of the body and mind, reach the state of inner harmony, the fitness yoga practice plan can have a certain effect on preventing and alleviating the psychological sub-health state.

4.3. The Creation of Yoga is Suitable for Promotion Among Office Workers with Sub-health Conditions.

The creation of yoga for office workers mainly targets office workers with sub-health problems in the office, aiming to relieve and prevent discomfort in body parts and sub-health

conditions, it pertinently selects yoga postures, with a very clear objective. By choosing topics suitable for different groups, adhering to the principle of targeted creation, comprehensive and holistic principle, and gradual improvement principle, taking human physiology and anatomy as basis, the created healthy yoga programs are suitable for promotion among office workers with sub-health problems.

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