

A Comparative Study on Quality of Life Among Yoga and Gym Practitioner

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Abstract- This study examines the quality of life (QoL) differences between yoga practitioners and gym enthusiasts, comparing the physical, psychological, social, and environmental dimensions of well-being. Using a cross-sectional design, the research involved 124 participants— 62 yoga practitioners and 62 gym-goers— aged 18–65, each with a minimum of one year of consistent practice. QoL was assessed using the WHOQOL-BREF scale, which measures diverse aspects of life satisfaction. Descriptive analysis revealed mean scores of 338.839 for yoga practitioners and 350.871 for gym practitioners, with a wider variability observed in the yoga group. Inferential statistics, employing an independent samples t-test, indicated no statistically significant difference in QoL scores between the groups ($t = -1.846, p = 0.067$), although results suggested a potential trend favoring gym practitioners. Both practices showed unique benefits: yoga was associated with emotional regulation, stress relief, and mindfulness, while gym workouts emphasized physical fitness, endurance, and energy. The findings underscore the need for personalized fitness approaches tailored to individual goals and preferences. Limitations include the cross-sectional design, small sample size, and reliance on self-reported data, highlighting the need for longitudinal studies and broader samples to better understand the interplay between physical activity types and QoL. This research contributes to health promotion strategies by exploring how varied exercise modalities can enhance overall well-being.

Keywords: Quality of Life, Yoga, Gym, Physical Fitness, Well-being, Health and Exercise Modalities.

I. INTRODUCTION

The concept of quality of life refers to how a person views their place in the world in relation to their objectives, standards, expectations, and worries, as well as the culture and value systems in which they are immersed. Yoga and other forms of exercise have been shown to provide numerous health benefits, according to numerous scientific studies. They

encourage the use of yoga and physical activity as remedies for a variety of issues, including stress, high blood pressure, and cardiovascular illnesses. Yoga improves mental clarity, focus, mood, well-being, and stress tolerance. A daily practice session of thirty minutes under the guidance of a qualified instructor will optimize the advantages. It is imperative that healthcare professionals support their patients in continuing their yoga practices. Depression and posttraumatic stress disorder (PTSD) are alleviated by yogic breathing, or pranayama. Yoga has been applied as a stress-reduction technique that can help in alleviating stress and anxiety disorders.

Quality of life.

The World Health Organization (WHO) defines quality of life as “an individual’s perception of his/her position in life in the context of the culture and value system in which they live and in relation to their goals, expectations, standards, and concerns.” Recently, “quality of life” has emerged as a key concept in medicine, with medical practitioners placing equal weight on patients’ quality of life and the technical quality of care they receive. The concept of quality of life is particularly well-suited for the task of combining these two viewpoints because it includes both objective and subjective elements: an individual’s subjective, personal experience of their own life as well as a more objective evaluation of external factors that affect the quality of their life.

Yoga.

Yoga is a well-liked supplementary and alternative therapy for a wide range of illnesses because it's thought to calm the mind and deal with the disruptions that lead to issues. Research has demonstrated that yoga enhances psychological well-being and that pranayama, or yoga breathing techniques, are useful in treating anxiety, disease, and stress-related problems.

It has been demonstrated that implementing stress management and yoga-based lifestyle changes can lessen anxiety and depression. Additionally, yoga improves subjective wellness and quality of life; patients who practice yoga on a regular basis report higher quality of life. Yoga stimulates a sense of well-being by combining disciplined physical and breathing practices with meditation; clinical interventions lead to improved mood and decreased symptoms of anxiety and sadness. The goal of yoga, an internal science, is to accomplish the unification of the mind and body, which results in self-realization. Overcoming suffering and achieving a sense of freedom, contentment, and harmony in all facets of life are the goals of yoga practice. It has been demonstrated that yoga significantly improves general wellbeing and quality of life. Frequent yoga practice helps lessen stress, anxiety, sadness, and chronic pain while improving respiratory and cardiovascular health, muscular strength, flexibility, and strength (Woodyard, 2011). Research has indicated that practicing yoga enhances one's subjective well-being; following a four-month yoga course, participants reported significant improvements in nine out of eleven variables on the Subjective Well-Being Inventory (Malathi et al., 2000). Yoga has therapeutic benefits for a wide range of illnesses and demographics, including addiction recovery and bettering sleep patterns (Singh & Yadav, 2023). Additionally, studies on obese individuals have shown that those who have practiced yoga report higher quality of life in several areas, such as pleasure of physical activities, productivity at work, self-esteem, and social fulfilment.

