

WORKOUT SESSIONS IN THE WORKPLACE: A STUDY OF DELHI NCR

by

Bhavneet Kaur Dilawari

DISSERTATION

Presented to the Swiss School of Business and Management Geneva

In Partial Fulfilment

Of the Requirements

For the Degree

DOCTOR OF BUSINESS ADMINISTRATION

SWISS SCHOOL OF BUSINESS AND MANAGEMENT GENEVA

June 2026

WORKOUT SESSIONS IN THE WORKPLACE: A STUDY OF DELHI NCR

By

Bhavneet Kaur Dilawari

APPROVED BY

Iva Buljubasic

Dissertation chair

RECEIVED/APPROVED BY:

Renee Goldstein Osmic

Admissions Director

Dedication

I want to dedicate this research work to my mother Mrs. Harjeet Kaur Saluja as she was always my support during my research and whatever I am I owe to her.

Acknowledgements

I acknowledge the incredible support provided to me by my mentor Dr. Jordan Thurston. Without his support this research would not have reached its final destination. I am also grateful to my husband Mr. Mandeep Singh Dilawari to encourage me at every step during this journey.

Abstract

WORKOUT SESSIONS IN THE WORKPLACE: A STUDY OF DELHI NCR

Bhavneet Kaur Dilawari

2026

The study investigates the impacts of working out at work on many elements of employees' health, engagement, and productivity to address the growing concern about the negative effects of sedentary lifestyles on workplace productivity and employee health. The study combines tests, questionnaires, and in-depth interviews with other quantitative and qualitative research methodologies to produce its conclusions. Combining primary data from previous research with secondary data from well-structured questionnaires yields a thorough understanding of the subject issue.

The stratified random sample approach focuses on the workforce in Delhi's National Capital Region (NCR), a booming economic region. The study determined that 400 workers would be a suitable sample size using Cochran's formula to ensure that the results are trustworthy and applicable to different contexts. Excel and SPSS are used in statistical analysis to perform measures such as mean, standard deviation, regression, and correlation. These techniques enable a comprehensive examination of the relationships between workplace fitness programs and employees' health, satisfaction, engagement, and productivity.

TABLE OF CONTENTS

List of Tables	viii
List of Figures	ix
CHAPTER I: INTRODUCTION	1
1.1 Overview	1
1.2 Workplace Workout Sessions	2
1.3 Historical Evolution of Workplace Workout Programs	12
1.4 Workplace Wellness Initiatives	18
1.5 Research Problem	26
1.6 Purpose of Research	27
1.7 Significance of the Study	27
1.8 Research Questions	28
Chapter II: REVIEW OF LITERATURE	29
2.1 Introduction	29
2.2 Recent Reviews of Literature	30
2.3 Summary	54
Chapter III: METHODOLOGY	55
3.1 Overview	55
3.2 Operationalization of Theoretical Constructs	56
3.3 Research Purpose and Questions	58
3.4 Objectives of the Study	59
3.5 Hypothesis of the Study	59
3.6 Variables of the Study	60
3.7 Conceptual Framework	60
3.8 Research Design	61
3.9 Population and Sample	62
3.10 Participant Selection	63
3.11 Instrumentation	64
3.12 Data Collection	64
3.13 Data Analysis	67
3.14 Limitations	69
3.15 Conclusion	69

Chapter IV: RESULTS	71
4.1. Overview	71
4.2. Results Based on Demographics	72
4.3. Results Based on Hypotheses	81
4.4. Results Based on Responses	89
4.5. Summary of Findings	96
4.6. Conclusion	97
Chapter V: DISCUSSION	98
5.1 Introduction	98
5.2 Discussion of Results	99
Chapter VI: SUMMARY, IMPLICATIONS AND RECOMMENDATIONS	104
6.1 Overview	104
6.2 Summary of the chapters	105
6.3 Summary of Findings	106
6.4 Suggestions and Recommendations	109
6.5 Implications of the study	110
6.7 Future scope of the study	111
6.8 Conclusion	112
REFERENCES	113
APPENDIX	146

LIST OF TABLES

Table 4.1 Gender of the Respondents	72
Table 4.2 Age of the Respondents	73
Table 4.3 Designation of the Respondents	75
Table 4.4 Work Schedule of the Respondents	76
Table 4.5 Years of Experience of the Respondents	77
Table 4.6 Location of the Respondents	79
Table 4.7 Marital Status of the Respondents	80
Table 4.8 Descriptive Statistics Table	81
Table 4.9 Correlations Table	81
Table 4.10 Model Summary Table	82
Table 4.11 ANOVA Table	83
Table 4.12 Coefficients Table	84
Table 4.13 Descriptive Statistics Table	85
Table 4.14 Correlations Table	85
Table 4.15 Descriptive Statistics Table	87
Table 4.16 Correlations Table	88
Table 4.17 Items of Workplace Workout Session	89
Table 4.18 Items of Employees' Physical Health	90
Table 4.19 Items of Mental Well-being Among Employees	92
Table 4.20 Items of Employee Productivity	93
Table 4.21 Items of Employee Engagement and Satisfaction	95

LIST OF FIGURES

Figure 1.1: Benefits of Workplace Workout Sessions	4
Figure 1.2: Types of Physical Activities in a Workplace Setting	6
Figure 1.3: Scope of Potential Types of Workout Sessions	9
Figure 1.4: Emerging Trends & Initiatives in Workplace Fitness in Delhi NCR	15
Figure 1.5: The Growing Emphasis on Physical Wellness in the Modern Work Environment	17
Figure 1.6: Significance of Incorporating Workout Sessions into the Workplace	20
Figure 1.7: The Value of Workplace Workout Programs	27
Figure 3.1: Conceptual Framework	61
Figure 3.2: Process of Ethical Selection of the Participants	63
Figure 3.3: Collection of Data	65
Figure 3.4: Process of Data Collection	66
Figure 4.1 Gender of the Respondents	73
Figure 4.2 Age of the Respondents	74
Figure 4.3 Designation of the Respondents	75
Figure 4.4 Work Schedule of the Respondents	77
Figure 4.5 Years of Experience of the Respondents	78
Figure 4.6 Location of the Respondents	79
Figure 4.7 Marital Status of the Respondents	80
Figure 4.8 Items of Workplace Workout Session	90
Figure 4.9 Items of Employees' Physical Health	91
Figure 4.10 Items of Mental Well-being Among Employees	93
Figure 4.11 Items of Employee Productivity	94
Figure 4.12 Items of Employee Engagement and Satisfaction	96

CHAPTER I

INTRODUCTION

1.1 Overview

The topic explores “Workout Sessions in the Workplace” in the Delhi’s National Capital Region (NCR) and how it is becoming popular to include physical exercise as part of the work process because of its benefits to both the employees and organizations. Businesses, HR professionals, and policymakers alike need to know, therefore, what fitness means toward the improvement in productivity, better well-being, and improved workplace culture, as the workplace has become a focus every day in life.

The discussion is initiated by drawing attention to the importance of incorporating workout sessions into working hours as a way of enhancing energy levels through engaging in routine physical exercises, which are known for boosting energy levels while reducing stress and sharpening mental health, among other benefits. Similarly, this is an essential aspect in stressful work settings where fostering well-being among workers will result in long-term production sustainability. (Stork et al., 2023). The subject emphasizes these sessions as promoting team building spirit that nurtures stronger interpersonal connections and enhanced cooperation among employees.

This is further illustrated by the analysis of how exercising at work can impact an employee’s will to stay with an employer or the satisfaction they get from their job. Fitness programs availed within a company demonstrate concern for workers and, in so doing, limit staff turnover rates and increase job contentment. This subject additionally considers possible problems in rolling out such schemes as well as ways of overcoming them, considering that employees have different needs and preferences. (Eather et al., 2020). It shows how organizations may be able to implement workout programs that are flexible and inclusive enough to accommodate diverse fitness levels and time schedules.

This topic also seeks to explain the role of management in boosting the workplace fitness culture. It looks at various ways of increasing employee involvement, such as rewarding them, allocating gym areas within the company, and including fitness in other wellness programs run by organizations. Additionally, this part highlights the potential payback for companies on improved employees’ well-being that could result in lowered healthcare expenses and productivity enhancement (Kinnaefick et al., 2018).

Overall, the “Workout Sessions in the Workplace” gives a detailed analysis of benefits and difficulties linked to physical activity promotion among employees. Moreover, it focuses on key issues and suggests some strategies for enhancing healthier workforces through understanding how workplace dynamics affect exercise habits.

1.2 Workplace Workout Sessions

Workplace workout sessions are increasingly recognized as an effective strategy to boost employee health, productivity, and morale. These sessions typically involve short, structured physical activities during work hours, ranging from simple stretching exercises to more vigorous routines like yoga or strength training (Pronk & Kottke, 2009). The integration of these sessions into the workday addresses the negative health impacts associated with prolonged sitting, such as cardiovascular disease and musculoskeletal problems. Research indicates that workplace workout sessions can lead to significant improvements in employee well-being.

Research published in the Journal of Occupational and Environmental Medicine shows that employees who took part in exercise programs at work reported decreased levels of stress and greater job satisfaction compared to non-participating employees. Also, these classes can improve cognitive abilities, which results in increased attention span and productivity during the day. Moreover, integrating physical activity into working hours nurtures a culture of healthiness hence reducing absenteeism. Companies facilitating workplace exercise sessions frequently experience positively impacted costs as a result of enhanced staff retention as well as reduced healthcare expenses. In order to maximize these benefits, employers should provide suitable training options for different fitness levels and create an environment where workers are encouraged to engage regularly (Martinez, 2021).

1.2.1 Purpose of Workplace Workout Sessions

Workplace exercise programs offer a wide range of benefits. These significantly affect the welfare of employees and the performance of organizations. Such initiatives are formulated to improve physical fitness, enhance work capacity, and heighten productivity. Pronk & Kottke (2009), as well as Todorović et al. (2020), among others, have researched this issue and provided us with information that regular participation in physical activities at the workplace may be a solution for better health state as well as higher efficiency at the job place. Strength training is mainly used for the management of musculoskeletal disorders, which are common in office workers because they sit for long hours (Jones et al., 2019). This form of exercise does

not only improve body structure but also affects emotional status positively. Research has shown that 10-15 minutes of simple exercises, especially those aimed at boosting muscle strength, are the most effective way to improve overall health status together with workability (Unsal et al., 2021).

Furthermore, the deteriorating workability is prevented more by doing sports on the job than in the house. It is important to mention here that healthcare workers are one of those who benefit from this kind of intervention as compared to their peers in other sectors (Jakobsen et al., 2015). Consequently, these interventions increase general physical activity, improve aerobic capacity, and contribute to weight loss when conducted during or after working hours. For instance, post-work sessions have additional advantages over others, such as being a source of strenuous exercise, which leads to weight loss and reduces fasting glucose levels (Burn et al., 2017).

1.2.2 Benefits of Workplace Workout Sessions

Some companies do not always accept the physical health of their workers, but maybe they should. Enhanced productivity is only one of the gains that exercise has over employees. Another one is minimizing presenteeism's effects. The British Heart Foundation expects businesses investing in their employees' physical and mental well-being to realize £4.17 for every £1 spent. Even more, the global economy could gain up to \$100bn per annum if employers 'effectively encouraged their staff members to meet World Health Organization guidelines on exercise' (Reif et al., 2020). In order to give you some idea of this, it would take just a 15-minute walk a day. The benefits of Workplace Workout Sessions are numerous:



Figure 1.1: Benefits of Workplace Workout Sessions

(i) Improves Focus and Productivity

This is because it enhances brain blood flow and makes concentrating easier. It also encourages creative thinking, which assists employees in finding new ways of solving difficult issues. According to a study published in the Journal of Occupational and Environmental Medicine, workers who exercised moderately had higher levels of work quality and performed better at their jobs than those who didn't exercise at all. The key word here is moderate. Nobody is suggesting military boot camps for a whole day. Certainly, coercing staff into exercises cannot work as well. Educating them will be very useful, though (Burton et al., 2005).

(ii) Helps Employees Manage Stress

Feel-good neurotransmitters, known as endorphins, are released by the body during exercise. Stress is a fact of life. There are instances when such work-related stress comes along with personal ones and this infiltrates into the employee's time while at work. This alleviates the business if it helps someone to handle stress. Their article is about one study that was published on the Anxiety and Depression Association of America (ADAA) website Aapativ which talked about how "Seven out of ten adults in the United States say they experience stress or anxiety daily. And most say it interferes at least moderately with their lives." Your employees could be experiencing either stress or anxiety daily, up to 70% of them (Laxmeshwar & Amarantha, 2016).

(iii) Help Treat Employee Burnout

Burnout is a persistent stress related to work. Many things cause it, but the overwhelming workload is the most prevalent. Symptoms include tiredness, decreased motivation, and lower productivity. Nevertheless, teaching managers how to delegate tasks effectively and identify early symptoms of burnout will help them cope with such difficulties. Similarly, exercise can be useful in preventing this condition on top of teaching managers how to assign duties appropriately for instance. In another research, it was found that “Cardiovascular exercise was found to increase well-being and decrease psychological distress, perceived stress, and emotional exhaustion.” “Resistance training was noticeably effective in increasing well-being and personal accomplishment and to reduce perceived stress.” The study said that employees can use exercises as a way of getting through burnout (Bretland & Thorsteinsson, 2015).

(iv) Encourage Better Working Relationships

Creating good group dynamics and fostering fresh partnerships is the essence of a group exercise. An organization’s social circles grow bigger and help in establishing support systems. Such bonding can be important during tough times in business. For instance, companies may hold early morning yoga sessions or even organize walks around their locality during lunch breaks. Alternatively, some teams find team challenges effective. One such example could be a step challenge. They are also great for promoting interaction among diverse staff members from different departments as well as encouraging collaboration within departments and across networks.

(v) Reduces the dangers of sedentary lifestyle

The link between illness and sitting first emerged in the 1950s when researchers found double-decker bus drivers were twice as likely to have heart attacks as their bus conductor colleagues. The drivers sat for 90 per cent of their shifts; the conductors climbed about 600 stairs each working day (Saltin,1992). “Increased sitting increases the risk of developing chronic health conditions such as cardiovascular disease, diabetes, muscle and bone weakness, and it weakens the body's immune response. This latter fact, in particular, could have a real impact on the number of absences within an organization during the year (Hunter et al., 2018).

(vi) Makes current staff feel valued and Attracts New Employees

In general, lower staff turnover is a characteristic of companies that are concerned about their employees' well-being. Additionally, such businesses are always more likely to attract new talents. Earnings alone cannot tempt younger generations when making employment choices, and among them include work environment and social responsibility, for they seek companies that match their credibility. Naz Beheshti writes this on Forbes: 89% of workers in firms with well-being program initiatives would recommend their company as a good place to work (Krekel et al., 2019).

1.2.3 Types of Physical Activities in a Workplace Setting

Physical activity interventions such as exercise, yoga, and walking can improve psychological well-being in office-based workplace settings (Abdin et al., 2018). Different workplace settings (office, call center, customer service) have different levels of sedentary time and physical activity during both work and non-work hours. Thus, office environments and building designs that encourage active behaviour, like stairs or flexible workspaces, are linked with increased physical activity among employees who work in offices (Michalchuk et al., 2022). The several types of physical activities in a workplace setting promote different aspects of health and well-being.

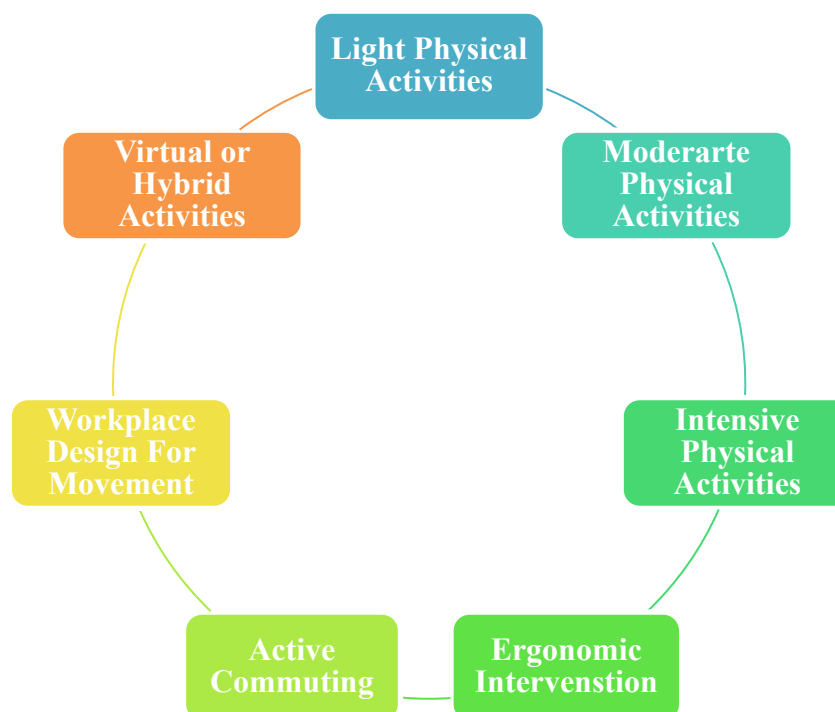


Figure 1.2: Types of Physical Activities in a Workplace Setting

(i) Light Physical Activities

Walking Meetings: Instead of sitting in a conference room, employees walk while discussing their workplace matters, and this may lead to movement, and creation can be enhanced (Oppezzo & Schwartz, 2014).

Standing Desks: Using standing desks encourages employees to sit and stand alternatively, which reduces the health risks that arise from prolonged periods of sitting (Bauman et al., 2016).

Stretching Exercises: Simple stretches done at the desk or in a break room can reduce muscle tension and make one more flexible.

(ii) Moderate Physical Activities

Office Yoga or Pilates: There are certain places, such as a wellness facility or conference room, where these activities take place. Neck pain, tension, and backache, stress reduction, improve postures and build core strength (Hartfiel et al., 2011).

Group Walks: Social interaction is established through group walks which are scheduled during lunch breaks or after work, hence promoting regular physical activity.

Stair Climbing: Staircase use instead of elevators is an easy way to increase activity during the day.

(iii) Intensive Physical Activities

On-site Gym Workouts: There is a possibility of carrying out several intensive activities like lifting heavy objects, cardiovascular training, and group fitness, among others, in case a company gym is available to workers (Conn, 2009).

High-Intensity Interval Training (HIIT): A short yet challenging workout that can be accomplished in a short period, whether in a gym or a versatile area (Boutcher, 2011).

Team Sports or Fitness Challenges: Sports leagues such as basketball and soccer or fitness challenges like step counts and cycling to work can promote team building as well as encourage continuous physical fitness.

(iv) Ergonomic Interventions

Ergonomic Assessments: Evaluating and rearranging job stations to enhance the sitting position and decrease chances of suffering from skeletal muscle injuries (Robertson et al., 2013).

Microbreaks: Periodic shorter leaves spent stretching, walking, or doing mild exercises can prevent weariness and sustain productivity.

(v) Active Commuting

Walking or Biking to Work: Encouraging employees to walk or bike to work, providing bicycle racks, and promoting the use of public transportation (Oja et al., 2003).

Carpooling with Walking: Implementing carpooling strategies that involve parking farther from the workplace and then walking a short distance.

(vi) Workplace Design for Movement

Open Space Layouts: Creating offices that promote movement, like having open floor plans and putting printers/copiers in central positions, as well as making communal zones strategically (Zimring et al., 2004).

Active Break Rooms: Putting fitness equipment or a room for movement in break rooms to encourage physical activity during breaks.

(vii) Virtual or Hybrid Activities

Virtual Fitness Classes: Providing remote or hybrid workers with online fitness classes so that they can keep themselves active outside of the office (Bravata et al., 2007).

Online Challenges: Activities that can be used to track and promote physical activity among workers, whether in the office or working remotely through applications or platforms. This can help employees remain active, alleviate stress, and enhance general welfare, which will lead to a healthier and more productive work environment.