Gym.

The activity has numerous psychological and physiological advantages, such as better cardiovascular health, tighter control over diabetes, and improved body weight management. Lesser-known advantages of exercise could include reduced blood pressure, stronger bones, happier moods, cancer prevention, and even extended life spans kind of physical activity is helpful, regardless of the activity—sports, organized exercise, housework, yard maintenance, or work-related duties are all acceptable. Health and fitness gains will be comparable if total energy consumption stays the same. People's everyday lives these days typically involve technology-based

jobs, which has resulted in an extremely harsh lifestyle. Workouts, maintenance or housework, and job duties are all advantageous. Gains in health and fitness will be equivalent if total energy consumption stays the same. These days, the typical lifestyle has become extremely technologically oriented, with little time left over for physical activity. This sedentary lifestyle spells poorly for the overall health of the community. In addition to medical care, medical professionals hope to give their patients some form of physical training. Additionally, it has been shown to be beneficial in treating both psychological and physical illnesses. The psychological benefits of exercise have received more attention in recent years, and there is ample data in the literature to support these positive effects. Exercise has also been demonstrated to have a positive psychological impact on mood, cognitive performance, and self-concept. (Ulge and Yaqlia).

Rationale

The reason to conduct this research is to better understand how different forms of physical activity influence overall well-being. By comparing yoga, which emphasizes mental calmness and mindfulness, with gym workouts, which focus on physical strength and fitness, this study can reveal which practice is more effective in improving life satisfaction, stress relief, and emotional balance. Additionally, this research can provide valuable insights into how these activities affect people differently based on their age, background, or lifestyle, helping to develop more targeted strategies for enhancing quality of life.

II. REVIEW OF LITERATURE

This study aims to evaluate the results of a few chosen studies about the therapeutic applications of yoga and to present a thorough analysis of the advantages of consistent yoga practice. C. Woodyard (2011). Health care providers should be aware of the properties of yoga and the numerous therapeutic benefits it has been shown to have as interest in mind-body fitness programs like yoga grows. As a result, the following paper offers information on the therapeutic benefits of yoga, which have been investigated in a variety of groups with respect to a wide range of illnesses and disorders. Therapeutic yoga refers to the use of yoga poses and techniques to treat medical disorders. It

includes lessons on yogic postures and practices to prevent, lessen, or reduce or eliminate constraints, pain, and suffering that are structural, physiological, emotional, and spiritual. The study's findings demonstrate how yoga increases physical strength and flexibility, strengthens and improves cardiovascular and respiratory systems, aids in addiction treatment and recovery, lessens stress, anxiety, depression, and chronic pain, enhances sleep patterns, and improves general well-being and quality of life. This research project proposes assessing the results of a few chosen studies about the therapeutic applications of yoga and presenting a thorough analysis of the advantages of consistent yoga practice. As a result, this article offers information on the therapeutic benefits of yoga, which have been investigated in a variety of groups with respect to a wide range of illnesses and disorders. The study's findings demonstrate how yoga increases physical strength and flexibility, strengthens and improves cardiovascular and respiratory systems, aids in addiction treatment and recovery, lessens stress, anxiety, depression, and chronic pain, enhances sleep patterns, and improves general well-being and quality of life. Numerous studies have demonstrated the advantages of yoga as a supplemental therapy for mental health issues such as depression, anxiety, stress, and sleeplessness. In order to balance the sympathetic nervous system and the fight-or-flight reaction with the parasympathetic nervous system and the relaxation response, it promotes relaxation, slower breathing, and present-moment awareness. The immune system depends on balanced energy, which is produced by this exercise.

By inhibiting the posterior, or sympathetic, portion of the hypothalamus, yoga improves the body's sympathetic reactions to stressful stimuli and restores the stress-related autonomic regulating reflex mechanisms. Regular yoga practice can significantly raise serotonin levels while lowering the neurotransmitter-degrading enzyme monoamine oxidase. It also helps with depression, as well as cortisol. Increased flexibility is one of the key advantages of yoga, as it contributes to the maintenance and/or growth of muscular mass and strength, warding against ailments like osteoporosis, arthritis, and back discomfort. Yoga also enhances balance and perception. Yoga improves red blood cell and hemoglobin levels, which boost oxygen delivery to bodily cells and improve their functionality.

Additionally, it thins the blood, which lowers the chance of heart attacks and strokes, which are frequently brought on by blood clots. Twisting poses wring out venous blood from internal organs and allow oxygenated blood to flow in when the twist is relaxed. By promoting venous blood flow from the legs and pelvis back to the heart, inverted poses help the blood be pushed via the lungs and become newly exposed to oxygen.

Yoga can promote physical, mental, and spiritual wellness as well as a sense of calm, which is something that many cancer patients long for, even though it cannot treat the disease. Cancer patients can benefit from yoga, breathing techniques, and meditation, as they can lower stress, accelerate recovery, and improve their quality of life. Yoga may have a revitalizing impact on both physical and mental energy, which enhances fitness and lessens exhaustion, according to research. Furthermore, yoga stresses developing attention, accepting one's feelings in the present moment, and refraining from pushing one's body beyond its comfort zones. Yoga relieves over stimulation as well as the pressures and busy lifestyle of contemporary living, which frequently results in better sleep. the application of non-traditional sleep therapy techniques, including official psychotherapy, relaxation methods, and behavior-based educational approaches.

The purpose of the study was to ascertain the quality of life of a group of adult, healthy yoga practitioners as well as the relationship between the practice's characteristics and quality of life. Zuzanna Piekorz, A total of 300 participants, aged 35 to 50, were analyzed and split into two groups: the control group (n = 150) did not practice yoga, and the respondent group (n = 150) practiced yoga. Both the original and the WHOQOL-BREF quality-of-life questionnaire were utilized. A significant threshold of was established. The study's findings indicated that yoga practitioners have considerably better levels of overall life satisfaction, health satisfaction and somatic domain satisfaction. the psychological, environmental, and social domains. A correlation has been noted between the experience of practicing yoga and the evaluation of one's physical functional quality of life.

Yoga literature reveals that many practitioners worldwide aim to teach yoga practices to populations of healthy individuals, patients, and persons in specific age ranges. A commonly measured metric, quality of

life, appears to be positively correlated with yoga practice. Considering the large number of studies on the benefits of yoga for patients and the elderly, the low number of studies on healthy individuals, and a lack of research in Central European nations, the study was completed. The study included some findings from a 2017 investigation on a Polish group of yoga practitioners. The study protocol was authorized by the Bioethics Committee of Nicolaus Copernicus University in Torun (82/2017) and the Collegium Medicum in Bydgoszcz. A total of 345 adults were assessed for the study; however, 45 participants were not included because they did not meet the age requirement or had one or more medical issues. The remaining 300 participants were split into two equal groups: 150 yogis made up the study group, and 150 adults who did not practice yoga made up the control group. The research was carried out both individually and in groups. Surveys were given to research participants either directly by the study investigator, a yoga instructor, or they could be picked up. at their job or yoga studio. The study's purpose, inclusion and exclusion criteria, questionnaire completion instructions, and consent form were sent to the subjects. Participants' socio-demographic and yoga practice variables were evaluated by a questionnaire used in the study. The questionnaire was filled out by the study group.

III. METHODOLOGY

Research methodology is the term for the systematic method of looking into psychological phenomena. It covers the methods for gathering data, the procedures for analysing data to test hypotheses, and the study design. It guarantees that ethical standards, reliability, and validity are upheld throughout the research process.

A. Research Question

1. How would you rate your quality of life?
2. How satisfied are you with your health?

B. Aim

The aim of the study is to compare the quality of life between individuals who practice yoga and those who engage in gym-based exercise routine.

C. Objective

- 1) Investigate the physical, psychological social relationship and environmental benefits

experienced by each group.

- 2) Identify which specific aspects of yoga and gym workouts most significantly impact quality of life.
- 3) Determine the relationship between mental health status and quality of life, and how they might influence each other.

D. Hypothesis:

Alternative Hypothesis (H_1): Practicing yoga or gym exercises has a significant impact on one or more aspects of quality of life, such as mental well-being, stress reduction, or physical health.