1.2.4 Scope of Potential Types of Workout Sessions

Depending on the goals, level of fitness, and personal preference of a person, workout sessions may be very different from each other. It must be remembered that all workouts have their place in an overall fitness program; they should do many things at once to enable individuals to reach their physical objectives more effectively or quickly (Kompf et al., 2014). Here are some potential forms for training which are as follows:



Figure 1.3: Scope of Potential Types of Workout Sessions

(i) Strength Training

This category of exercise is directed towards enhancing the mass and force of muscles. Generally, this involves using weighted objects (barbells, dumbbells) or body mass (push-ups, pull-ups). These workouts are important for improving muscle stamina, bone density as well as total body power (Westcott, 2012).

(ii) Cardiovascular Workouts

The purpose of these exercises is to boost the health of your heart and build up endurance. These activities are such as jogging, biking, swimming, or doing high-intensity interval training (HIIT). Cardio workouts burn calories, enhance lung capacity, and decrease the chances of getting heart disease (Garber, 2011).

(iii) Flexibility and Mobility Training

This group contains exercises that increase suppleness, mobility of the joints, and stability. These can be yoga, pilates, or stretching among others. It is necessary to have these workouts to prevent injuries; they also help in relieving muscle tightness and enhancing general body fitness.

(iv) Endurance Training

The purpose of these exercises is to increase the duration that you can be physically active. Endurance workouts usually include long-distance running, cycling, and swimming which are activities that help people develop cardiovascular strength as well as muscular power.

(v) Functional Training

This is the kind of exercise that involves copying movements and activities carried out in daily life to enhance overall body function. It includes exercises like squats, lunges, and kettlebell swings. It is hard to come up with any other form of training that can be compared to functional training, as it has numerous benefits when it comes to enhancing coordination, balance, and agility (McGill, 2010).

(vi) Sports-Specific Training

These sessions are designed specifically for athletes and aim at improving skills and conditioning that are necessary in each sport. Such can include specific sports demands such as drills, agility exercises, and power development tailored for the sport (Hoff & Helgerud, 2004).

1.2.5 Frequency of Workout Sessions

The regularity of training sessions relies on various aspects, such as fitness objectives, current fitness level, and recovery demands. Eventually, one must consider individual targets and lifestyles to maintain a balance between progress and recuperation that will result in the optimum frequency of workout sessions (Arazi et al., 2011).

(i) Beginners

Beginners should opt for 3-4 workout sessions per week. This allows enough time for recovery while building a consistent routine. Sessions should include a mix of strength training, cardiovascular workouts, and flexibility exercises (Grzyb et al., 2022).

(ii) Intermediate Exercisers

The perfect number of sessions per week is 4-5 for someone who has been exercising. This will make the workouts more focused in that one can train on alternating days, depending on the program being used. Even then, they would still be able to accommodate high-intensity interval training or even yoga after a couple of restful days (Kraemer & Ratamess, 2004).

(iii) Advanced Athletes

Muscular hypertrophy, endurance, or sport-specific skill building are the primary objectives of several days a week of training for higher fitness levels. It is also common for them to follow a structured program such as this one that involves different kinds of exercises, which they should be cautious to recover from and avoid excessive strain (Baechle, 2008)

(iv) Rest and Recovery

Rest is crucial irrespective of fitness level. Muscle recovery and burnout prevention are advised in every week's schedule to allow at least one or two rest days. Such gentle activities like stretching or walking can also be helpful for active recovery (Zatsiorsky et al., 2020).

(v) Special Considerations

The number of sessions may be increased or decreased at any time, depending on the phase of training and specific goals e.g., marathon preparation or bodybuilding (Joyce & Lewindon, 2014).

1.2.6 Implementation Strategies for Workplace Workout Sessions

Workplace workout sessions need to be approached strategically for them to succeed and engage employees. That's why. First, it is important to assess the needs and preferences of employees by conducting surveys, which will show their levels of fitness, areas of personal interests, and when they would like to undertake the exercises. Having several exercise options like yoga, strength training, or cardio will encourage all people to get involved (Robroek et al., 2009). Of course, it is also necessary to gain management support by pointing out that corporate workouts have several benefits, such as stress reduction, increased productivity, and lower healthcare costs (Cancelliere et al., 2011). However, this can be handled by getting approval from employers who can allocate all necessary resources: instructors' budgeting, equipment purchasing, and adaptation of a suitable premise (Proper & van Mechelen, 2008).

Attendance varies depending on different times of the day. During the day, in contrast to working hours, before morning or after it instead, will not affect employees' daily work schedule, thereby allowing them to be involved in such training sessions (Merrill et al., 2013).

Additionally, such small yet effective segments lasting between thirty and forty-five minutes are easier for employees to incorporate into their busy routines. Establishing a workout space within the office, which may involve converting an extra conference room or underutilized office space, is also necessary. Such areas should have basic exercise devices like

mats, resistance bands, and weights that can be used for various types of exercise (Garne-Dalgaard et al., 2019).

The use of qualified trainers would help to make sure that the sessions are secure and effective. This can promote involvement when it comes to employee participation by promoting the sessions through emails, posters, or company newsletters. In addition, incentives like wellness challenges, fitness rewards, or participation points boost engagement. Finally, regular feedback from participants should be used as the basis for program monitoring and adjustments to continue its achievement (Goetzel et al., 2007). Thus, workplace programs must be flexible enough in order to change with the changing needs of employees so that continued participation is ensured for positive outcomes at work.

1.3 Historical Evolution of Workplace Workout Programs

The historical development of workplace fitness regimes can be attributed to three key pillars, namely, health education, employee assistance programs, and on-site wellness screening initiatives. As time has gone by, firms have acknowledged the significance of their staff's well-being to their organizational performance. The term "workplace well-being" now includes social and emotional wellness as well as physical fitness (Dalleck & Kravitz, 2002). In the past, these initiatives served two major objectives; they were either intended to develop 'fit for work' employees or address emerging societal problems). Although the motive and means of implementing workplace wellness programs may have differed over the years, these basic properties have remained unchanged (Stern, 2008). This change reflects an increasing recognition that employers have a responsibility to promote worker health by creating human resources policies aimed at fostering total wellness (Jung & Cha, 2013).

1.3.1 Historical Evolution of Workplace Workout Sessions: A Global Perspective

A shift in global practices towards employee wellness has been witnessed over the years during which workout sessions have been carried out at workplaces. Since the beginning of this century, physical activity integration into the place of work has been one of the most popular approaches to dealing with non-communicable diseases and cutting down on healthcare expenses. The changing nature of business fitness from a national to a highly personalized, global trend is seen in its evolution (Andreasson & Johansson, 2014).

The quest to have a competent workforce that takes care of societal problems has led to the metamorphosis of workplace well-being programs over time. In recent times, it has been established that engagement with workouts in office places, especially strength training has

helped to enhance health, work productivity, and motivation. These improvements are visible even during short sessions between 10-15 minutes, which feature uncomplicated exercises like light jogging on the spot.

This global phenomenon of corporate physical well-being reflects an increasing realization of its capacity to address lifestyle issues and control chronic illnesses. Businesses seek to achieve a fitter workforce, raise efficiency, and cut down on medical expenses by encouraging consistent exercising (Sachsenmaier, 2011).

1.3.2 Key Milestones in Workplace Physical Wellness Initiatives Worldwide

Physical wellness initiatives in the workplace have changed as employers now appreciate the importance of employee health. In the early 20th century, there was a clear line between private and occupational health (Conrad & Walsh, 1992). The 1980s and 1990s witnessed great changes with respect to structured wellness programs fueled by the high costs of healthcare and the realization that unhealthy lifestyles are major causes of diseases. As public health campaigns promoting physical activity multiplied, businesses also started implementing on-site fitness facilities and other workplace wellness programs (Gebhardt & Crump, 1990).

This trend has been global, whereby employers worldwide have resorted to using physical activity to enhance productivity while decreasing healthcare expenses. Still, this growth has not been substantial enough since only a few companies take a proactive approach towards workplace health, even though comprehensive strategies are needed that integrate individual risk behaviors with work-related hazards (Kirsten, 2010). These days, almost all large employers (92%) offer their employees wellness programs aimed at curbing the skyrocketing rate of obesity and related health issues in the workplace. Normally, these programs concentrate on smoking cessation, exercise, and weight loss (Mattke et al., 2012).

Although they are provided, uptake is poor, often going below 20%. Various employers employ incentives as a way of boosting participation; whereby financial incentives appear to be moderately efficient. Program configurations vary, with comprehensive and prevention-focused programs benefiting more from incentives than intervention-focused ones (Huang et al., 2016). While most employees report satisfaction with wellness programs, little is known about their impact on health outcomes and costs because there are evaluation problems. For a program to succeed, however, it must build a corporate culture of health while overcoming such barriers as employee unavailability for this service (Mazur & Mazur-Małek, 2017). There

is a need for future research to identify best practices and understand what works under which circumstances.

In recent years, there has been a significant shift in workplace wellness strategies that increasingly recognize the correlation between physical and mental health. It is upon this holistic view that the consequential influence of mental health on employee productivity, engagement, and overall performance of the organization is founded (Daraojimba et al., 2024). Corporations are adopting elaborate plans that involve telecommuting policies, fitness programs and campaigns to erase the stigma attached to mental illness. Though global workplace health promotion seems to be growing, few companies are taking an integrative approach. However, effective well-being initiatives still face some challenges, such as reducing stigma towards people with mental health conditions, as well as measuring program effectiveness. Nevertheless, an all-inclusive business model encompassing both personal and organizational factors is vital for sustainable progress in worker's medical fitness (Kirsten, 2010).

1.3.3 Emerging Trends and Initiatives in Workplace Fitness in Delhi NCR

Businesses and employees in the Delhi NCR region are increasingly aware that good health and wellness are important for their workplaces; hence, workplace fitness has been gathering pace (Soni et al., 2020). The following are a number of developing trends and initiatives in Workplace Fitness in Delhi NCR:

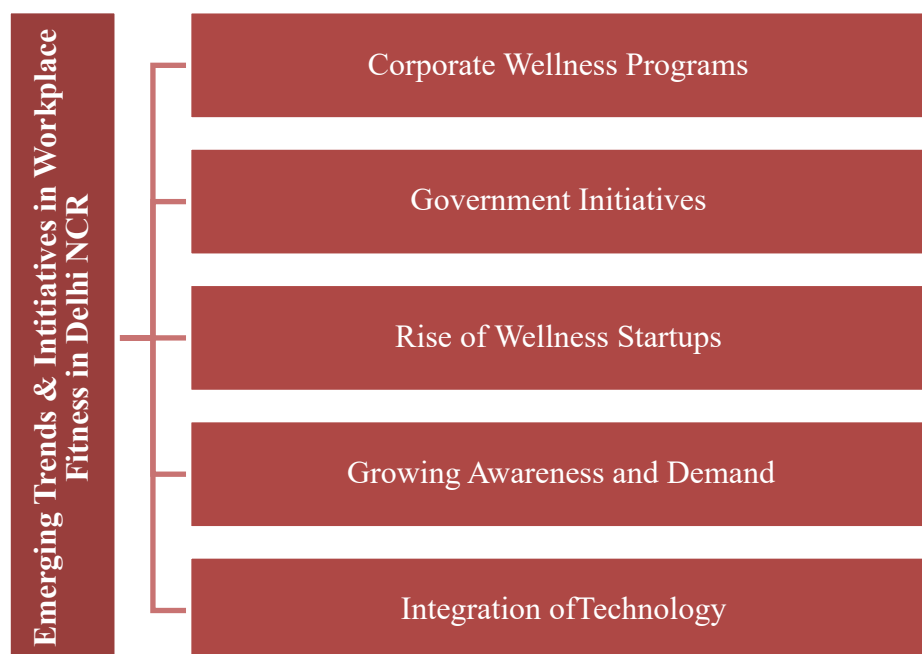


Figure 1.4: Emerging Trends & Initiatives in Workplace Fitness in Delhi NCR

(i) Corporate Wellness Programs

Numerous companies in Delhi NCR have integrated wellness programs into their workplace culture. These programs usually consist of on-site gymnasiums, yoga and meditation classes as well as health seminars. Local corporations in India have found inspiration from Google and Microsoft, which are globally recognized for their commitment to wellness, hence influencing local firms to adopt the concept of a sound lifestyle (Mazur & Mazur-Matek, 2017).

(ii) Government Initiatives

Emphasizing the significance of workplace wellness has also been initiated by the Indian government. Purpose such as National Health Mission incorporates workplace health programs that aim at enhancing the welfare and productivity of workers. In this respect, businesses are being driven to adjust their habits towards healthier ones by the government (Grover & Singh 2019).

(iii) Rise of Wellness Startups

Companies that concentrate on workplace wellness are abuzz in the startup ecosystem of Delhi NCR. They have come up with out-of-the-box ideas like virtual fitness classes, individualized health programs and online medical services for contemporary offices, among others (Mahapatra & Baral, 2022).

(iv) Growing Awareness and Demand

Growing awareness and demand for wellness. Workers are becoming more aware of their health needs. Stress at work is increasingly being recognized as a hazardous condition; sitting around too much is also considered a major health problem now, so staff members want to see some changes made in terms of physical fitness opportunities available for them (Saini, 2025). That means organizations need to provide better facilities for staying healthy – this is what employees are asking for. This has led to many companies investing heavily in corporate wellness programs or even building gyms on-site (Kets de Vries, 2020).

(v) Integration of Technology

This phenomenon is greatly aided by technology. Companies use apps and wearable tech to oversee and motivate their staff's physical exercise. Instruments that monitor health

data while providing online workout programs are gaining more ground every day (Fadare et al., 2024).

In a wider context, the attention given to corporate wellness in Delhi NCR mirrors worldwide efforts to foster employee well-being as a key driver of better productivity and job satisfaction.

1.3.4 The Growing Emphasis on Physical Wellness in the Modern Work Environment

In the last several decades, physical wellness in modern workplaces has been increasingly important. Since the 1980s, workplace wellness programs have grown from being a trend to becoming deeply ingrained within corporate culture, with employers reaping measurable benefits as well (Lakshyayog, 2023). These initiatives are designed to enhance employees' health and overall welfare thereby resulting in higher productivity levels alongside reduced healthcare expenditure (Chernoff, 2020). However, the COVID-19 pandemic has brought about more changes in the work environment, hence underlining the need for physical activity among workers so as to promote good mental health, which is also associated with strong immunity against diseases, including better management of chronic illnesses (Whitsel et al., 2023). Some key points include the following:

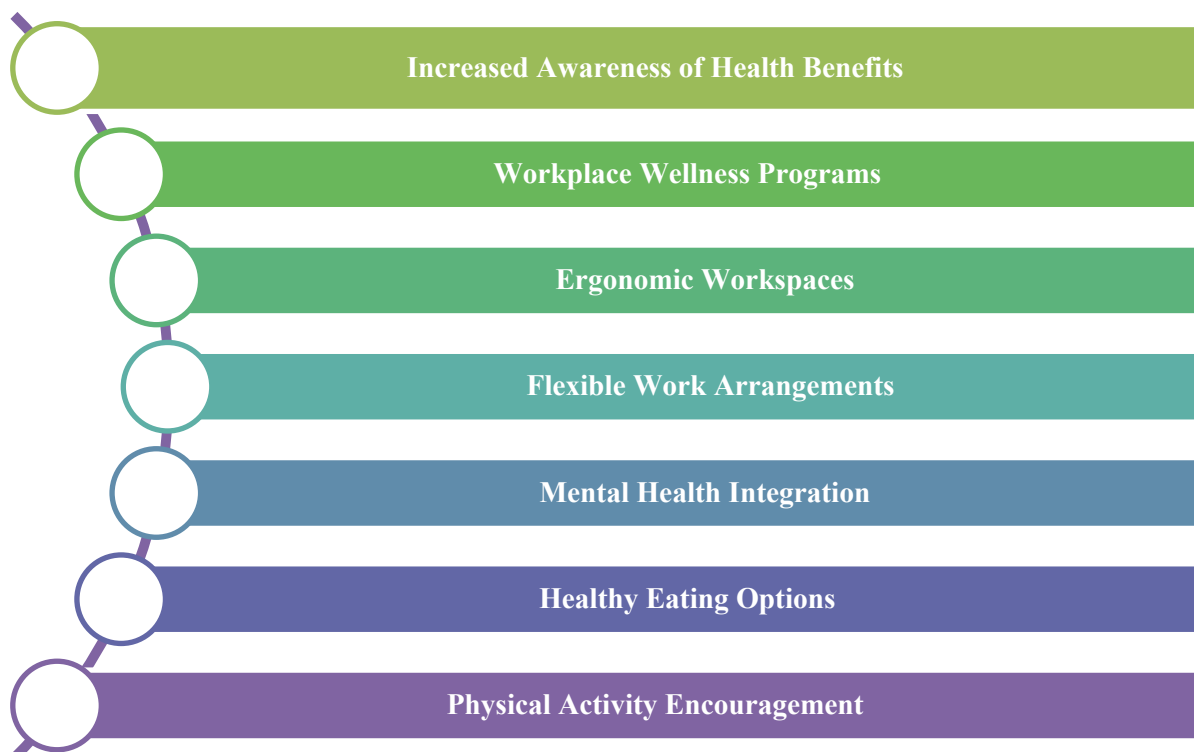


Figure 1.5: The Growing Emphasis on Physical Wellness in the Modern Work Environment

(i) Increased Awareness of Health Benefits

Corporations have started understanding that mental health and productivity, as well as job performance in general, are greatly affected by physical fitness. Poor health problems can cause absenteeism among workers and presenteeism where employees are physically present but not working to their full potential, and companies now realize how much this can cost them in terms of healthcare spending (Williamson, 2016).

(ii) Workplace Wellness Programs

Numerous corporations are now investing in wellness programs which contain gym membership, fitness classes, health screenings and wellness challenges; these programs aim at motivating their staff members to live healthier lives and better their physical fitness (Chernoff, 2020).

(iii) Ergonomic Workspaces

Designing workspaces is increasingly becoming more focused on reducing physical strain and improving comfort. This could involve using ergonomic chairs, adjustable desks, and ensuring proper workstation setups, among others, all aimed at preventing musculoskeletal disorders and promoting health in general (Shifrin & Michel, 2021).

(iv) Flexible Work Arrangements

Giving employees more control over when they work and the opportunity to work from home helps them take care of their well-being while keeping their jobs. In addition, this lets them find time for physical activities in their day, which can ease tension and enhance general health.

(v) Mental Health Integration

Mental health support is being incorporated into physical wellness more and more. Wellness initiatives often include activities such as stress management, mindfulness, and meditation that recognize the link between mental and physical health (Reiss-Brennan, 2014).

(vi) Healthy Eating Options

Some organizations provide alternate food choices on the job. This includes fruits, nuts, and snacks that have fewer calories. In addition, nutrition workshops or cooking classes may be offered to ensure healthy eating habits (Allan et al., 2016).

(vii) Physical Activity Encouragement

It is more and more usual to promote physical activity at work. This might mean having meetings while walking, using standing desks or installing fitness rooms in the office building.

(viii) Health and Wellness Technology

Wearable fitness trackers, health apps, and online wellness platforms are becoming increasingly popular. These instruments allow workers to monitor their health and participate in healthy activities (Kari et al., 2017).

Basically, the change towards physical well-being at work is motivated by the understanding that more engaged employees are healthier, more productive and happier in their jobs—which ultimately serves both individuals and organizations.

1.4 Workplace Wellness Initiatives

Organizations have implemented wellness programs in the workplace more frequently as they strive to improve the health and well-being of employees (Chernoff, 2020). Some examples of these initiatives are health screenings, fitness activities, and resources for managing diseases. A study that looked at many different studies found that taking part in a wellness program leads to lower rates of absenteeism among workers and more job satisfaction (Parks & Steelman, 2008). However, when researchers did a broader investigation into the matter, they found that people who take part in this type of intervention were already healthier with lower medical costs before it started (Jones et al., 2018).

The only thing achieved by two years after starting on this plan was an increase in rates of screening for illnesses; there were no significant changes made to healthcare spending or behaviour related to health, such as exercise or dieting, neither productivity levels nor self-reported overall mental well-being changed significantly either. Mental wellness support programs like EAPs (employee assistance programs) and stress management workshops have been shown through various studies conducted over many years across different countries around the world to improve employee morale while also reducing staff turnover due to sickness absence rates recorded annually. These programs are doomed without strong backing from leaders within our businesses, which should be fostered by creating corporate cultures where such interventions become part and parcel of everyday life (Bajaj, 2023).