Null Hypothesis (H_0): Practicing yoga or gym exercises has no significant impact on any aspect of quality of life, including mental well-being, stress levels, and physical health.

E. Variables

Independent Variable: Type of Physical Activity: Yoga Practitioners (Group 1) Gym-Practitioners (Group 2)

Dependent variable: Quality of Life: This is a continuous variable, often measured using a standardized scale (e.g., WHOQOL, SF-36) that assesses various dimensions of quality of life.

F. Participants

Adult yoga and gym practitioners who had been practicing for at least a year and were between the ages of 18 and 65 were the study's main focus. There were 124 people in all, 62 of whom practiced yoga and 62 of whom worked out. Participants were chosen using convenience sampling, taking into account their availability and desire to participate. Adults who had been doing yoga or working out for at least a year were required to meet the inclusion requirements, and participants had to provide their approval and agree to participate willingly. Those who had not practiced consistently for more than a year or who refused to give informed permission were excluded.

G. Research Design

The study was conducted through the survey method with google forms. The study aims to explore the quality of life among yoga and gym practitioners. This study compared the quality of life (QoL) of yoga and gym practitioners using a comparative cross-sectional design. 124 participants—62 in each group—were chosen by convenience sampling from nearby gyms and yoga studios. The World Health Organization's standardised WHOQOL-BREF questionnaire was used to assess quality of life in four areas:

environment, social relationships, psychological health, and physical health. To compare group differences, the data were analysed using an Independent Samples t-test; corrections were performed if the assumption of equal variance was broken. Although this approach facilitates useful group comparisons, the cross-sectional nature of the data limits the ability to draw inferences about causality, and the use of self-reported data raises the possibility of bias.

H. Research Instrument

World health organization Quality of life: WHOQOL World organization, 26 item scale Cronbach's alpha coefficient around 0.91, in a 5-point Likert scale point Likert scale. Where the following items were rated on a 5point Likert scale. Very poor= 1, Poor=2, Neither poor nor good = 3, good= 4, very good= 5. A popular instrument for evaluating a person's quality of life across a number of dimensions is the World Health Organisation Quality of Life (WHOQOL). WHOQOL-100 (a 100-item version) and WHOQOL-BREF (a 26-item version) are the two main variants. Recoding negatively framed questions, computing raw domain scores, and converting scores to a 0–100 scale are all steps in the WHOQOL-BREF scoring process. A higher quality of life is indicated by higher ratings in each domain. Two standalone items are also included in the WHOQOL-BREF: Q1: Total life satisfaction and Q2: General health contentment. Higher scores indicate a higher quality of life. Scores are averaged within domains and converted to a 0–100 scale. It is necessary to reverse-scored some items before computing domain averages. Universe of population are people performing Gym and yoga at least for a year.

Sampling methods: In the present study, the participants were recruited by convenience sampling as the participants who were available and interested to participate were chosen. A sample size of 124 gym and yoga practitioners. Practitioners were between the age 18-65 years who were performing exercises from 1 years or more than that.

Procedure were done by Google Forms has been used for the data collection process on population. The URL to the Google Form was forwarded to friends, family, and individuals I know in the area, and some of them were asked to pass it on to other people. There is total 26 items in the google form.

Jasp software will be used to conduct T- Test between the two variables for the statistical analysis of the data collected. After doing the data analysis, the results obtained will be used to form a conclusion with respect to our hypothesis. Ethical consideration following were considered during course of the study Informed consent: Before filling out the form, the participants were informed about the nature of the study and were asked to fill a consent form where they agreed to voluntarily participate in the study. The participants were also informed that, if at any point they wish to withdraw their participation, they were free to do so. Privacy: Participation was anonymous; however, the participants were free to reveal their names but were assured that their identity, in any case, will not be revealed. Confidentiality: The participants were assured that the record of their responses will not be shared and will only be used for the purpose of this research and by the researcher.

IV.RESULTS

Using JASP (Jeffrey's Amazing Statistics Program) software, descriptive as well as inferential statistics were computed for all the data gathered and received from the participants. In line with the nature of this research, independent T-Test Analysis was conducted to determine a quality of life among yoga and gym practitioners, and the results are mentioned below.

Descriptive Statistics:

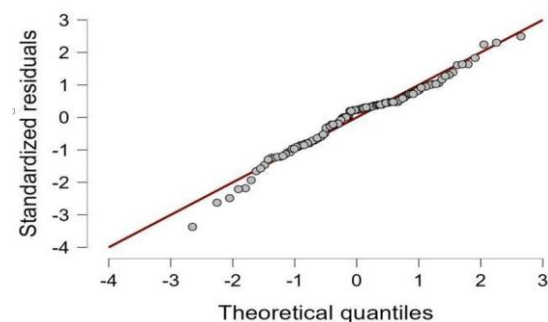
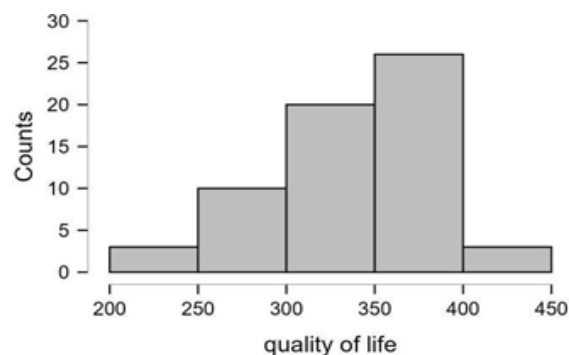
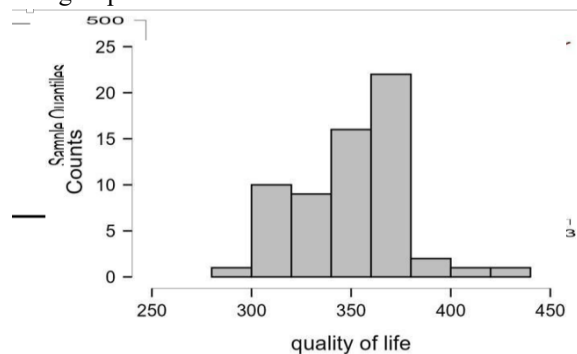
Table 1 *Descriptive Statistics*

	Valid	Missing	Mean
yoga	62	0	338.839
gym	62	0	350.871

Table 1 shows the means and standard deviations of the variables- yoga and gym practitioners' quality of life. As seen in the table, the means of quality of life in yoga practitioners were (338.839), SD (43.836) and mean for quality of life in gym practitioners were (350.871), SD (26.692) respectively.

The effectiveness of yoga and gym programs is compared in the study with respect to participants' physical and mental health. The mean score for the yoga group was 338.839, whereas the mean score for the gym group was 350.871. The standard deviation for the yoga group was 43.836, indicating a little better

result. The scores of the yoga group varied more, indicating a broader variety of results. The range was smaller for the gym group, with a greater minimum and marginally larger maximum. According to the psychological interpretation, the yoga group had a wider range of results, which may suggest that yoga might have different benefits for different people, while the gym group did better overall and more consistently. While more consistent results were seen by all individuals in the exercise program, The benefits of yoga can vary, perhaps based on personal preferences, degree of talent, or dedication to the practice. This variation in yoga could indicate that it's more suited to individual needs, but it might also mean that group results won't be consistent.



Applying an Independent Samples T-Test, the study compares the quality of life of yoga and gym

practitioners. When comparing yoga practitioners to gym goers, the results indicate a poorer average quality of life score due to the negative t-value. Still, the change is not that great. The entire sample size employed is indicated by the 122 degrees of freedom. The p value indicates that there is insufficient data to assert a statistically significant difference at the 5% significance level, as it is marginally higher than the traditional significance threshold of 0.05. The p-value, on the other hand, is nearly 0.05, indicating a tendency in favor of a significant difference. The equal variance assumption in the t-test appears to have been broken, as indicated by the significant Brown- Forsythe test result ($p < 0.05$). This can have an impact on the t-test's dependability. result and reduce the accuracy of the conventional independent t-test when comparing groups. According to the statistics, there might be some differences in the quality of life between yoga and gym practitioners, but not enough for them to be statistically significant at the standard level. This is significant from a psychological point of view. A further indication that there may be differences in the ways that different forms of exercise affect people's quality of life is the violation of equal variances, which suggests that certain participants may gain more from certain forms of exercise than from others.