As strategic tools that promote employee health and organizational success, workplace wellness programs have gained recognition. According to some research, well-designed programs can deliver a return on investment (ROI) of up to six to one (Berry, Mirabito & Baun, 2010) These undertakings often lead to lower healthcare costs for workers and employers alike,

increased productivity, and better morale among staff (Nelson, 2018). However, there are many factors which determine whether or not such an initiative will be successful. These include leadership involvement at all levels of the company, making sure everything is aligned strategically with what the organization wants to achieve most broadly so that it benefits everybody involved; ensuring that everyone has access no matter where they live or work etc.; good communication being another essential element towards their effectiveness being realized while also considering different needs among employees during implementation as well fostering healthy living within corporations too for that matter (Mazur & Mazur-Małek, 2017).

Nevertheless, despite limited participation levels by some staff members and continuous improvement, challenges still face these wellness programs, as indicated by Wydział & Zarządzania (2018). In general, when done right, which means if implemented correctly, it can indeed significantly contribute to the welfare of employees and organizational achievements as well.

1.4.1 Significance of Incorporating Workout Sessions into the Workplace

Making exercise sessions part of the job may seem like a big task, but it comes with numerous paybacks. These include better health leading to increased output as well as team building and good public image for the company. A more contented workforce is created when employers invest in physical and mental wellness, thereby fostering higher levels of productivity within such organizations. Seven important facts about integrating this habit into your routine are:

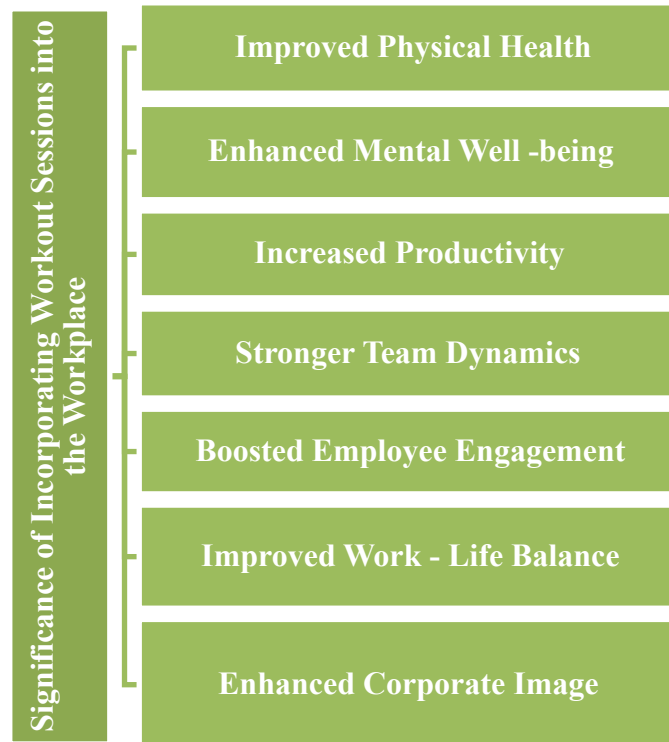


Figure 1.6: Significance of Incorporating Workout Sessions into the Workplace

(i) Improved Physical Health

Regular exercise decreases the risk of heart disease, diabetes, and obesity. Therefore, by implementing workout sessions at work, employers would help their employees remain physically healthy and reduce sick days off work, thereby reducing health costs (Benjak, 2012).

(ii) Enhanced Mental Well-being

Exercise can reduce stress, anxiety, and depression by releasing one's natural mood lifters within the body. This exercise will give workers time away from their work to refocus and then come back to the task refreshed and with renewed positive energy if fitted in the work routine.

(iii) Increased Productivity

Exercise and physical activity increase energy levels, concentration, and brain function. Workers who have regular exercise sessions tend to stay alert, focused, and productive at work, hence better performance (Sumińska, 2021).

(iv) Stronger Team Dynamics

The group exercise sessions can create bonding among employees. When used together, working out will make the employees break barriers, collaborate, and come much closer to each other; this directly comes out in inter-team performance (Krans et al., 2019).

(v) Boosted Employee Engagement

Offering exercise sessions shows that the organization truly cares about the welfare of its employees; this may boost the level of participation and job satisfaction. If the employees feel cared for, they will be committed to their work and loyal to the company (Johnson, 2017).

(vi) Improved Work-Life Balance

Providing exercise sessions at work saves time for employees and makes exercising much more convenient (Bartlett et al., 2021). This convenience offers the employee a much better work-life balance that will reduce stress and make life more satisfying.

(vii) Enhanced Corporate Image

Companies, therefore, that take good care of their employees' health with regular workout sessions are known to source the best talents and have a character of being great places to work. A strong employee health commitment may also improve the company's brand image, thereby winning the hearts of major clients, customers, and prospective employees (Feldiansyah, 2024).

1.4.2 Benefits for Employees

Programs at the workplace that allow for workout sessions yield many benefits for workers. They work toward better physical health, enhanced well-being of the mind, and thus higher productivity and a more job-satisfied workforce that translates into a more encouraging and supportive work environment (Agarwal, 2021)

(i) Improved Physical Health

Regular physical activity is an important factor in maintaining and improving physical health. Exercise sessions at work are meant to assist employees in exercising, which offers protective health benefits against chronic diseases such as stroke and heart diseases, hypertension, and diabetes. Regular exercise provides the following benefits: strengthening of the cardiovascular system, improving musculoskeletal health, and management of body weight (Brown & Brown, 2015). By providing the means for greater accessibility to fitness, organizations help employees fit regular exercise into schedules that otherwise might be difficult to do so because of time demands placed on the individual (Gebhardt & Crump, 1990).

This proactive stance reduces not only absenteeism due to health-related problems but also reduces the cost of health care both for the employee and the employer (Gehlich et al., 2020). Further, attention to physical well-being can result in more energy, greater stamina, and the capability to withstand or bear the physical stress of the job, and this is an addition to the overall quality of life (Pronk, & Kottke, 2009).

(ii) Enhanced Mental Well-being

The impact of physical activity on mental health can be gauged from a very commonplace phenomenon of even a simple action like exercising that elicits the release of endorphins in the human body, which are natural mood elevators. Physical activities that are regular are known to reduce reactive symptoms of stress, anxiety, and depression and, therefore, prove to be an excellent way of also relieving pressure at work (Gauci, 2013). Working out within the workday sees to it that individual employees are channeled to a structured way of managing stress and enhancing their mental resilience (Cloninger, 2006). This can result in mental refreshments, clear thoughts, concentration, and problem-solving capacity, creating a better and more efficient work environment (Lattie et al., 2019). Furthermore, exercise done in a group and in a friendly environment gives one a sense of identification with a particular group, therefore making the state of mind even better. As regular physical activity is associated with the elevation of mood, less stress, and a more productive work-life balance (Chu et al., 2014).

1.4.3 Benefits for Employers

Embedding workout sessions at work not only makes employees happy but is immensely beneficial for employers as well. Some of these benefits include productivity, reduced health care costs, and better engagement of workers—all aimed at a smoother and more efficient workplace.

(i) Increased Productivity

Workout sessions at work would bring enormous improvements in the productivity level. Conversely, exercising regularly would keep persons full of energy, focused on their jobs, and mentally sharp and alert to take up the tasks assigned to them efficiently (Burton, 2005)

Exercise improves concentration. Concentration is connected with creativity and problem-solving. Basically, exercise allows more blood flow to the brain and reduces mental fatigue, hence enabling one to focus and concentrate. Basically, physical activity bears a

positive effect on reducing burnout and increasing the odds of employees remaining engaged and motivated (von Thiele Schwarz & Hasson, 2011). All of this finally leads to the high-quality work, fewer errors, and good overall performance. What's more, planned exercise breaks are valuable breaks within work that employees need to rejuvenate themselves for the very reason of being able to come back refreshed and ready to put in harder work, hence increasing productivity.

(ii) Reduced Healthcare Costs

This may result in reduced healthcare costs for the employer. Regular exercise reduces the prevalence of chronic conditions and diseases and hence reduces the frequency and severity of medical. Creating a culture that encourages wellness among employees at the workplace motivates them to exercise regularly (Baicker et al., 2010) This would minimize the occurrence of health problems like obesity, diabetes, and cardiovascular diseases, hence minimizing the medical costs incurred by the organization. This thereby reduces the total health expenditure towards medical treatment and intervention. Further, a healthier workforce tends to have reduced cases of sick leave, consequently reducing the cost of absenteeism and temporary replacement costs incurred by the company (Martínez-López & Grajales, 2010). The investment in workplace wellness programs therefore will provide long-term cost savings and a healthier, more cost-effective workforce (Bowne et al., 1984).

1.4.4 The Value of Workplace Workout Programs

Workplace workout programs, otherwise called corporate wellness programs, are activities that employers extend to their employees with the view of encouraging physical activity and overall well-being. A few initiatives can be very simple, such as offering gym memberships or establishing walking clubs, while others may be much more involved, like on-site fitness classes, health screenings, and wellness challenges (Mujtaba & Cavico, 2013). The breakdown of how workout programs in the workplace can benefit you is given below:

(i) Health Benefits

Reduced Health Risks: This will likely bring down the risk of acquiring chronic diseases, more so CVDs, diabetes, and obesity, with regular physical activity. Since they provide an incentive for workout activities, workplace workout programs help workers lead healthier lifestyles, hence reducing the chances of suffering from such diseases.

Improved Mental Health: Exercises also make mental health strong by reducing depression, anxiety, and stress. This way, workplace workout programs add to better mental health and, therefore, happier employees, which could prove even more productive (Emerson et al., 2017).

Increased Energy Levels: Regular exercise generally boosts one with energy and normally leaves one with less fatigue, hence making workers or employees feel more awake and able to focus on what they are doing throughout the day.

(ii) Productivity Gains

Enhanced Focus and Concentration: Physical activity is among the promoters of improved cognitive functioning that result in increased concentration and enhancing problem-solving skills. Workers involved in regular workout programs develop a sense of focus that may be reflected in their productivity (Ten Brummelhuis et al., 2021).

Reduced Absenteeism: Healthier employees are less frequently absent from work. Businesses offer a culture of well-being, reducing the absenteeism rate, and can be certain that their working staff will indeed show up to work and be productive.

Boosted Morale and Engagement: Offering exercise programs in general shows that a company truly cares about its employees' welfare. This can mean higher morale, increased satisfaction, and greater employee engagement.

(iii) Cost Savings

Lower Healthcare Costs: Healthier employees do not pay so much for health care. Workout programs at work can make a big difference in costs incurred by the employer and employee, in most cases, by reducing incidences of chronic diseases and encouraging preventive care.

Reduced Workers' Compensation Claims: Regular exercise can help avoid many injuries, such as musculoskeletal injuries related to a sedentary work environment. As such, fewer workers' compensation claims are received, further reducing costs (Martinez, 2021).

(iv) Improved Workplace Culture

Fostering Teamwork: Such programs usually hold exercises in groups through a fitness class, walking challenge, or sports league. In that sense, it promotes camaraderie at work, generally

enhancing the capability of employees to work with others or interact with other individuals within the work environment (Brinkley et al, 2017).

Promoting a Healthy Work-Life Balance: Announcing exercise time aloud during the workday communicates that work-life balance is important to the company. This can go further to build a much healthier, more balanced approach toward work.

Attracting and Retaining Talent: Companies with wellness programs are seen as some of the better places to work and, in so doing, would help attract better talent in an extremely competitive job market. Offering the program can help improve retention (Clark, 2008)

(v) Challenges and Considerations

Participation Rates: One of the major challenges workout programs at the workplace face is one of high participation. Programs must be accessible and inclusive for a diverse workforce, relevant, which might include a menu of activities that meet diverse interests and different levels of physical fitness (Bensa & Širok, 2023)

Privacy Concerns: The employees might be concerned about their privacy, more so if it involves health or fitness monitoring. Participation has to be purely voluntary, and any health information collected is kept confidential.

Cost and ROI: A workplace workout program requires an up-front investment; corporations look to the return on investment. However, the benefits that pay off in accruable health savings, productivity increments, and employee satisfaction are for the long run (Wein, 2015).

(vi) Best Practices for Implementation

Assess Employee Needs: Research in advance of the program, either through surveys or focus groups, to understand what kinds of activities and rewards will resonate with employees the most before the actual launch of the program.

Offer Flexibility: Offer options to accommodate a variety of schedules, fitness levels, and interests. These might include on-site gyms, virtual fitness classes, and partnerships with local fitness centers (Woodbrey & Santa Barbara, 2023)

Incorporate Incentives: Incentivize participation by offering rewards or recognition to participants, or even lower health insurance premiums for the frequent participants.

Promote Inclusivity: Ensure that it remains an all-inclusive program and hence can be used by all categories of workers, like the disabled or those who cannot do any traditional exercise comfortably.

Overall, the workplace workout program offers great value to employers and employees alike, through the benefits it has on health, productivity, cost, and work culture. Although full of implementation challenges, such potential benefits make the programs worth an investment by companies that value a healthier and more engaged workforce.



Figure 1.7: The Value of Workplace Workout Programs

1.5 Research Problem

Most organizations nowadays are striving towards increasing the well-being and productivity of their workers, not forgetting the health risks associated with a sedentary office job. Sedentary working is said to result in obesity, cardiovascular diseases, and musculoskeletal disorders, which then affect organizational performance directly. Workplace health promotion generally refers to business efforts to promote a healthier work environment. Programs for exercise and other health initiatives in the workplace may have a positive impact on the physical and mental health of employees and, consequently, increase the productivity of those workers. However, office workers tend to be less likely to meet recommended levels of physical activity due to sedentary jobs and a lack of supporting environments. It also means that through focused workplace health behavioral intervention, health risks may be reduced,

and overall well-being can be improved. A program focused on enhancing better health at workplaces holds significance in shaping a much healthier, more productive workforce, even while admitting the fact that the process of putting these programs into action could be challenging.

1.6 Purpose of Research

This research primarily aims to comprehensively study the multifaceted impact of workout sessions in the workplace on the employees. The first goal is to study the effects of these workouts on the physical condition of an employee, including fitness, energy, and general physical well-being. Secondly, the analysis will focus on how such workouts affect the mental health of an employee, including stress reduction, enhancement of mood, and emotional fortitude. Thirdly, the study looks at how these workout sessions potentially affect productivity, including improvements in work quality, concentration, and efficiency of a performing staff member. It also looks at the degree to which employees engage with and enjoy these wellness initiatives, seeking to understand their attitudes, levels of motivation, and participation rates. Finally, the research will evaluate the status quo of these workplace workout schemes and their efficacy, leading to evidence-based recommendations to improve the sessions for better employee well-being and organizational productivity.

1.7 Significance of the Study

The idea of a workplace workout session is increasingly becoming very popular since it has a great, positive impact on employee well-being, productivity, and health status. Working habits that are glued to the chair cause a humongous wreckage to one's health. Sitting contributes to obesity, circulatory maladies, and disorders in the musculoskeletal system. Regular workout sessions are important for better physical health and mental wellbeing by reducing stress and improving mood. They support an active and efficient workforce, thus encouraging employees while at work, and they are indicated to lower costs regarding health care by nurturing a corporate culture of health and showing care about the healthiness of the employees. By offering accessible options for workout activities, organizations help employees to overcome barriers most office workers encounter with regard to physical activities. Integrating workout sessions in a work setup or environment would support a healthier lifestyle, radiate toward increased productivity, and also create a conducive work environment, being an investment in the benefit for both the employee and employer.

1.8 Research Questions

- (i)** What are the measurable effects of Workplace Workout Sessions on the physical health of employees?
- (ii)** How does the implementation of Workplace Workout Sessions influence the mental well-being of employees?
- (iii)** What is the impact of Workplace Workout Sessions on employee productivity, and how are these effects observed in the workplace?
- (iv)** In what ways do Workplace Workout Initiatives contribute to employee engagement, and how satisfied are employees with these initiatives?
- (v)** What are the current practices of workplace workout sessions, and what measures can be suggested to enhance employee well-being and productivity based on the existing sessions?

CHAPTER II: REVIEW OF LITERATURE

2.1 Introduction

Long-held beliefs suggest that some types of physical activity (PA), including exercise, provide health benefits regardless of the environment in which they are done. However, taxonomy has evolved in lockstep with the standardization of its definitions. Any physical activity that engages the body's muscles is referred to as “Physical Activity” PA, including exercise, which is a type of physiological activity that supports and preserves general health and well-being. (Dangelmaier et al., 2015) Consequently, leisure and daily hobbies are included in the concept of PA in addition to physical exercise.

If the appropriate muscles are used, the intensity is raised to a suitable level, and sufficient recovery time is given, these activities may have health benefits comparable to those of physical exercise. Therefore, it is crucial to understand that not all PAs are associated with the best possible health. Absenteeism due to illness might be a helpful sign of poor health in the workplace. (Karatrantou et al., 2023). Employees who participate in focused physical exercise at work to improve both broad and specific indicators of health and well-being are said to be participating in “Workplace Workout,” also known as “Workplace Exercise (WE).”

According to recent research by the World Health Organization (WHO), lost productivity from depression and anxiety disorders costs the world economy \$1 trillion yearly (WHO, 2019). Numerous studies have shown an increase in the occurrence of psychological health conditions including anxiety and depression as well as sad results like suicide (Sliter & Yuan, 2015).

Psychological illnesses are described as “health conditions that involve changes in emotion, thinking, or behavior (or a combination of these)” by the “American Psychiatric Association.” Suffering and problems that hinder functioning in social, professional, or family settings are hallmarks of mental illnesses. (Follmer & Jones, 2018) claim that although health-related areas have given greater attention to the issue, the field of management is lagging in acknowledging those who suffer from mental illnesses.

In 2019, the Economic Times released an article stating that one in five Indian employees of firms suffers from workplace depression. Medical practitioners feel that a lack of support systems in both personal and professional circles is the primary culprit, as reported by the Economic Times (2019).

The qualitative analysis of the participants' experiences throughout this YPV intervention made it clear that senior management needed to take the initiative. For such projects to be effectively implemented, the corporation is required to provide its full support in the form of time and space. (Pressler et al., 2010). Generally speaking, the participants thought that if they could include YPV in their daily routines to stay healthy, it would be beneficial for both them and their employers. For example, before starting their job, employees in Japan warm up with a series of repetitive activities that last ten to fifteen minutes. (Williams, 2008).

While working out while at work was unheard of, it could soon become the norm. Everyone is aware of the many health advantages of physical activity, which include elevating mood and helping people lose weight or maintain a healthy weight. It may surprise some to learn that there are several benefits to doing quick exercises at work or taking a break during the day to do so. (Rezai et al., 2020). It's likely that working out briefly or engaging in little activity while at work may improve your output, performance, and the mood of your workplace as a whole (Merrill et al., 2011).

Several workplaces have already taken use of this knowledge and are allowing their employees to work out at the gym during their lunch hour. If so, one ought to make full use of it! It will help you maintain a healthy weight and enhance your overall health, but it may also provide you an advantage over other candidates at work. Bring lots of water and wholesome foods so that folks may keep hydrated throughout the day if they can exercise during the day. (James & Zoller, 2018).

2.2 Recent Reviews of Literature

2.2.1 The Benefits of Workplace Exercise Programs

There is a limited body of research exploring the advantages of office fitness programs. Numerous authors have made significant contributions to the existing body of literature. Exercise can serve as a comprehensive and economically viable solution for burnout. To evaluate the relative efficacy of aerobic and resistance exercise concerning well-being, perceived stress, and burnout, the authors set out to expand on the research. Participants had decreased psychological discomfort, perceived stress, and emotional tiredness following four weeks of exercise, along with increased positive well-being and personal success. It has been discovered that engaging in cardiovascular exercise can improve well-being while lowering emotional tiredness, perceived tension, and psychological discomfort. Resistance training was notably successful in lowering perceived stress and elevating feelings of accomplishment and

well-being. Fitness may be a useful burnout treatment, according to research, which showed significant impact sizes. Still, further study is necessary because of the limited sample size (Tapia, et al. 2022). An efficient burnout intervention strategy may involve exercise. Employees may benefit differently from various forms of exercise. Promoting regular fitness programs among employees is one proactive way that organizations may help their staff avoid burnout. (Shephard, 1996).