Practically speaking, quality of life may be enhanced by both yoga and gym workouts, albeit the precise impacts may vary depending on personal preferences, driving forces, and other environmental variables. Additional research utilising a test that takes uneven More precise insights might be obtained by adjusting for any confounding variables or using log variances.

V.DISCUSSION

The purpose of this study was to use statistical analysis to assess the quality of life between yoga and gym practitioners. Yoga practitioners had a slightly higher mean quality of life score (338.839) than gym practitioners (351.871). There may have been more variation in the quality-of-life scores for the yoga group as the standard deviation was higher than for the exercise group. With the yoga group rating between 217 and 429 and the gym group scoring between 294 and 432, both groups demonstrated a wide spectrum of experiences. The purpose of the independent samples t-test was to ascertain whether there was a statistically significant difference in the mean quality of life

between yoga and gym practitioners. The t-value of -1.846 and the p-value of 0.067 from the t-test showed no a statistically significant variation in the two groups' quality of life. But the p-value being close to significance implies that a difference might be noticeable with a bigger sample size or more accurate measurements. Psychological viewpoints indicate that although through different mechanisms, both types of physical activity have a similar positive impact on wellbeing.

Strength training, endurance, and cardiovascular fitness are frequently prioritised by gym goers because they are associated with both psychological and physical advantages like boosted confidence, happier moods, and more energy. The non-significant results, however, imply that there might be minor variations between the two groups in terms of life quality. There is evidence from prior studies, sample size, measure sensitivity, practice length and frequency, and other factors suggesting longer-term and more frequent participation in any type of exercise can have more noticeable effects on wellbeing. Although the study has various limitations, it examines the association between quality of life and yoga and gym activities. First off, the results' generalisability is constrained by the tiny sample size. A bigger sample size would have improved the studies' statistical power and given us a stronger grasp of the group differences. Second, the research breaks the independent t-test's equal variance assumption, which would have affected the outcomes. Thirdly, because the study's cross-sectional methodology only collects data at one particular moment in time, it is not feasible to draw conclusions about the causal linkages between better quality of life and activities like yoga or working out. Additionally, the study did not account for confounding factors such age, gender, socioeconomic level, past medical histories, psychiatric exercise frequency, duration, and state of health. These factors might have had an impact on the results regarding quality of life. Recall bias and social desirability bias are two types of response biases that can affect self-reported statistics. The trustworthiness of the results could be increased with more objective measurements or by confirmation with reports from outside sources. Finally, as both yoga and gym workouts comprise a range of activities, the study does not differentiate between them. It is more difficult to make inferences regarding the particular advantages of various exercise regimens due

to this lack of differentiation. The limitations of the study indicate that larger and more diverse samples, more focused outcome measures, longitudinal studies, and qualitative research should be the main areas of future investigation. Expanding the sample size and guaranteeing variety in age, gender, and socioeconomic position could generalize findings across diverse communities. Studies that follow participants' changes in quality of life over time may shed light on the long-term advantages of yoga and fitness regimens. Incorporating qualitative components such as focus groups or interviews may yield more detailed information about personal experiences.

VI. CONCLUSION

There was a small difference in the quality-of-life scores between yoga and gym workouts, according to the study. The difference did not, however, approach statistical significance, indicating that it is not significant enough to prove beyond a reasonable doubt that engaging in a particular activity improves quality of life. The cross-sectional design, limited sample size, reliance on self-reported measures, and lack of control for confounding variables are some of the drawbacks of the study. Notwithstanding these drawbacks, the study adds to the body of knowledge by emphasising the possible subtleties in the ways that various types of physical activity impact people's quality of life. It highlights how crucial it is to consider variables like the type of exercise, demographics, and assessment methods when assessing how physical activities affect wellbeing. Future studies ought to focus on these constraints by utilising longer-term designs, more accurate quality-of-life indicators, and larger, more varied sample sizes. Comprehending these dynamics can aid in guiding health promotion tactics and personal decisions regarding physical exercise to enhance both mental and physical wellbeing. socioeconomic position could generalize findings across diverse communities. Studies that follow participants' changes in quality of life over time may shed light on the long-term advantages of yoga and fitness regimens. Incorporating qualitative components such as focus groups or interviews may yield more detailed information about personal experience

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