The underlying justification for the implementation of workplace fitness programs offered a concise evaluation of their advantages. Numerous endeavors aimed at evaluating these programs have shown to be insufficient, mostly due to a deficiency in methodological rigor and a failure to incorporate a comprehensive understanding of these programs within their broader organizational framework (Griffiths, 1996). The majority of the available data lends credence to the idea that employee fitness programs may have a positive impact on people's lives, particularly in terms of their physical health rather than mental health. Though somewhat equivocal, the evidence for advantages to organizations is nonetheless encouraging (Olpin, 1996).

The researchers investigated the impact of “a resistance training intervention” implemented in “the workplace on several health, fitness, and work-related” variables in a group of untrained male individuals, namely bus drivers. The training group participated in a 24-week resistance exercise program, while the control group carried on with their everyday activities as usual (Jakobsen et al., 2017). Assessments of each group's body composition, blood pressure (BP), frequency of pain, muscular endurance, and flexibility were conducted both before and during the 24 weeks. Additionally, throughout this time and during a 12-week follow-up phase, work absenteeism was documented. (Prieske et al., 2019).

Generally speaking, neither group's body composition changed. Throughout the interventional and follow-up periods, there was a decrease in the worker absenteeism rate in “the training group as compared to the control group.” Overall, it was shown that a workplace intervention involving periodized resistance training improved several aspects of health and fitness in men who were not trained, potentially providing extra benefits related to their line of work (Zavanela et al., 2012). Thus, the establishment, encouragement, and support of a resistance training program for work-related physical activity may prove advantageous to both employers and employees. (Moreira-Silva et al., 2016).

According to the assertion made by Thøgersen-Ntoumani and Fox (2005), an increasing body of literature suggested that engaging in exercise has positive effects on both physical and mental well-being. Researchers classified workers according to their fitness and mental health regimens using “quantitative and qualitative methods.” The method for determining at-risk groups might be useful in the creation and implementation of wellness initiatives for more reasonably priced workplaces (Williams-Karnesky et al., 2020). Online surveys were used to collect data on physical, occupational, and general health markers as well as exercise. In addition, ten people were interviewed using a semi-structured interviewing method; five of the participants were female, and the remaining five represented instances from each of the cluster groups (Santos et al. 2016) this was done to provide a more comprehensive source of information on the core concepts of the clusters and to evaluate the extent to which the cluster description matched the experiences of the individual respondents.

There has been a global challenge in addressing physical inactivity, as a significant number of adults and adolescents fail to meet the daily recommended exercise guidelines. Workplace physical activity programs, which are particularly advantageous for sedentary workers, are one way to reduce adult physical inactivity (Dabkowski et al., 2023). The results of (Amaya et al. 2019) provided many recommendations for companies seeking to improve employee well-being. programs for generalized workplace physical exercise received positive feedback from both companies and employees. Integrating these practices into regular work procedures may have positive effects, such as increased productivity at work and decreased physical inactivity.

Furthermore, the potential consequences of implementing a consistent, daily, and supervised exercise regimen for those who lead sedentary lifestyles in office settings. The primary goal of the study was to determine how a 6-month workplace training program affected the health indices, musculoskeletal complaints, functional ability, and physical fitness of office workers (Karatrantou et al., 2020). Individuals were assessed on a range of health indicators both before and after the program, such as “body composition, blood pressure, respiratory function, musculoskeletal symptoms, functional ability (flexibility, balance), and physical fitness (maximal strength, cardiorespiratory fitness).” A post-program satisfaction survey was conducted with the participants. As was already established, none of those were changed in CG. Moreover, the majority of workers (94.4%) expressed satisfaction with their occupations. The “Heal Workers” program was a fun kind of exercise that employers could use to improve

their staff members' health, fitness, and productivity without taking any risks (Penwell-Waines et al., 2020).

How well a program called “Physical activity (PA)” enhanced the quality of life, “work-related stress,” and weight control of overweight and inactive individuals working in high-tech companies. Evaluations were conducted on the results of “structured questionnaires, blood biochemistry tests, and physical fitness assessments” (Fang et al., 2019). In addition to significantly improving “measures of physical fitness such as flexibility, muscular strength and endurance, and cardiorespiratory endurance,” participation in the Physical Activity program effectively reduced “the prevalence of metabolic syndrome risk factors and total body fat.” The levels of “serum triglycerides, low-density lipoprotein cholesterol, and total cholesterol” were all considerably reduced by the intervention. Notable advancements were also observed in quality of life, relationships at work, work control, and overall job satisfaction. The study of Knapen et al. (2015) demonstrated how an exercise regimen might improve the physiological, psychological, and “physical outcomes of overweight and sedentary employees in high-tech industries”.

It assisted in reducing presenteeism, absenteeism, and direct and indirect healthcare expenses. It also improved workplace quality and morale while reducing sickness and injury. Rather than concentrating on specific health promotion activities, this resource presents essential concepts and practical guidance for planning proactive workplace wellness initiatives. It also emphasized ideas of organizational growth and transformation, which are crucial for creating and implementing such initiatives (Michaels & Greene, 2013).

There was a significant increase in healthcare expenditures for enterprises. The problems associated with people's lack of physical activity have made this situation worse (Drannan 2016). Obesity is the fourth greatest cause of death globally. If management is looking for ways to save costs, they could investigate how exercise might improve worker performance, mood, and subjective health. Physical exercise was defined for the study as deliberate, synchronized, and repeated acts to enhance physical health and fitness. Work performance was described as an employee's contributions to the achievement of company objectives. One's perception of their health was described as subjective health (Coulson et al. 2008). The study of Peñalver et al. (2019) the relationship between exercise and productivity at work as well as the mediating functions that happiness and subjective health play. The results of the data analysis showed that people who consistently worked out did better at work. The

results also demonstrated that the participants' enhanced job performance was influenced by their better subjective health and disposition.

According to the study conducted by Pereira et al. (2015), an analysis was undertaken to investigate the impact of workplace interventions promoting “health-enhancing physical activity (HEPA)” on worker productivity. “In controlled research or randomized controlled trials (RCTs) of onsite workplace HEPA programs,” working people's productivity was investigated. Study bias and inter-rater reliability in the quality rating were evaluated. synthesizing qualitative evidence. Initiatives for workplace HEPA tend to have an impact on output (Pereira et al., 2015). According to surveys, “high-quality studies with the onsite combination (aerobic, strengthening, and flexibility) HEPA regimens and moderately-quality Tai Chi programs boosted worker productivity for female laundry workers and senior female nurses, respectively.”

The study showed benefits focused on productivity measures as primary goals, targeted occupations with heavier physical demands, and higher program intensity and compliance (Proper et al., 2002). The inconsistent results and paucity of research hindered further examination. Sometimes, employees' self-reported productivity increases as a result of workplace HEPA initiatives. High-quality onsite workplace HEPA program RCTs should focus on at-risk groups, intense treatments, and productivity results. Higher worker productivity required better recordkeeping and high attendance rates.

Businesses have raised their investment in “workplace wellness” programs to improve “employee health and save healthcare expenses,” according to Baicker et al. (2019) research. However, “there was insufficient evidence to support the efficacy” of these programs in the experimental data. The goal of this clustered randomized trial, which was conducted at 160 work locations between January 2015 and June 2016, was to evaluate a multifaceted workplace wellness program like those offered by US firms. Survey and biometric data were gathered from July 1 to August 31, 2016, whereas employment and administrative claims data were continuously collected until June 30, 2016. Notwithstanding restrictions brought about by a lack of data on some outcomes, these results may serve to lower expectations for the short-term financial return on investment that wellness programs may give (Gubler et al., 2018)

Moreover, according to the analysis conducted by Demou et al. (2018), it was shown that shift work has been correlated with unfavorable lifestyle behaviors and poses a potential risk for several chronic illnesses. There is a great deal of opportunity for promoting and

assisting behavior change in the workplace (Lin et al., 2020). Group-based lifestyle workplace interventions for shift workers were systematically evaluated by the researcher to (i) “identify modifications and intervention components that suit shift work and (ii) evaluate their influence on weight, physical activity, sedentary behavior, and healthy eating. Thorough searches were conducted in databases from Scopus, Web of Knowledge, EBSCO, and Ovid.” Teams of researchers used predefined standards to independently pick studies, assess their quality, and extract data. Although further research is required to address unhealthy eating and sedentary behaviors, preliminary findings indicate that workplace treatments focused on group dynamics may be helpful to staff members who want to lose weight and get more exercise. The results prompted essential intervention components and organizational-level improvements to improve shift employees' access to treatments promoting healthy lifestyles (Kossek et al., 2017).

2.2.2 Workplace Exercise Initiatives and Employee Engagement

The design of wellness programs and the provision of financial incentives had an impact on employee engagement rates. A nationally representative survey of 407 organizations' workplace wellness initiatives was evaluated by the researcher using cluster analysis and multivariable regression analysis. Higher participation rates are shown by employers who provide extensive program options and incentives (Huang et al., 2016). Program configuration affects the efficacy of incentives; prevention-focused and comprehensive programs yield the greatest benefits. Reward systems that lean interventionistically do not correlate with higher levels of involvement. Workplace health was the primary emphasis of many wellness program setups. Financial incentives have the potential to boost employee participation, but the impact and magnitude of this effect varies based on the design of the program.

Workplace wellness programs have been included in corporate healthcare plans to report prevailing health dangers including overweightness and idleness. Contribution has been monetarily rewarded to boost engagement, based on the assumption that employees are largely driven by external incentives such as financial gain (Sangachin et al., 2015). A cohort of 436 white-collar professionals was surveyed to gather further information; 177 of them took part in “the worksite fitness program,” whereas 259 did not. Everyone had access to a variety of fitness facilities, but there wasn't much motivation to work out. After adjusting for previously identified factors influencing involvement, it was discovered that external regulation was a major component in the multivariate logistic regression that was examined. The findings supported the necessity of a thorough participative strategy for health promotion as well as the

significance of “external, non-financial motivators” such as workplace health cultures (Mathauer et al., 2006).

Wellness programs are said to improve teachers' social connections, stress levels, and understanding of healthier alternatives in addition to their overall quality of life. Finding out how instructors viewed and utilized a fitness and mindfulness program was the aim of the study (Gipson et al., 2023). The three separate focus groups served as a stress-reduction intervention for primary school teachers and were held following each of the three nine-week exercise and mindfulness programs. Interview instructions that were semi-structured were used. The focus group members were all female, with ages ranging from 22 to 64 and varying degrees of classroom experience from one to 21 years. The results showed that self-care teachers felt more at ease among coworkers who had a better work-life balance, employed mindfulness practices, and were held accountable. Underdown et al. (2022) stated developing a sense of community at work was brought up by the attendees. Overall, the results supported elementary teachers' beliefs that a nine-week mindfulness and exercise program improved staff members' health (Weare et al., 2013).

It makes sense to offer chances for exercise in the workplace because most individuals spend a significant amount of their day working. It has been shown that allowing employees to work out during the workday enhances both their physical and emotional health (Wenker et al., 2022). Nevertheless, Brinkley et al. (2017) the possible disadvantages of this offer like coercion to participate have not yet been fully investigated. Furthermore, research was conducted on the effect of a sports offer on the employer brand and its relationship to workers' well-being. The results illustrated the many benefits of introducing sports into the workplace. There was no indication of any unforeseen repercussions, including higher participation pressure or worse self-esteem in less sporty workers (Little et al., 2020). A sports program is a fantastic way to demonstrate your concern for your staff and foster a favorable business image, but it shouldn't be the primary motivator for a job applicant. However, the results showed that all companies ought to give their staff members chances for physical activity (Butler et al., 2015).

Workplace exercise, psychological discomfort, and job engagement have all been examined concerning workers' mental health and productivity at work (Jindo et al., 2020). The data for the Meiji Yasuda Lifestyle research was collected throughout the period from July 2017 to December 2017. The researchers assessed the degree of job engagement and psychological distress by employing the “Utrecht Work Engagement Scale” and the “Kessler Psychological Distress Scale” (K6), respectively (Imamura et al., 2016). The amount of

physical activity connected to the job and sedentary behavior were positively and independently correlated with exercise at work. Regardless matter how many times a week one exercised—once, twice, three times, or more—the relationship remained intact (Smith et al., 2018). The results demonstrated the potential benefit of office exercise in boosting the vitality of job engagement, particularly for white-collar professionals (Seymour & Dupré, 2008).

It has been argued that the detrimental actions exhibited by American employees have resulted in a significant rise in healthcare costs for businesses. To address these rising costs, several firms have aggressively started to promote employee wellness initiatives. Usually, though, no research was done on their efficacy (Swayze and Burke, 2013). With a focus on the physical health of employees, the authors examined program outcomes associated with wellness programs at a significant manufacturing business in the Midwest. (Scherrer et al., 2010).

Several employees may not see worksite wellness initiatives as having the intended effect of improving their overall health. The research aimed to get a more profound comprehension of the elements that lead to workers declining newly offered health benefits from their employer (Perrault et al., 2020). More than 1,500 employees of a large Midwest firm took part in a survey following their yearly open enrollment session. They also thought it would take too long to participate, that it was unfair or unneeded, and that since they were healthy already, they didn't need the program (Corley et al., 2010). There was no difference in participants' self-reported overall health compared to nonparticipants. However, participants' levels of self-efficacy were greater, and they thought their place of employment offered beneficial tools for leading healthy lives (Duggleby et al., 2009). There are ideas on how to inform employees about recent health-related activities.

The effectiveness of workplace wellness efforts in promoting physical activity was examined. The findings indicate a significant increase in both productivity levels and a reduction in obesity rates in recent years (Rezai et al., 2020). Even though the initial results were promising, more research was needed. to assess the consequences of an exercise program at work on several “physical outcomes, including body mass index, aerobic fitness, and muscular fitness,” in addition to the program's total cost. Significant gains were shown in all pertinent physical outcomes, according to the results. Furthermore, it appears that increases in employee health and the cost of healthcare for companies are adversely correlated (Schultz & Edington, 2007).

Employers and workers were both harmed by workplace stress, according to Mai (2018). As a result, workers suffer from a variety of detrimental physical, psychological, and emotional effects, and businesses incur costs from lower productivity and absenteeism (Goetzel et al., 2002). A few of the elements that may mitigate the effects of stress include employee control, social support, physical activity, and wellness programs. Numerous companies have begun to introduce wellness initiatives to help employees manage stress connected to their jobs. These wellness programs range from exercise-focused programs to entire programs that assist staff members in changing their behaviors toward healthier, less stressful living (Sullivan, 2014).

Despite the many advantages of physical exercise (PA), most individuals don't receive enough of it. "To improve the health and well-being of employees," the World Health Organization advocates for workplace PA. Considering the importance of workplace well-being, it would seem prudent to investigate the literature that has already been written about efficiency. conducted comprehensive research to assess the psychological well-being of working adults using PA therapies. It analyzed the available data, assessed the caliber of the research, and pinpointed problems and areas in need of more study. PA treatments included exercise, yoga, and three walking investigations (Elavsky, & McAuley, 2007). Walking, yoga, and exercise improve workplace well-being more than doing nothing at all. Since several trials lacked a placebo control group, any PA intervention is preferable to none at all. Office well-being can be enhanced by PA treatments, yet the outcomes of the study were inconsistent. Though encouraging, methodological errors preclude strong proof. Research indicates that office PA treatments improve the mental health of the workforce (Ensari et al., 2016).

The primary subjects of the study were the significance of "physical fitness and its effect on employee health, performance, and productivity in organizations". With time, several workplace health promotion programs have increased (Etemadi et al., 2016). Health promotion activities may have financial benefits, including a reduction in employee healthcare costs, presenteeism, absenteeism, and staff turnover, even though businesses may cite a variety of reasons (Baxter et al., 2015).

2.2.3 Factors Affecting Implementation and Success of Workplace Exercise

The factors contributing to workplace stress and the coping strategies utilized by employees in various types of organizations, including public, private, and non-governmental organizations (NGOs) were examined. 51 workers from different companies participated in the qualitative interviews. The participants stated that unfavorable working circumstances and subpar management techniques are common causes of stress in the workplace (Bhui et al., 2016). Stress-inducing management practices included unrealistic expectations, a lack of support, unfair treatment, a lack of appreciation, an unbalanced work-to-reward ratio, attitudes that conflicted with one another, a lack of transparency, and inadequate communication. It was believed that organizational initiatives that enhanced management techniques were beneficial (Levenson et al., 2007). Examples of these initiatives included taking breaks, exercising, and assigning proper time for job planning. Stress reduction and prevention strategies outside of the job involved one-on-one interventions. Interventions should be made to increase personal participation outside of the office, and managerial practices should be enhanced (Richardson & Rothstein, 2008).

An effective technique for keeping older people in their jobs longer may be to implement a workplace lifestyle intervention that aims to assist them in developing better behaviors. Verifying the efficiency of alike intrusion on “vitality, work engagement, productivity, and sick leave” was the study's stated goal (Strijk et al., 2013). There were no considerable alterations in “workers' vitality, work engagement, productivity, or sick leave” between the experimental and control groups during a 6- or 12-month follow-up. High exercise contributors also showed this positive trend; however, it was not statistically significant. Implementing “worksites yoga facilities” might be a smart way to improve vitality-related work results if high compliance can be maximized (Patterson et al., 2012). Thus, the variables that inhibit engagement should be the focus of future studies.

The results showed that medium flow levels and steadily rising flow values were experienced by both intervention groups (Elbe et al., 2016). There was a strong favorable correlation between the occurrence of flow around midway through the intervention and the continuation of regular physical activity engagement 18 weeks after the intervention ended (Rosenberg et al., 2019). Furthermore, repeated measurements made during the intervention period showed that adherers and non-adherers evolved their flow values over time in quite different ways. Consequently, the flow may be essential to continuing a regular physical exercise regimen at work. Future research, especially focusing on male participants, should

examine the importance of flow in other circumstances related to physical exercise (Kawabata & Mallett, 2011).

Hypertension significantly impacts cardiovascular disease, and they propose that including regular deep breathing exercises (DBE) has been promised as an effective approach to mitigate blood pressure and stress levels in adult individuals (Tavoian and Craighead, 2023). Deep breathing exercises may be utilized in a range of situations since they are simple, fast, and don't require any special equipment. Workplaces are ideal for the nationwide implementation of DBE for several reasons, including the fact that employees spend a large amount of their waking hours there, spend a high percentage of their time sedentary, frequently experience work-related stress, and take regular breaks that may minimize worker error (Muchiri, 2022).

Although an employee's degree of dedication to everyday workplace DBE will always be their responsibility, managers, and companies may nevertheless take significant steps to remove barriers to participation (Muchiri, 2022). More specifically, this may include implementing DBE during brief breaks or courses every day, paying for DBE-facilitating smartphone applications, and creating incentive programs for consistent participation in deep breathing exercises (Tavoian & Craighead, 2023). “By introducing DBE in the workplace, a significant section of the adult population in the United States—at least half of whom have high blood pressure can get low-cost blood pressure and stress reduction therapy.” It's a useful strategy to connect with this group.

The study looked at the possibility of continuing exercise activities during leisure time and confirmed that there is a connection between physical activity and happy feelings, according to Feuerhahn, et al. (2014). The study's authors hypothesized that those who worked out after work would feel happier at night and that improvements in psychological distance from their jobs, positive body image, and social connections may account for the association between exercise and mood (Lachance et al., 2022). Over five days, 126 individuals from a variety of professions completed diaries twice a day. Multilevel research revealed no unfavorable correlations between exercising at night and working out after work. Exercise after work and a happy mood in the evening were thought to be mediated by psychological distance, a sense of belonging, and physical self-perceptions (Nägel, 2013).

The prevalence of inactivity and sedentary behavior has prompted experts to advocate for the implementation of workplace-based physical activity (PA) programs. Prior research on

workplace-based PA, authors claimed, has only demonstrated mild and transient benefits. This has been ascribed to the absence of well-defined implementation tactics and comprehension of the elements that might impede or facilitate the adoption of PA. A deeper comprehension of implementation techniques, as well as the obstacles and enablers of workplace-based PA, is required to guarantee long-term, sustainable results (Ojo et al., 2019).

A scoping evaluation of research on implementation strategies and variables influencing workplace-based PA adoption was carried out. The multidimensional elements influencing the adoption of workplace-based PA have been brought to light by the review, which also supported the difficulties in putting such initiatives into practice (Chau, et al. 2019). The available literature mostly offers information from the viewpoints of the employees on factors that must be addressed; failing to do so will result in these problems impeding the adoption of PA. Future intervention design may be guided by the theoretical framework provided by the examination of obstacles and facilitators. To completely comprehend the success or failure of implementation methods, more study is necessary (Grol, 2001).

Additionally, the research conducted by Kumar & Singh (2022) examined the idea that an organization's staff productivity was the primary factor influencing how effectively it operated. Productivity levels of employees were influenced by their psychological wellness (Bandyopadhyay, 2018). Stress adversely affects a person's social life, health, productivity at work, and connections with family and friends. It's important to comprehend the forces acting on people and organizations, as well as their consequences. Companies are becoming more and more worried about workplace stress as anxiety levels have increased (Danna, & Griffin, 1999). Organizations need to develop strategies for mitigating and preventing stress. The study focused on the many aspects of yoga and wellness program participation by workers that affect business development and performance. The study's goal was to learn more about how various businesses use yoga as a workplace stress reliever (Sharma et al., 2012).

A tiny fraction of individuals exercise to the necessary extent, despite the well-established benefits of a physically active lifestyle, as shown by the research of Malik, S. H. et al. (2014). Many individuals claim they don't have time for exercise, but because workplace programs may reach a large number of people at once, they are an excellent area to be implemented (Michie et al., 2017). The present study aimed to ascertain the sorts of interferences that are implemented in offices to encourage bodily action amongst workforces, delineate the attributes of these interventions, assess the potential beneficial effects of these

interventions on action points, and evaluate the procedural soundness of previous research (Ammendolia et al., 2016).

Researchers carried out a thorough evaluation of “the literature on physical activity at work, which was published as recently as April 2011,” to identify the various intervention types and their outcomes. Even though this review's data suggested that workplace physical activity programs can be effective, the effects are not always constant (Kahn et al., 2002). Even though there have been a lot of studies done in this field, more thorough studies are still needed to determine the most promising treatment options and to assess the overall efficacy of “workplace interventions” in promoting “physical activity” (Malik et al., 2014).

Further reductions in physical activity due to the COVID-19 pandemic have also been reported. This, combined with computer work's sedentary nature, raises the risk of developing several chronic diseases and lowers the quality of life (QoL), which is directly related to health (Moreira et al., 2022). An employee's physical well-being can be enhanced by a program of workplace exercises that they participate in during breaks. The study set out to quantify the effects of virtual team-building exercises on computer professionals' job satisfaction (Jackson, 2022). After participating in workplace activities for 17 weeks, the intervention group's health improved, as seen by an improvement in their evaluation of their quality of life, particularly in the pain area (Bungum et al., 1997). As a result, more investigation was needed to determine the best type of exercise for CWs, including trials looking at different exercise regimens, intensities, and environments (Boyne et al., 2017).

Numerous companies have implemented workplace wellness programs aimed at enhancing the general health of their employees and preventing the estimated \$300 billion in annual health-related losses (Sholar, 2017). These programs are designed to encourage physical activity among employees. Workplace wellness initiatives have had less success recruiting middle-aged and older workers, even though they may benefit from regular exercise the most in terms of physical, psychological, and cognitive health (Herbert et al., 2020). The study by Monteagudo (2021) created and evaluated a 6-week exercise incentive program to address the demands of older, sedentary working individuals and explore potential non-physical advantages of higher activity levels (Rojatz et al., 2017).

The intervention, which was primarily based on Self-Determination Theory, included support groups of people with similar social backgrounds to help with coping and adherence, as well as feedback on personally created, realistic, process-specific exercise goals and

professional advice (Fliess, & Volkers, 2020). The intervention was designed and implemented fully online to accommodate the significant time constraints of the sample. A group of thirty working individuals, most of whom were older, received motivational intervention, and it was beneficial in reducing stress and dramatically increasing activity and general effect. Measures of task performance, job engagement, personal resources, and work effort did not show any significant differences (Barbier et al., 2013).

Office workers have a worse Human Relative Quality of Life (HRQOL) due to their higher likelihood of developing chronic illnesses (Wikman, 2011). The goal of this meta-analysis was to compile information from quasi-experimental studies, observational studies, and “randomized controlled trials (RCTs)” to measure the impact of exercise on HRQOL among office workers with and without health issues (Nguyen et al., 2021). When done unattended, both general and mental exercise significantly increased HRQOL, while only general exercise did so under supervision. Given the broad range of exercise alternatives available, it was hard to make precise suggestions, even though increasing exercise, especially unsupervised activity might improve HRQOL among office workers (Gobbo et al., 2019). Thus, additional investigation was needed to determine the ideal physical activity for office workers with different ages and health conditions (Saito et al., 2022).

Additionally, according to research by Laux, et al. (2018), modern workplaces have altered due to technological improvements, which have resulted in a decrease in employee physical activity. Physical exercise programs can be utilized to counteract this sedentary lifestyle and protect against potential illnesses associated with employment (Sigblad et al., 2020). As part of the study, the Workplace Physical Activity Program (WPAP) was developed as an intervention concept to address the social, psychological, and physical aspects of workplace exercise (Smith, 2023). Three stages constituted the methodological division of the experiment: setting the WPAP in context, carrying out the program, and suggesting an intervention. It was believed that since this type of program has a rapid payback and greatly enhances the health of employees, investments should be made (Panjaitan-Drioadisuryo & Cloud, 1999).

Moreover, as stated by Genin, et al. (2017), the primary objective of the pilot project was to examine the potential impact of a workplace fitness program on the overall health and fitness levels of employees inside postsecondary institutions. Three groups consisting of ninety-five workers each were formed: CON (the control group), NOV (the new group), and

EXP (the veteran group). For five months, the NOV and EXP groups engaged in a minimum of two sessions per week of on-the-job physical exercise (De Bloom et al., 2017).

The subject's aerobic fitness level, body fat percentage, eating patterns, self-reported health status, pain thresholds, and overall quality of life were all assessed. The NOV and EXP groups showed improvements in the 6-minute walking test, pushups, and squat jumps in addition to a reduction in body fat (Genin, et al., 2017). Improvements were noted in NOV in people's food choices, sleep quality, physical activity levels, and health-related attitudes. The study demonstrated the benefits of these workplace initiatives for postsecondary workers' health as well as the practicality of their design (Bredahl et al., 2015).

2.2.4 Promoting a Culture of Health and Wellness at Workplace

In their study, Samdal, et al. (2017) conducted “a systematic review to elucidate the heterogeneity in outcomes of interventions aimed at promoting physical activity and healthy eating among overweight or obese adults. This was achieved by analyzing the diverse impacts of behavior change techniques (BCTs) and other characteristics of the interventions” (Michie et al., 2018). Effective BCTs supporting change in physical activity and healthy eating are comparable to each other, but they also differ from one another in terms of how they promote change maintenance. The findings back up the use of goal setting and behavior self-monitoring in adult counseling for overweight and obese people. To sustain behavior over time, several further BCTs and the use of a person-centered, autonomy-supportive counseling approach appear to be crucial (Scott et al., 2022).

The research by Mazur & Mazur-Mańek (2017) sought to illustrate wellness initiatives as a way to help companies develop a culture of health. Statistics indicate that the number of health-related work difficulties is continually rising, making the idea of a “culture of health” more and more relevant for businesses (Otenyo & Smith, 2017). Labor expenses are thus steadily rising. Businesses started implementing health and wellness initiatives to address this issue and enhance the psychophysical well-being of their staff members. An outline of the idea of a workplace culture that promotes health was provided in the study (Cooke & Rousseau, 1988).

Additionally, it defined what obstacles prohibit workers from participating and offered best practices for disease prevention through employee-focused initiatives. It also highlighted criteria that determined its effectiveness among employees (Beehr & Newman, 1978). A survey of the literature that included both published works and statistical data from government

databases served as the foundation for the investigation. Research frequently demonstrated the value of wellness initiatives in creating a company culture that prioritizes health (Safeer & Allen, 2019). It also demonstrated the barriers to such applications' usage, which allowed businesses to grow and advance (Datta & Henry, 2006).

The job has a significant impact on employees' social, emotional, mental, and financial health as well as that of their families. A multidisciplinary, integrated approach is crucial to addressing the numerous factors that influence workers' health (Chu et al., 1997). An assessment of contemporary developments in workplace health promotion reveals a shift in perspective away from an individual behavior-focused, risk-factors-based approach and toward an integrated strategy focused on fostering healthy work environments (Flynn et al., 2018). Employers and employees are empowered to enhance all aspects of their health thanks to the health-promoting workplace's comprehensive approach (Whitehead, 2006). Planning and evaluating workplace health are areas where there are knowledge gaps at the state and federal levels. To improve communication between academics and public health practitioners and to improve the health of working Australians, a national information network is required (Nutbeam, 2000).

Because it's getting harder to eat healthy and exercise, research by Bartelme (2014) examined the patterns of physical activity and nutrition that employees at an energy firm demonstrated. There have also been other studies conducted on the benefits of workplace wellness programs. It looked into whether people who use workplace fitness centers (WFCs) behave better than others who don't (Raju, 2017). Data were gathered through in-person interviews and online surveys. The outcomes of the study project exhibited no alterations in the exercise or nutrition habits of the two groups, except for one minor group: those who used the workplace fitness center (WFC) chose to stroll to talk with coworkers more often than those who did not. The crew also looked into a variety of diet and fitness programs (Pastors et al., 2003). These interventions came up as an outcome of an environment where collaborators influenced one another's diet and exercise habits, or the organization provided them in the form of policies and perks (Pronk et al., 2025).

Field research on the application of “peer-based cooperative fitness tracking (PCFT)” to enhance workplace suitability was presented by Ren, et al. (2018). Research has explored the notion that a key factor in promoting physical activity is the establishment of social bonds through participation in group fitness endeavors and the sharing of fitness information among colleagues. The study involved the division of 10 dyads of coworkers into two distinct groups

based on their proximity in the workplace: a dispersed group and a co-located group (Madison, 2016). Through the comparative analysis of fitness data gathered over three weeks, encompassing the baseline week, the PCFT intervention week, and the post-intervention week, it became feasible to evaluate the effectiveness of the proposed PCFT intervention (Kay & Edgley, 2018).

The effects of “workplace culture of health (COH)” components on workers' opinions of “employer support for health and lifestyle risk” were examined by Payne et al. (2018). The authors described the components of a COH as follows: leadership and support from colleagues; employee engagement (motivational interventions); programmatic, policy, and environmental support; and strategic communication (Cao et al., 2016). Using self-reported data on physical activity, diet, and tobacco use, ratings of employees' opinions of their employers' support for health and lifestyle risks were among the outcomes (Stokes et al., 2006). Workplace components (policy and environmental support) are more closely linked to lifestyle risk than relational aspects (leadership and colleague support), which are often connected with perceived support for health. To create a COH, employers must address interpersonal and workplace issues jointly (O' Brien, 1995).

The study conducted by Kent et al. (2016) aimed to determine the critical success factors that contribute to employer-sponsored wellness and health promotion initiatives. To investigate “best and promising practices in workplace health promotion programs,” the authors visited nine organizations with excellent programs, held meetings with subject matter experts, and updated their analysis of the literature (Wiltsey Stirman et al., 2012). Creating a culture of health and utilizing strategic messaging are examples of best practices. A culture of health is mostly influenced by the following factors: employee participation, social and physical environmental support, and leadership commitment. The goals of strategic communications are to promote products, inspire, inform, and foster trust (Zerfass et al., 2020). They have the ideal time, frequency, and location, and are multichannel, bidirectional, customized, and targeted (Fabius & Phares, 2021). More work is required to spread the knowledge gained from companies that have established healthy workplace cultures and effective communication plans and to implement these ideas more widely in actual work environments (Manley et al., 2011).

The purpose of the study undertaken by Santos & Miragaia (2023) was to systematically evaluate “the literature to identify the influence of workplace physical activity programs on employee wellbeing and organizational productivity.” The study's excellent standard was

ensured by using the “Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA)” (Shamseer et al., 2015). In this situation, physical fitness regimens might help workers and the organizational structure by lowering presenteeism and absenteeism rates. The analysis of these groups confirmed it. Still, a lot of businesses decide against implementing these kinds of initiatives. The results of the study were essential for company managers to implement work-related physical activity programs, just as they are for intra-organizational acceptance of a corporate social responsibility strategy (Thauer, 2014). The study may also provide valuable insights for professionals in the sports and physical activity industries who are interested in enhancing their organizations via the integration of workplace physical fitness initiatives (Stoewen, 2016).

The main goal of the research by Yassi (2005) was to combine the knowledge from occupational health and health promotion to enhance workplace health. The research provided a brief overview of contemporary ideas in “occupational health and safety” as well as the development of the definition and understanding of health promotion. It also covers a strategy used in British Columbia, Canada's healthcare industry, where teamwork and evidence-based approaches became essential to enacting change and achieving remarkable cost-beneficial outcomes in terms of the health of the healthcare workers (Eddington, 2006).

Historically, occupational health and safety and workplace health promotion have been two separate fields. While workplace health and safety regulations and laws play a major role in determining occupational health, workplace health promotion is based on “wellness” and healthy lifestyle choices (Friis, 2015). But more and more people are realizing these days that what's needed is a more comprehensive strategy that addresses workplace culture, primary and secondary prevention, and individual and organizational treatments (Whitlock et al., 2002).

In response to the query, “Are workplace health promotion initiatives effective?” An overview of the data supporting the efficacy of workplace programs combined with suggestions for a critical analysis of outcome studies, as made by Goetzel et al. (2014). Recent research casting doubt on the efficacy of workplace initiatives was also discussed. Research gathered over the last three decades demonstrates that evidence-based programs with sound design and implementation may have a good impact on both health and finances (Calley et al., 2010). Companies looking to implement a program that “works” are advised to think about their objectives and whether or not their company culture can support success (Bortolotti et al., 2015). When implementing a health promotion program, employers should make use of the most effective and promising techniques to increase the probability of favorable outcomes.

Leading an unhealthy lifestyle may increase the likelihood of sick leave, which is a major influence on corporate productivity.

Many wellness programs have been created at work as a consequence to enhance employees' productivity, "physical health, and general well-being" (Johan et al., 2023). The objective of the findings was to ascertain the impact of "a physical training program" on sick leave and absence from work. The study evaluated the results of the chemical company workers' physical training program in 2018 using a cohort retrospective methodology. The study's findings demonstrated a significant difference in terms of improving fitness and lowering absences from sickness between the "active group" and the "inactive group" (IG). Furthermore, it was shown that those with a healthy weight had a better probability of increasing their level of fitness compared to those who were obese or overweight (Wei et al., 1999). It has been shown that engaging in "a physical exercise program" lowers sick days and raises fitness levels. Compared to normal nutritional status, being overweight is less likely to promote fitness. Additionally, Penalvo et al.'s study from 2021 looked into the special case of workplace health promotion. The multi-component workplace wellness programs for nutrition and cardiometabolic risk factors were studied in the study. Interventions for workplace wellness raise risk indicators related to nutrition, anthropometry, and cardio metabolism (Gea Cabrera et al., 2021). Programs aimed at enhancing cardiometabolic health should take research design and heterogeneity into consideration.

Workplace wellness is a relatively recent concept in the occupational health and safety area when it comes to employer programs and activities that promote health and well-being in various occupational contexts and worldwide as stated in the study by Shaw et al. (2012). The promotion of workplace health and wellness can take the form of targeted services and programs, company guidelines and policies, monetary rewards and incentives, and adjustments to the environment or culture of the workplace (Horwitz et al., 2013). Programs that target specific goals such as weight loss, quitting smoking, or health risk assessment have demonstrated a moderate degree of success and financial gain; however, the most significant effects have come from comprehensive wellness initiatives that incorporate various activities, entail workplace environmental and cultural modifications, and are customized to address the particular needs of businesses, health concerns of employees, and work environments (Goetzel & Ozminkowski, 2008). The necessity of integrating wellness activities across organizational divisions, the significance of environmental modifications to encourage healthy lifestyles, and the value of primary, secondary, and tertiary illness and injury prevention chances have all been

highlighted by researchers studying worksite wellness programs. It was anticipated that in the years to come, workplace initiatives promoting health and wellness will become increasingly widespread in nations like the USA which have an aging labor population and a rising incidence of chronic illnesses (Hodgins et al., 2017).

The results of Heuse et al. (2021) were cited to support the idea that avoiding burnout symptoms should come first in occupational health promotion. Exercise has positive effects on one's health. The objective of the study was to validate the notion that physical exercise and its deliberate planning serve as supplementary elements that contribute to employees' experiences of burnout, alongside job demands and accessible resources (Bakker & de Vries, 2021). In mild and moderated mediation experiments, vigorous physical exercise was found to be a significant personal resource, since it was found to lessen the detrimental impacts of job demands on feelings of burnout. Planning strategies supported the detrimental effects of job resources on burnout symptoms and presented a strong argument for physical exercise (Leiter & Maslach, 2005).

Coping strategies improved the adoption of physically demanding work, especially for employees with moderate stages of job pressure (Ma et al., 2021). The potential mediation of physical exercise on the link between job demands, job resources, and burnout symptoms was shown to be non-significant. The research broadened the knowledge on the prevention of occupational health hazards. It brought to light an important topic for the near future: how to combine work-related elements like job stress with leisure activities like physical exercise in an efficient way to keep humans' stress stages depleted and prevent burnout symptoms (Rada & Johnson-Leong, 2004).

In the United States, where 64% of adults were classified as obesity, the number of obese children aged six and above approached almost 9 million. The study conducted by Sharifzadeh (2013) established a correlation between obesity and notable “health issues such as diabetes, heart disease, high blood pressure, and hypertension.” American workers are compelled to put in more hours because they are unable to keep up with the rising expense of living. It has to deal with the fact that working longer hours makes it more difficult for people to cook at home, which leads to an increase in the amount of unhealthy fast food they eat and less time for exercise (Knightley et al., 2023).

The management literature has not been able to provide an explanation for how, when, or why employee physical activity affects work performance, according to a study by

Calderwood et al. (2021). This is even though physical activity has been linked to employee well-being and has also been shown to lower organizational healthcare costs. Notwithstanding the widely accepted fact that there is a link between physical exercise and worker wellbeing. The research aimed to provide a synthesis of evidence addressing the relationship between physical workouts and work functioning from other domains (Gough, 2007).

The researcher conducted a cross-disciplinary examination of six pertinent domains to establish a resource-based framework that supports the claim that the relationship between physical exercise and job performance has not been adequately addressed by the body of research (Proper et al., 2002). It made it possible for us to build a framework that supports the assertion and is based on resources. The all-encompassing approach sought to guide further research on the physical activity of employees. This approach provided several alternatives for focusing on the empirical evaluation of proposed processes, boundary conditions, and temporal components that might direct the study of physical activity in organizational settings (Busse et al., 2017).

Living a healthy lifestyle can significantly reduce the risk of early “death, chronic diseases, lost productivity, and other social and economic issues.” Nonetheless, office treatments that report healthiness and nourishment issues while taking work-related outcomes into account were intricate, challenging to implement, and challenging to properly evaluate (Grimani et al., 2019). In two tests, absenteeism was only affected by variations across subgroups. Studies show that workplace organizational structure and physical environment may have a significant impact on health promotion programs and their effects on job-related outcomes, including absenteeism (Ornek & Esin, 2020). It is necessary to conduct controlled, high-quality research using objective outcomes and quality-assured surveys over a prolonged period to draw more findings on work-related consequences.

2.2.5 Technology and Gamification in Workplace Workouts

The research conducted by Chaturvedi and Rathore (2021) investigates the utilization of virtual employee wellness programs as a means to encourage healthy lifestyle choices among remote workers. The introduction of wellness programs yields benefits for both employers and workers. Reduced costs associated with illness, disability, and absenteeism will be extremely beneficial to businesses (Hulsey, 2019). In fact, the health and wellness initiatives that many have started in reaction to the pandemic are only getting started. Although the aspects of worker health programs might differ greatly between organizations, the goals are always the same (Franco et al., 2002). It is commonly known that office productivity and employee morale are

positively impacted by wellness efforts. A successful wellness program helps employees achieve their goals and aspirations (Brady, 2011). When employees feel valued, they are more driven to perform to the best of their abilities. Several platforms, including social media and Zoom, are used to manage these projects. It takes into account the financial, social, physical, and emotional well-being of the workforce (Zhang, 2025).

The results of a study by Bhui et al. (2016) on participant perceptions of job stress” show that the health behaviors—exercise, meditation, and healthy eating were identified by study participants as the most effective personal treatments. Rajagopal (2010), several physical illnesses, such as hypertension, diabetes, and cardiovascular problems, may be influenced by poor mental health and workplace pressures. Employees' overall health is greatly impacted by their mental health (Pogrebtsova et al., 2017).

Personal health-tracking devices like Fitbit and Apple Watch are being used more and more in workplace health and wellness initiatives (Priyadharshini, 2019). Concerns over workplace surveillance and the growing blending of work and personal life are raised by many who wonder if these technologies help workers in their search for improved well-being levels. Chung et al. (2017) researched to investigate the adoption of monitoring technologies in wellness initiatives and the perspectives of staff members regarding these initiatives. Because it helps increase awareness of exercise levels, the authors found that employees are typically in favor of workplace incentives for health tracking (Adjerid et al., 2022). Nonetheless, there is a discrepancy between the programs' objectives and each person's experiences and health objectives (Au et al., 2025). Confusion and participation hurdles might occasionally arise from this. Health tracking in the workplace won't be suitable for everyone, even if this gap may be closed; this has consequences for the creation of tracking technology as well as workplace wellness initiatives (Miyamoto et al., 2017).

According to research by Santa Barbara, et al. (2022), businesses can experience cost savings and higher productivity with WWPs, while employees may benefit physically and psychologically. However, WWPs have been forced to move to virtual meeting places because of the COVID-19 pandemic. Evaluation of the BHIP mobile WWP's viability, acceptability, and efficacy was the goal of the brief study (Tenison, 2022). Over ten weeks, participants received nutrition education via Zoom once a week, twice a week physical training session, and one-on-one sessions lasting thirty minutes with a licensed dietitian (Lier & Breuer, 2020). Anthropometry, stress, aerobic fitness, muscle endurance, and demographics were all measured at baseline and follow-up visits. Those who utilized a mobile device during the WWP reported

positive improvements in their health. (Kappen et al., 2020). One of the main benefits of the program that respondents mentioned was how convenient the online workout and nutrition lessons were (Jurca et al. 2005). In later incarnations of the program, funding was raised to enhance completion rates and make it more appealing to both men and women (Ozdamli & Milrich, 2023).

While activity trackers are growing in popularity, it is unclear if this new technology can benefit the health of workers. In their study, Lennefer, et al. (2020) sought to assess the impact of an office intervention that used action trackers (a behavioral approach) in conjunction with an online coach (a cognitive method) on physical health (e.g., body mass index) and work-related well-being (e.g. burnout). There was no intervention or long-term impact on work-related well-being, according to analyses of variance for repeated assessments (Blagov et al., 2013). The authors observed a substantial decline in body mass index and a significant rise in health perception in the intervention group (Getman et al., 2024). Three months and a year after the intervention, respectively, for health perception and body mass index, these benefits persisted over time (Lister et al., 2014). The research demonstrated that while activity trackers and cognitive-behavioral intervention improved physical health over time, they did not affect improving well-being at work (Powell et al., 2013).

Businesses employed digital tools to improve “workplace health promotion (WHP)” activities. (Tapp, 2024). The effects of a “mobile health application (mHealth) on employee behavior” and well-being were investigated by Westmattelmann, et al. (2021). This exploratory, empirical case study was carried out at “Ireland's Health Service Executive (HSE),” a well-known workplace health program, in April 2018 (Ren et al., 2019). User data on exercise was gathered via the “Steps to Health Challenge, including daily activity in steps taken, mood, total daily exercise, and other characteristics.” Seventy active app users were surveyed and data was gathered for the study's first phase (Betthausen et al., 2020). The majority of users said that the mHealth app motivated them to keep up and even increase their daily step total. (Bai et al., 2025). The interviews fell under the second phase. It was found through qualitative data analysis that the app positively affected employee behavior (De Jong & Den Hartog, 2007).

2.2.6 Diverse Populations and Inclusivity of Employees for Workplace Exercise

According to a study based on public health, Vatan et al. (2017) examined the effects of a 12-week physical exercise program on the resilience, productivity, and staff absence rates of female employees at Islamic Azad University. The results indicated that the staff participants' resilience and productivity were greatly enhanced by a 12-week physical exercise program.

The 12-week physical exercise program did not, however, considerably lower the rates of employee absences (O'Donovan, et al. 2010). It was recommended that managers support regular physical activity among all staff members in their companies and develop practical initiatives that offer opportunities for physical activity, especially for female staff members who confront particular difficulties and can gain from these initiatives in terms of resilience and productivity (World Health Organization 2019).

Additionally, Walsh, et al. (2017) looked at a comprehensive analysis of the research done on “theory-based physical activity (PA)” interventions in rustic locations. Authors searched the “PubMed, PsycINFO, and Web of Science databases” to find research papers that applied “behavioral theory or models, randomized or quasi-experimental research designs (Miller et al., 2020), study populations from rural areas,” PA as the main outcome, and primary and secondary preventive applications. The findings indicated that while theory-based PA treatments are mostly successful in increasing PA in rural communities, they still require development (Jemmott III et al., 2014). Higher degrees of theoretical application and the development or modification of theories particular to rural areas should be explored in future studies. To lessen bias and increase the dependability of the outcomes, study designs should make use of more rigorous research procedures. Conducting follow-up evaluations is necessary to appraise the intervention's durability and behavioral maintenance (Fjeldsoe et al., 2011). Lastly, it was suggested that publications and funding agencies identify as rural by using “the rural-urban commuting area codes as the standard.”

Researchers Del Pozo-Cruz, et al. (2013) suggested reassessing a “web-based intervention” for employees with non-specific subacute low back pain who do not exercise regularly. A reanalysis was conducted on a randomized controlled experiment. The proposed “intervention plus usual care (intervention group) or the usual care only (control group)” was given to participants at random. An interactive website with in-lab video demonstrations was created to serve as the teaching and therapeutic intervention tool (Loisel et al., 2005). A resource section has been added to the University Preventive Medicine Service website. The Medical University. The trial's reanalysis indicates that after the intervention, exercise routines related to low back pain appeared to have improved. Significant changes in low back pain clinical outcomes were linked to the development (Ostelo, & de Vet, 2005).

The idealization of slender bodies in modern culture has led to a stigma against obese people in places where physical exercise is conducted. Considering the hostile environment in these areas, it is doubtful that many people will participate in and get the benefits of regular

exercise (Pickett & Cunningham 2017). Consequently, a novel framework for physical activity areas is required to captivate and maintain a predominantly disenfranchised populace. Providing a quick overview of the intricate connections between body weight, stigma, health, and physical activity, Pickett & Cunningham (2017) contended that the model fails to adequately represent bigger people. The authors then present a model that expands access to the advantages of physical exercise for all bodies and makes the case for the establishment of body-inclusive venues to promote more participation, all while adhering to the Health at Every Size thesis (Vohra et al., 2015).

2.3 Summary

This chapter offers a comprehensive literature review on the benefits, challenges, and implications of workplace exercise programs. It underscores how physical activity (PA), including structured workplace workouts, can enhance employees' physical and mental well-being, reduce stress, improve job performance, decrease absenteeism, and bolster organizational productivity. Drawing from global studies, it reveals that various forms of exercise such as resistance training, deep breathing, mindfulness, and yoga positively influence health outcomes, work engagement, and resilience, especially among sedentary office workers and vulnerable populations. The review highlights the evolving role of management support, organizational culture, and the need for inclusive, well-structured, and evidence-based health promotion interventions tailored to diverse workforces. Additionally, the chapter examines the role of technology, such as fitness trackers and mobile apps, in boosting engagement, while also addressing challenges such as low participation, implementation barriers, and the need for long-term, sustainable wellness strategies. Overall, it advocates for an integrated, participatory, and culturally sensitive approach to embedding exercise into workplace practices.

CHAPTER III: METHODOLOGY

3.1 Overview

Research methodology encompasses the approaches and procedures used to gather and analyze relevant information for a specific study. It is the way in which researchers plan their study to meet their goal with the selected instruments. The methodology outlines the approach to addressing a research topic, encompassing data collecting and analytic procedures, along with the criteria for study selection. It comprises data collecting methods (such as interviews, surveys, or experiments), and data analysis techniques (such as thematic analysis or statistical tests, and research design), which may be defined as the framework for conducting a study. It, therefore, emphasizes the requirements for the validity, trustworthiness, and ethical standards of the study. Research methodology aids researchers in providing a methodical framework for the examination of a topic, deriving meaningful conclusions, and ensuring that the results from the study possess robust, replicable, and ethical validity.

Work ability relates to an individual's resources, such as health, skills, and both physical and mental capabilities, and how these resources fit the job's requirements. Health problems that are job-related are defined by the presence of musculoskeletal discomfort, chronic sickness, absenteeism, early retirement, and even death. Workers who assume prolonged awkward positions without recovery are bound to experience musculoskeletal disorders and loss of work capacity. Workplace interventions, in particular, workout sessions, can help alleviate the situation and improve health and work performance. Such workplace exercise programs are effective in the management of both the health and productivity of the employees (Todorović et al., 2020). For example, workplace physical activity events have been focused on reducing physical input in job tasks as opposed to home-based focused physical activity sessions. The ideal duration of these sessions to benefit from strength exercises is 10-15 minutes. Engaging in both moderate and vigorous types of exercise enhances health, productivity, as well as motivation making it easy to embrace office workout sessions (Vilela et al., 2015). The research employs a questionnaire and software such as Excel and SPSS for data analysis. The study also addresses ethical issues such as safeguarding the confidentiality of participants and obtaining informed consent. The research design utilizes both qualitative and quantitative approaches where primary information from the employees was complemented with secondary literature sources. The research concentrates on the health of the workers based in the Delhi (NCR) region.

3.2 Operationalization of Theoretical Constructs

a) Workout Sessions

A workout Session is referred to as any scheduled period of physical activity intended to achieve specific goals such as the development of strength, improvements in aerobic or cardiovascular levels, increased flexibility, or conditioning of the body as a whole. These sessions are often planned and include exercises, drills, or routines tailored to the individual or team's requirements and goals. Workout sessions can vary in intensity, length, and frequency based on the aims of the workout, and are often tracked for progress and performance optimization. Indeed, in most operational environments, whether in the military, corporate wellness programs, or athletic training, such activities would be integrated into daily or weekly routines to maintain physical fitness and performance and, minimize the risk of injury and burnout (Gjestvang et al., 2021).

• Self-Determination Theory (SDT)

“Self-determination theory (SDT)” is well-suited to exercise sessions because it incorporates intrinsic motivation created by three key psychological needs: autonomy, competence, and relatedness, which can be maintained for longer periods of physical activity. Exercise-related autonomy is taking control of one's exercise decisions, making it enjoyable and self-motivated. Competence refers to the feeling of accomplishment that comes with development, such as increased fitness or the acquisition of new abilities, which motivates people. Relatedness encompasses all social interactions, such as going for a run with a colleague or joining a fitness group, that foster a sense of support and belonging. SDT also distinguishes between autonomous motivation (engaging in exercise for enjoyment or personal meaning) and controlled motivation, (driven by external rewards or pressures) This study is crucial to physical well-being because intrinsic motivation, which is driven by autonomy, competence, and relatedness, can encourage people to maintain exercise routines that are critical for their health and general well-being (Deci & Ryan, 2012).

b) Physical Wellness

Physical wellness is the capacity to live a healthy lifestyle that allows people to do their everyday tasks without experiencing fatigue or physical stress. Engaging in activities like exercising regularly, having healthy meals, and sleeping sufficiently enables one to attain optimal physical wellness. It is also crucial to avoid behaviours that might negatively affect an

individual's physical fitness, such as utilizing tobacco, alcohol, and other drugs (Hosker, Elkins & Potter, 2019).

- **The Physical Activity and Health Theory (PAHT)**

PAHT Theory underlines the importance of exercise in overall well-being. According to Penedo & Dahn (2005), regular physical exercise was necessary to improve physical health in terms of reducing chronic disease risk factors such as heart disease, diabetes mellitus, and hypertension, as well as mental well-being and stress management, mood enhancement, and cognitive performance. However, they promote a more comprehensive view of physical well-being that goes beyond exercise alone, encompassing not only exercise but also other daily habits like getting enough sleep, eating well, and taking care of one's mental health. PATH Theory recognizes that physical well-being is inextricably linked to overall wellness, which means that getting adequate sleep, eating healthy meals, and engaging in activities that enhance emotional health are the most effective strategies to maintain long-term physical health. This framework promotes a holistic, integrated approach to well-being, with physical activity serving as the foundation for overall health and a means of preventing chronic diseases (Treasure, Schmidt & Kan 2019).

- c) **Workplace Productivity**

Workplace productivity refers to how efficiently and effectively people and teams accomplish tasks and achieve goals within a certain timeframe. It includes factors like time management, communication, teamwork, and motivation. Organizations that improve workplace efficiency can boost their bottom line and acquire a competitive advantage in their industry. Businesses may increase workplace productivity by using tactics such as defining clear goals, providing enough resources and training, creating a happy work atmosphere, and embracing technology and automation (Ojo et al., 2018).

- **Affective Events Theory (AET)**

“Weiss & Cropanzano (1996) suggest that certain work-related events induce emotional responses in employees, which have a significant impact on their work attitudes, behaviour, and performance”. These might be favourable, such as receiving recognition or achieving a goal, or negative, such as dealing with conflict or criticism. Positive emotions often encourage engagement, creativity, and job satisfaction, resulting in increased yield productivity. On the other hand, negative emotions cause disengagement, absenteeism, or sometimes burnout. AET emphasizes how emotions accumulate over time, resulting in long-term emotional patterns or

"affective cycles," which feed into the longer-term drivers of work performance. Furthermore, the spillover effect outside of work might promote overall wellness. In short, AET theory highlights the importance of emotion at work. It emphasizes the necessity for a positive organization to foster positive emotional experiences: they play an important role in increasing job satisfaction, productivity, and overall well-being (Nderitu & Ndeto, 2019)

d) Employee Engagement

Employee engagement is a workplace strategy that fosters conditions for all organizational members to perform optimally each day, align with the company's objectives and values, be motivated to enhance organizational success, and have an elevated feeling of personal well-being. Employee engagement relies on productivity, trust, transparent communication, and mutual commitment between a business and its personnel. This strategy enhances business success by improving organizational and individual performance, well-being, and productivity (Lee et al., 2020).

● The Engagement Performance Model

The engagement performance model emphasizes the two-way connection that connects an employee's engagement and performance. More job resources, like as assistance, autonomy, or feedback, are linked to employees who are engaged and perform effectively. This boosts performance, which becomes a source of more engagement. Employees who are engaged are more attached to their jobs, put in more effort, and are driven by job satisfaction, which leads to improved performance. The model suggests that engaging workplaces is important because their performance directly contributes to the success of both individuals and organizations. As a result, a company that supports involvement will boost productivity and performance in the long run, ensuring success (Bakker, 2011).

3.3 Research Purpose and Questions

3.3.1 Purpose of Research

- (i)** “To evaluate the effects of Workplace Workout Sessions on Employee Physical Health”.
- (ii)** “To examine the impact of Workplace Workout Sessions on Employee Mental Well-being”.
- (iii)** “To investigate the influence of Workplace Workout Sessions on Employee Productivity”.

(iv) “To explore Employee Engagement and Satisfaction with Workplace Workout Initiatives”.

(v) “To assess the existing workplace workout sessions and suggest efficient measures to enhance employee well-being and productivity”.

3.3.2 Research Questions

(i) “What are the measurable effects of Workplace Workout Sessions on the physical health of employees?”

(ii) “How does the implementation of Workplace Workout Sessions influence the mental well-being of employees?”

(iii) “What is the impact of Workplace Workout Sessions on employee productivity, and how are these effects observed in the workplace?”

(iv) “In what ways do Workplace Workout Initiatives contribute to employee engagement, and how satisfied are employees with these initiatives?”

(v) “What are the current practices of workplace workout sessions, and what measures can be suggested to enhance employee well-being and productivity based on the existing sessions?”

3.4 Objectives of the Study

(i) “To evaluate the effects of Workplace Workout Sessions on Employee Physical Health”.

(ii) “To examine the impact of Workplace Workout Sessions on Employee Mental Well-being”.

(iii) “To investigate the influence of Workplace Workout Sessions on Employee Productivity”.

(iv) “To explore Employee Engagement and Satisfaction with Workplace Workout Initiatives”.

(v) “To assess the existing workplace workout sessions and suggest efficient measures to enhance employee well-being and productivity”.

3.5 Hypothesis of the Study

H0: “There is no significant association between regular workplace workout sessions and improvements in employees' physical health”.

H1: “There is a significant association between regular workplace workout sessions and improvements in employees' physical health”.

H0: “Workplace workout sessions do not contribute to improved mental well-being among employees”.

H2: “Workplace workout sessions contribute to improved mental well-being among employees”.

H0: “Regular participation in workplace workout sessions is not associated with increased employee productivity”.

H3: “Regular participation in workplace workout sessions is associated with increased employee productivity”.

H0: “There is a negative relationship between the frequency of workplace workout sessions and employee engagement and satisfaction”.

H4: “There is a positive relationship between the frequency of workplace workout sessions and employee engagement and satisfaction”.

3.6 Variables of the Study

Researchers use a wide range of approaches and variables in their research. A variable is a measured attribute that is subject to change while a study is being conducted. This holds true regardless of the comparison being made between individuals, between groups, or even across time. Two separate categories can be used to categorize the variables:

(i) Independent Variables

The independent variable is the specific factor intentionally manipulated or controlled by the researcher to examine its impact on the dependent variable & its consequences on outcomes such as satisfaction or engagement. The study's independent variables are the Regular workplace workout sessions and Frequency of workplace workout sessions.

(ii) Dependent Variables

The variable that is measured & observed to assess the influence of the independent variable is called the dependent variable. It describes the outcome or impact of a connection between cause and effect. The dependent variables in this study are Employees' physical health improvements, Employees' mental well-being, Employee productivity and Employee engagement and satisfaction.

3.7 Conceptual Framework

The conceptual framework visualizes the variables' interactions and interconnections. This study outlines the primary aims of this technique and explains how well-defined research

goals contribute to producing reliable and consistent outcomes. Figure 3.1 depicts the conceptual framework that underlies the research.

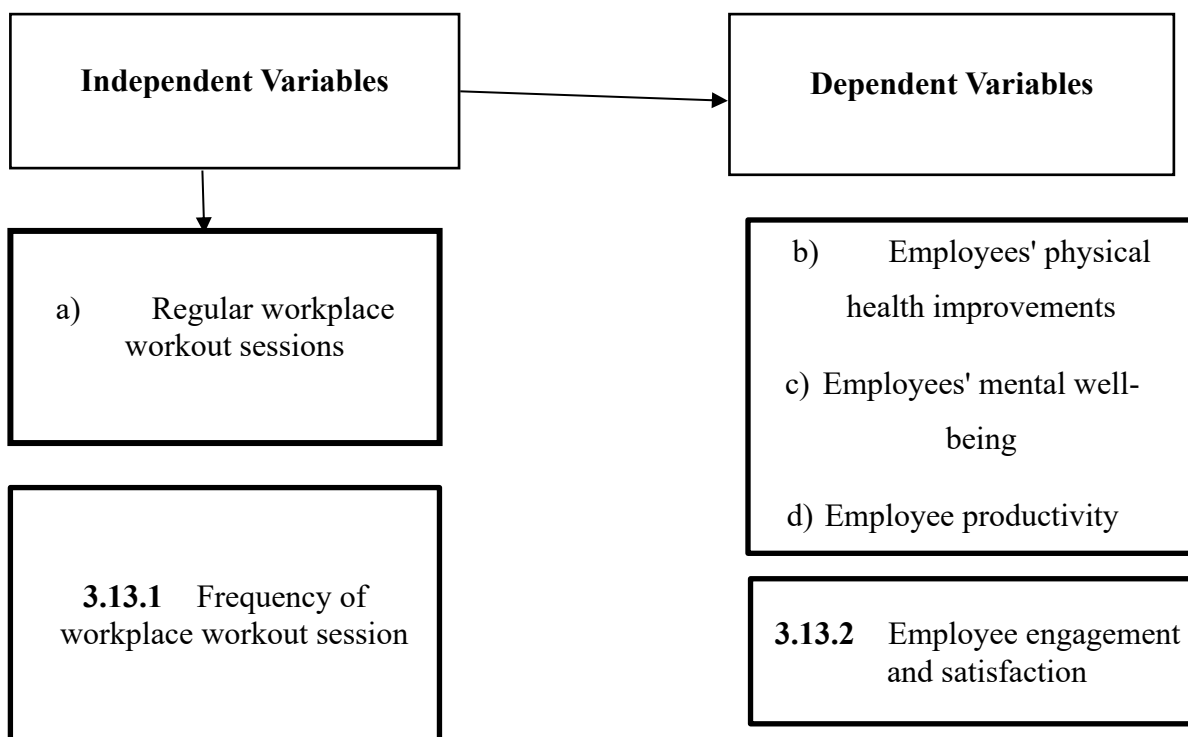


Figure 3.1: Conceptual Framework

3.8 Research Design

The research design is the basic framework for the collection, analysis, and measurement of data. To evaluate hypotheses, the study implemented a mixed-methods approach. This approach incorporates both aspects of research methods, that is quantitative & qualitative to have a clear perspective on the subject matter of the study. This approach relies on the advantages of both methodologies to maximize the accuracy and standard of the results.

A mixed-methods design is adopted in the study, it is essential to capture both measurable, quantifiable elements like patterns and trends, and more complex subjective experiences, such as personal interpretations and cultural contexts. This research design validates the information by combining the breadth and generality of the quantitative data with the depth and context given by qualitative data, thus increasing the reliability of the findings through triangulation. In addition, it facilitates the examination of various facets of the research. The quantitative techniques allow estimating the rate and the extent while qualitative techniques help in understanding the reasons and significance of actions. Ultimately, the

combination of these approaches enables the advantages of one to offset the disadvantages of the other, thereby facilitating a holistic comprehension of the research question.

3.9 Population and Sample

3.9.1 Target Population

"Employees" comprise the subject of the study. The term "target population" refers to the comprehensive group of individuals that a researcher intends to examine. The research investigates employees who are actively involved in workplace activities.

3.9.2 Inclusion and Exclusion Criteria

□ Inclusion Criteria

- The research focuses on those employees who are currently involved in their daily office operations and actively are engaged in working or performing the routine work of the organization.
- This study is confined to employees only from Delhi NCR and therefore strictly narrows down its scope within the geographic boundaries of that region.
- In this study, only the employees who have shown their interest in participating and given consent are considered. This ensures a true representation of their sentiments.

□ Exclusion Criteria

- The research excludes those employees who are absent from work, not engaged now or have recently left the organization to which they belong because their participation does not reflect the current state of workplace involvement.
- The study does not include the employees who are working outside of Delhi NCR, region.
- The study excludes the employees who have not shown their interest in participating and have not given their consent. This ensures a true representation of their sentiments.

3.9.3 Sample Size

The sample size is the number of respondents included in a sample population. It is important that each empirical investigation meticulously assess the sample size to generalize about the entire population. The population parameters are not specified in the analysis. "The study involves a sample size of 385 employees". "The sample size is determined using

Cochran's formula (1977) for computational simplicity”. The determination of the sample size may be calculated using the following method:

$$n = \frac{z^2}{4e^2}$$

$$n = \frac{(1.96)^2}{4(0.05)^2} = 384.16$$

Where,

“n = Sample Size”

“Z = Z-value (1.96 for 95% confidence level)”

“e = the desired level of precision (i.e., the margin of error).”

3.10 Participant Selection

3.10.1 Sampling Design

A "stratified random sampling technique" is employed in the study to guarantee that the data collected is both impartial and representative. This sampling technique guarantees that the sample accurately represents "the impact of Workout sessions in the Workplace" and helps minimize selection bias.

3.10.2 Process of Ethical Selection of the Participants

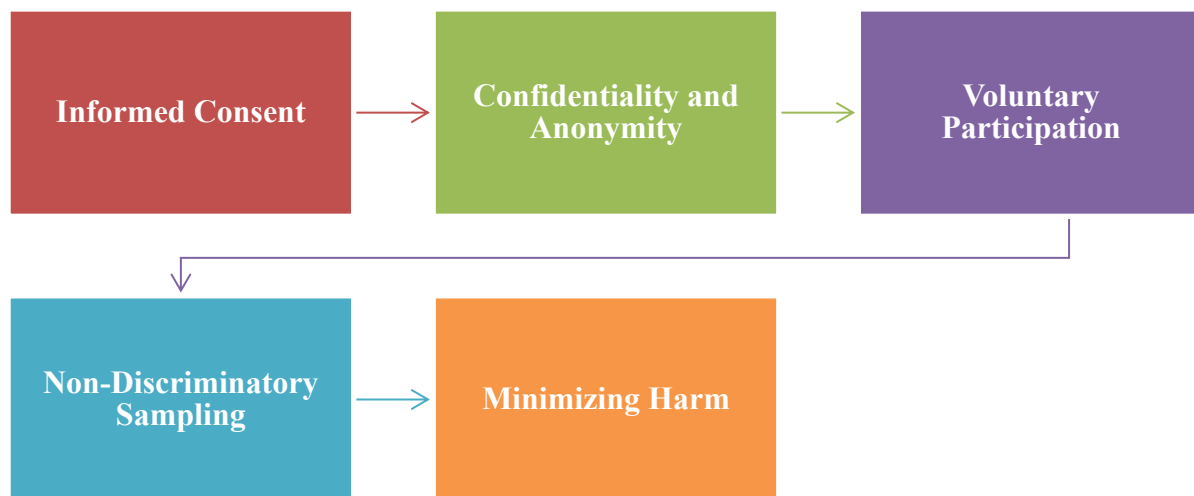


Figure 3.2: Process of Ethical Selection of the Participants

Figure 3.2 represents the process followed by the researcher in the study for the ethical selection of the participants. It includes the following steps: -

Step 1- Informed Consent: Participants are thoroughly apprised of the research's objectives, the methodologies employed, and their entitlement to retract the obtained data at any time. All participants provide their signed consent.

Step 2- Confidentiality and Anonymity: Personal identifiers are removed from the data and stored in a secure location for retaining participant anonymity.

Step 3- Voluntary Participation: Participation is entirely voluntary, and no participant is coerced into participation or suffers consequences for non-participation.

Step 4- Non-Discriminatory Sampling: Stratified random sampling ensures that the opportunity is equitably spread across all employees no matter what position they occupy or belonging to a certain gender or age.

Step 5- Minimizing Harm: The methodology of the study is designed to inflict no form of physical, psychological, or emotional harm on participants, and all activities conducted in the comfort level.

3.11 Instrumentation

A research instrument is a tailored equipment or tool employed expressly for data collection in a study. The nature of the study and the specific data gathered might significantly influence the choice of instruments. This research collected data using meticulously designed questionnaires. The questionnaire was chosen as the research instrument due to its efficiency in collecting data from a large sample of 385 employees, allowing for standardized and reliable responses that can be easily analyzed. Additionally, questionnaires provide anonymity, encouraging honest responses, especially on sensitive topics such as mental well-being and workplace satisfaction. This makes the questionnaire an ideal tool for this study's mixed-methods approach, particularly for a geographically dispersed workforce like those in the Delhi NCR region.

3.12 Data Collection

3.12.1 Source of Data Collection

There are two main sources from which data can be gathered. These sources are primary sources and secondary sources. The data used in this study was gathered from primary &

secondary sources to meet its objectives. Figure 3.3 shows the data collection sources that were used in the research.

(i) Primary Sources

Primary sources are the initial data that a researcher obtains that are either previously unpublished or preexisting. The primary source of information comprises self-reported responses provided by the participants. A questionnaire is used to obtain primary data from a sample of respondents in the study.

(ii) Secondary Sources

Secondary data refers to information acquired from sources apart from the main user. Secondary data is collected from several sources, including books, reports, newspapers, periodicals, journals, websites, and other pertinent materials. Secondary data is obtained from prior studies, journals, books, and similar sources in the research.

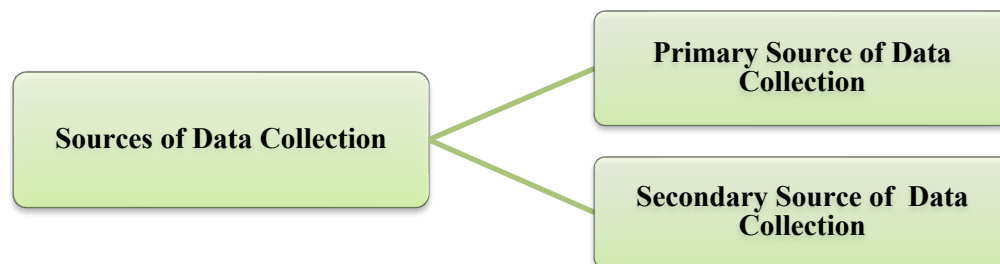


Figure 3.3: Collection of Data

3.12.2 Process of Data Collection

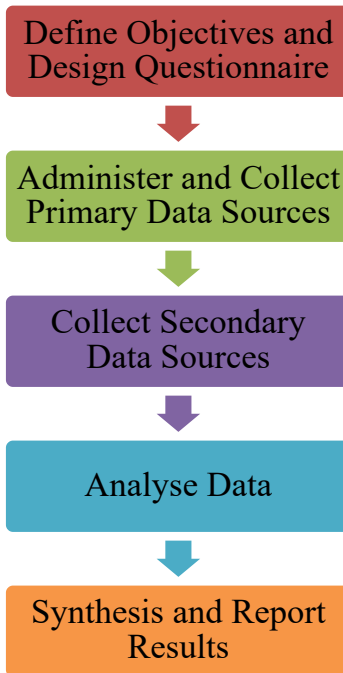


Figure 3.4: Process of Data Collection

Figure 3.4 represents the process followed by the researcher in the study for the data collection. It includes the following steps: -

- **Define Objectives and Design Questionnaire:** The research objectives are clearly stated, and a questionnaire with closed-ended questions is developed to collect relevant data.
- **Administer and Collect Primary Data:** Complete primary data collection by giving the questionnaire to respondents either through online surveys, emails, or hard copies and collecting responses completed over a period of time.
- **Collect Secondary Data:** Collect secondary data that are relevant from other studies, articles, and reports to supplement the primary data.
- **Analyse Data:** Analyze both primary and secondary data using statistical methods like regression and correlation analysis to indicate trends or patterns.
- **Synthesize and Report Results:** Combine the insights from both data sources to draw your conclusion and present the findings. This might include key takeaways and implications of those takeaways in terms of what they mean for workplace wellness programs.

3.12.3 Ethical Considerations During Data Collection

Data collecting entails ethical issues, including the necessity of informed permission throughout the process, confidentiality of collected data, consent to participate voluntarily, no harm to the participant, and ensuring that all participants or subjects understand the goals of the study and the potential risks. Furthermore, all data retained for utilization in additional studies must be safeguarded and employed solely for research objectives. Secondary data should be properly credited with respect towards their rights and equity to participants.

3.13 Data Analysis

3.13.1 Statistical Techniques

Statistical techniques are used to analyze data in research and decision-making. These techniques include both inferential techniques aimed at inferring conclusions or predicting the population results that may be obtained from sample data, and descriptive techniques intended to summarize the data. These methods are necessary for quantifying relationships, testing hypotheses, and finding meaningful insights from empirical data. The study employs the Mean, Standard Deviation, Correlation, and Regression tests for data analysis and decision-making.

(i) Arithmetic Mean

The term arithmetic mean can be used to explain either the actual or arithmetic average. One calculates the sum of all values in a given data set, divides that sum by the total number of quantities in the set, and then gets the result. The arithmetic mean (AM) corresponds to the centre value when all integers are evenly distributed. The arithmetic mean (AM) can be computed using many methods, dependent upon the data distribution and units involved. The below formula is utilized for computing the mean:

$$m = \frac{\text{Sum of the terms}}{\text{number of terms}}$$

(ii) Standard Deviation

The assessment of the disparity between a survey statistic, commonly known as the sample mean, and the standard deviation in a large population or samples is interconnected, albeit not invariably identical. A practical approach to approximate the standard deviation is to multiply the variances of each data set by their corresponding square roots. The formula for calculating the Standard Deviation is as follows:

$$SD = \sqrt{\frac{\sum (x_i - \mu)^2}{N}}$$

(iii) Correlation

A statistical concept that quantifies the variation among many variables is termed correlation. When the alterations of two variables occur in the same direction, it is termed a positive correlation. When variables exhibit an inverse connection, such that one rises while the other decreases, it is termed a negative correlation. The following formula can be employed to compute the correlation.

$$= \frac{\sum (x_i - \underline{x})(y_i - \underline{y})}{\sqrt{\sum (x_i - \underline{x})^2 \sum (y_i - \underline{y})^2}}$$

(iv) Regression

A regression model is employed to demonstrate the link between changes in several independent variables and changes in the dependent variable. Linear regression may be classified as simple, including a single independent variable to predict the dependent variable, or complex, utilizing many independent variables to forecast the outcome. The formula for calculating the regression is as follows:

$$Y = a + bX + u$$

3.13.2 Statistical Tools

Statistical tools are a collection of strategies and approaches that are employed to examine data during research and decision-making endeavours. Statistical software tools such as SPSS, and Excel assist researchers in evaluating findings and making inferences from empirical data, hence facilitating these analyses. The current study has utilized both SPSS and MS Excel to analyze and visually exhibit data.

(i) SPSS

IBM SPSS 26 Statistics is used for statistical analysis in the field of social sciences, statistics is a common variant of the SPSS application. Originally applied in the social sciences. Nowadays, statistical packages for the social sciences are very popular in many fields needing data analysis. The study uses numerous methodologies using SPSS for efficient data analysis.

(ii) MS Excel

MS Excel includes various features and tools that allow users to do a variety of data analysis tasks, such as filtering, sorting, and making graphs and charts. Excel is commonly used for data analysis by corporations and academic organizations due to its widespread accessibility, large range of features, and user-friendly design. “MS Excel is used in the study to carefully collect data and show it in a visual format”.

3.14 Limitations

- a) “The study is limited to Delhi NCR”.
- b) “The study is bound to 385 respondents”.
- c) “The study is bound to Employees working in the Workplace”.
- d) “The perspectives of respondents may be inherently skewed and cannot be eliminated”.
- e) “The study endeavour requires a substantial amount of time to collect the requisite data.
- f) Constraints”.
- g) “Response bias may occur if participants provide socially desirable answers or fail to fully disclose their experiences”.
- h) “Time constraints could limit the sample size or reduce the depth of data collection”.
- i) “Geographic focus on Delhi NCR might limit the generalizability of findings to other regions or industries”.
- j) “Secondary data may vary in quality or may not fully align with the study's objectives, affecting the analysis”.
- k) “Technical issues with data management tools (e.g., SPSS, Excel) could lead to errors in data entry or analysis”.
- l) “Limited resources, including time and funding, could restrict the scope of the study or the depth of qualitative analysis”.

3.15 Conclusion

In this chapter, the research methodology is designed to organize an approach to investigate the impact of fitness sessions at the workplace on employee health, mental wellness, productivity, and general satisfaction. The study uses a combination of primary and secondary sources of data such as assessments, surveys, and qualitative interviews to generate both

qualitative and quantitative data. A stratified random sampling technique has been adopted to collect unbiased data from employees working in the Delhi NCR region. The results of the data have been interpreted statistically using regression and correlation analysis. SPSS and MS Excel tools are used in the study.

The research design aligns with the research questions in finding out the way that would help understand the influence of sessions conducted in the workplace on these important variables such as health, productivity, and wellbeing of employees. This study employs a mixed-methods design utilising both quantitative and qualitative approaches, which need to be appropriately adjusted in the context of the theme. The findings in this study come from statistical analysis as well as in-depth personal experiences. The following chapters discuss the results of the data collection and the implications of the result. It also unfolds the working and interaction of the theory with the variables present in workplace fitness programs to influence employee outcomes and recommend ways of improving workplace wellness initiatives.

CHAPTER IV: RESULTS

4.1. Overview

In this chapter, a thorough analysis of workplace workout session is done and how it relates to several aspects of employee well-being and organizational performance. The critical aspects of workplace dynamics e.g. employee physical health, mental wellbeing, productivity, engagement as well as overall job satisfaction have been assessed in this chapter. The chapter includes a summation of key variables defining these elements and thus anchors its analysis onto a much broader basis. Detailed demographic profile of respondents are given, which provides the important contextual insights that allow for a much deeper understanding of their profiles regarding work and health habit. This demographic analysis would facilitate trend and pattern identification that accounts for variation in the response to workplace workout sessions. Strict data verification and reliability testing measures were high in this part of the study, which ensured that consistency in the data reflected the actual consequences of workout sessions on employees. Also, it is used as reference technique to assimilate the assessment process concerning both the accurate and efficient outcome of data interpretation. The study then delves into hypothesis testing, subjecting empirical data to scrutiny through statistical relationships as indicated above between workout sessions and employee-related outcomes. This dissection of participant responses generates enlightenment about the effectiveness of workout programs in professional settings (Gray 2023).

These findings demonstrate the relationship between physically and mentally healthy employees and their performance and engagement. The analysis then shows clear evidence that happier employees, less stress, and clearer focus might produce performance-honoured outputs that surely benefit the individual as well as the organization. Finally, the chapter closes with a full understanding of the points of view of each of the participants, emphasizing the need for advancement in workplace wellness programs (Brownson, et. al. 2018). This work uses this analysis and data interpretation to state the relevance of integrating fitness programs within a corporate environment, highlighting its relationship to healthier, more motivated, and productive work forces.

The study has emerged as a vital component of employee wellness programs, promoting physical health, mental well-being, and organizational productivity. These sessions integrate fitness activities into the workday, offering employees opportunities to engage in exercise

without disrupting their professional schedules. Regular workplace workouts not only reduce stress and anxiety but also enhance energy levels, focus, and overall job satisfaction (Miragaia, et. al. 2021). By fostering a culture of health, such initiatives improve employee engagement, reduce absenteeism, and boost morale, ultimately leading to better organizational performance. Additionally, they encourage team bonding, creating a sense of community and collaboration among employees. However, successful implementation requires addressing potential challenges, such as time constraints, lack of facilities, and managerial support. Organizations that prioritize workout sessions demonstrate a commitment to employee well-being, creating a positive work environment that supports both personal and professional growth, while also enhancing their reputation as health-conscious and employee-centric employers (Almerri, 2023).

4.2. Results Based on Demographics

Gender

The variable Gender was regarded as a crucial demographic element in examining its impact on perceptions, participation, and preferences about workplace workout sessions. Gender disparities frequently influence individuals' perceptions of physical activity, accessibility, and the perceived advantages linked to such engagements.

Table 4.1 Gender of the Respondents

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	160	41.6	41.6	41.6
	Male	225	58.4	58.4	100.0
	Total	385	100.0	100.0	

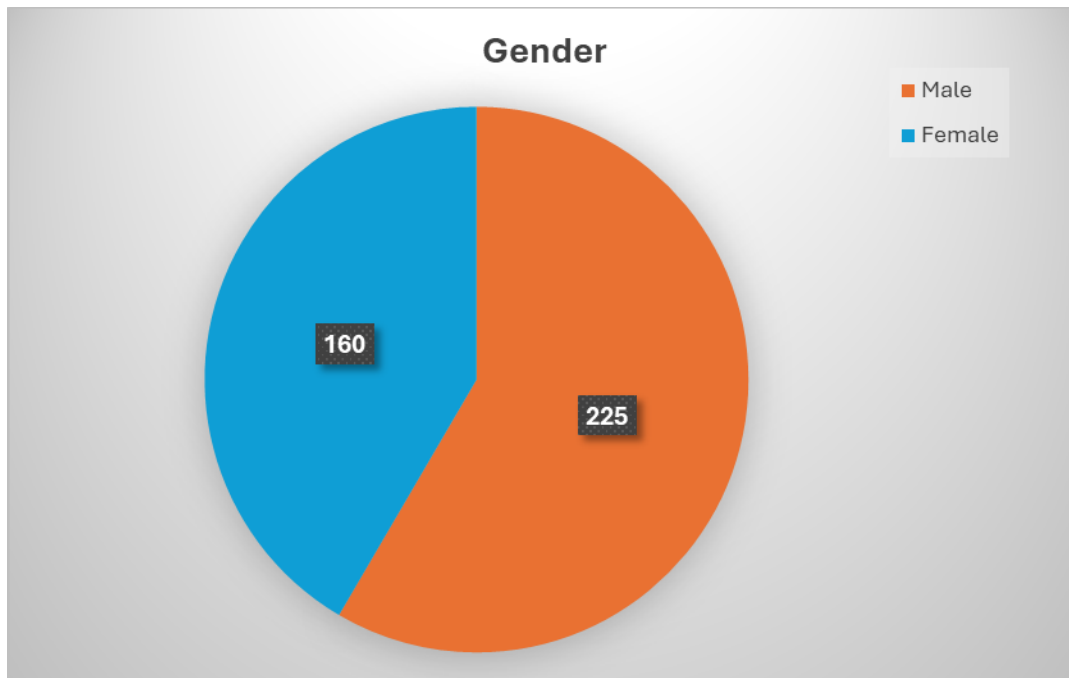


Figure 4.1 Gender of the Respondents

Table 4.1 and the Pie Chart (Figure 4.1) define the gender of the respondents. Table 4.1 above shows that out of the 385 respondents who were chosen for the study, 225 are male, i.e. 58.4%; and the remaining 160 are female, i.e. 41.6%.

Age

This study selected age to examine its impact on employee participation and views of office workout sessions. Age significantly influences individuals' preferred workout types, their physical talents, and their perceptions of health initiatives. This variable aims to identify age-related differences in involvement levels, training styles, and reported benefits of the sessions.

Table 4.2 Age of the Respondents

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 18 years old	65	16.9	16.9	16.9
	18 - 25 years old	86	22.3	22.3	39.2

	25 - 35 years old	108	28.1	28.1	67.3
	35 - 45 years old	79	20.5	20.5	87.8
	45 years old and above	47	12.2	12.2	100.0
	Total	385	100.0	100.0	

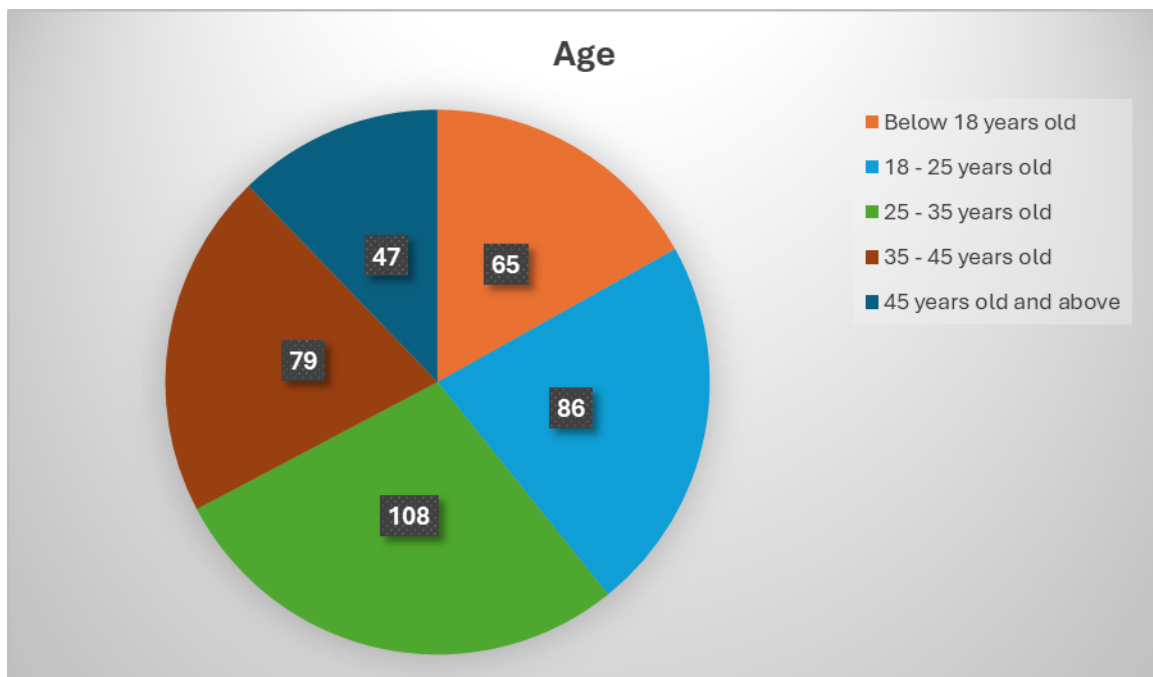


Figure 4.2 Age of the Respondents

Table 4.2 and Pie Chart (Figure 4.2) define the age of respondents. Table 4.2 above shows that of the 385 respondents who were chosen for the study, 65 are under 18 years old, or 16.9%; 86 are between 18 and 25 years old, or 22.3%; 108 are between 25 and 35 years old, or 28.1%; 79 are between 35 and 45 years old, or 20.5%; and the remaining 47 are 45 years old and above, or 12.2%.

Designation

The designation is a crucial demographic feature that signifies an individual's function and level of responsibility within an organization. Workplace workout sessions may appear feasible, beneficial, and essential to employees across different hierarchical tiers (entry-level personnel, middle management, senior executives); nevertheless, not all employees are inclined to share the same viewpoint. Senior executives may have constrained time for such

activities due to business obligations, whereas lower personnel may be more inclined to engage in them for relaxation and networking purposes.

Table 4.3 Designation of the Respondents

Designation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Junior Staff	91	23.6	23.6	23.6
	Executive	110	28.6	28.6	52.2
	Mid-level employees	101	26.2	26.2	78.4
	Management	83	21.6	21.6	100.0
	Total	385	100.0	100.0	

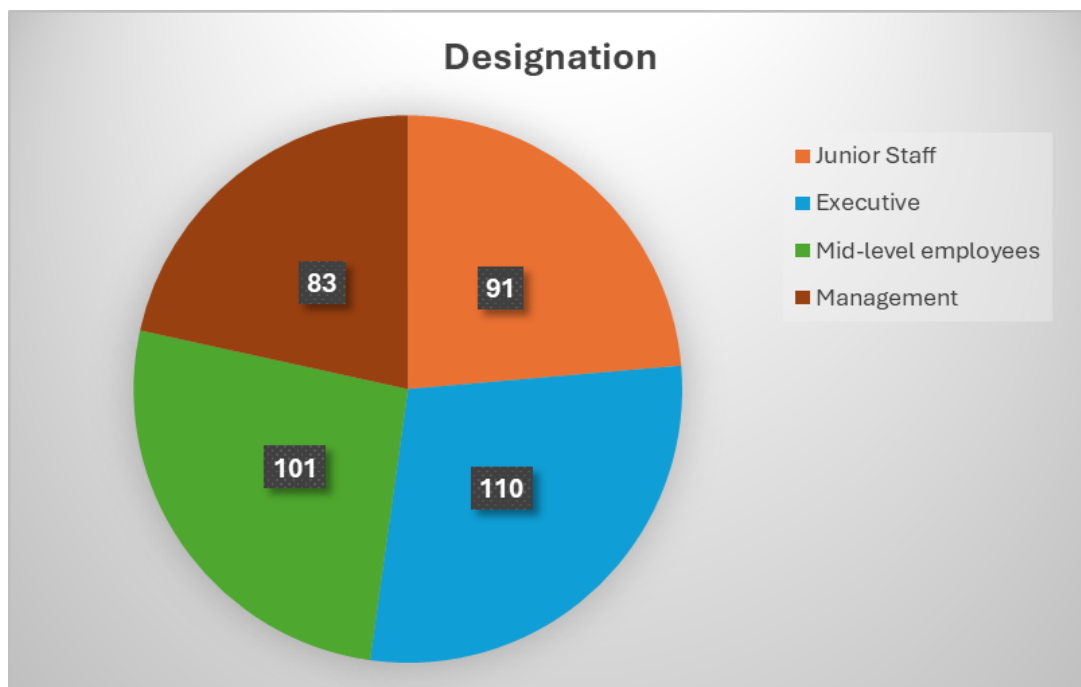


Figure 4.3 Designation of the Respondents

Table 4.3 and Pie Chart (Figure 4.3) define the designation of the respondents. Table 4.3 above shows that of the 385 respondents who were chosen for the study, 91 are junior staff,

or 23.6%; 110 are executive, or 28.6%; 101 are mid-level employees, or 26.2%; and the remaining 83 are management employee, or 21.6%.

☐ **Work Schedule**

Work schedules dictate employee availability throughout the day, impacting the practicality of incorporating workout sessions into their regular routines. Alterations in work shifts, flexible scheduling, and the equilibrium between professional obligations and personal time significantly influence participation rates and the efficacy of these programs.

Table 4.4 Work Schedule of the Respondents

Work Schedule					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Full-Time	177	46.0	46.0	46.0
	Part-Time	79	20.5	20.5	66.5
	Shift based work	129	33.5	33.5	100.0
	Total	385	100.0	100.0	

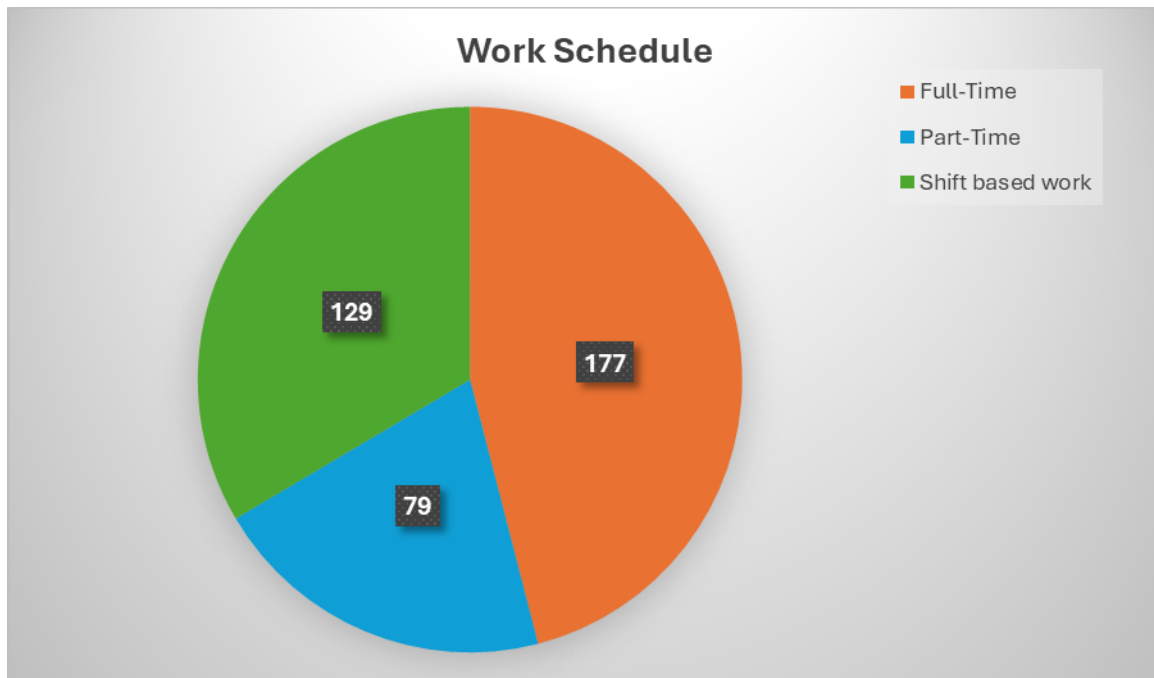


Figure 4.4 Work Schedule of the Respondents

Table 4.4 and Pie Chart (Figure 4.4) define the work schedule of the respondents. Table 4.4 above shows that of the 385 respondents who were chosen for the study, 177 have full-time work schedules, or 46.0%; 79 have part-time work schedules or 20.5%; and the remaining 129 have shift-based work schedules, or 33.5%.

Years of Experience

Employees may possess varying perspectives on the feasibility and benefits of such sessions, contingent upon their levels of experience. For instance, long-tenured employees may prioritize work efficiency and perceive fitness sessions as potential productivity enhancers, but newly hired employees can regard them as opportunities for team cohesion and stress reduction.

Table 4.5 Years of Experience of the Respondents

Years of Experience					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	111	28.8	28.8	28.8

	1-5 years	132	34.3	34.3	63.1
	6-10 years	74	19.2	19.2	82.3
	More than 10 years	68	17.7	17.7	100.0
	Total	385	100.0	100.0	

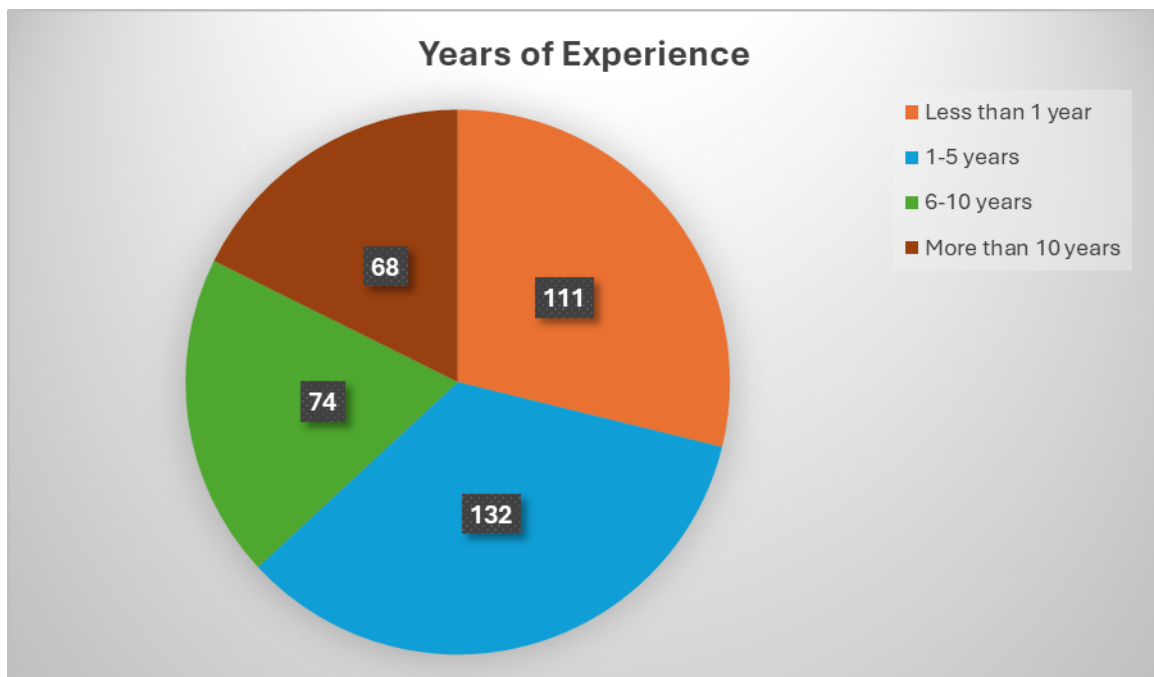


Figure 4.5 Years of Experience of the Respondents

Table 4.5 and Pie Chart (Figure 4.5) define the years of experience of respondents. Table 4.5 above shows that of the 385 respondents who were chosen for the study, 111 respondents have less than 1 year of experience, or 28.8%; 132 respondents have 1-5 years of experience, or 34.3%; 74 respondents have 6-10 years of experience, or 19.2%; and the remaining 68 respondents have more than 10 years of experience, or 17.7%.

Location

Location encompasses elements such as urban and rural settings, closeness to exercise facilities, and workplace infrastructure, all of which significantly influence employees' access to fitness opportunities. Urban workplaces may offer superior access to exercise resources but may also face spatial constraints, whereas rural areas may encounter distinct obstacles such as a lack of fitness trainers or facilities.

Table 4.6 Location of the Respondents

		Location			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rural	152	39.5	39.5	39.5
	Urban	233	60.5	60.5	100.0
	Total	385	100.0	100.0	

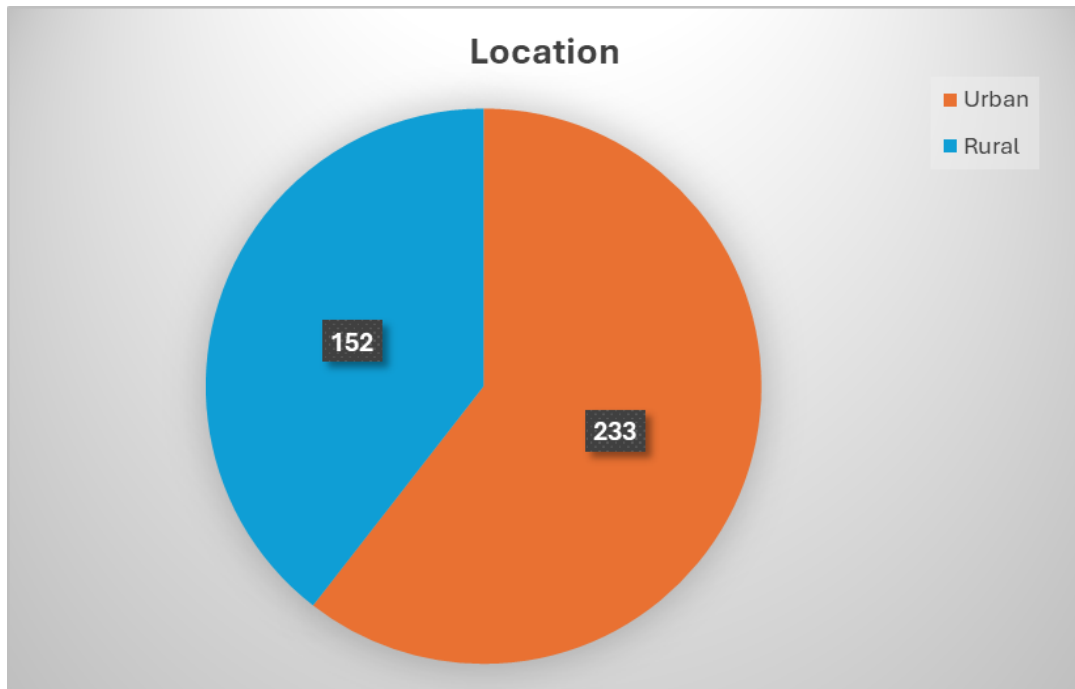


Figure 4.6 Location of the Respondents

Table 4.6 and Pie Chart (Figure 4.6) define the location of the respondents. Table 4.6 above shows that of the 385 respondents who were chosen for the study, 233 respondents are from urban areas, or 60.5%; and the remaining 152 respondents are from rural areas, or 39.5%.

Marital Status

An individual's engagement in workplace wellness activities can be directly influenced by their daily routine, time availability, and responsibilities, which are defined by their marital status. Marital status frequently influences an individual's daily routine, availability of time,

and responsibilities, hence directly affecting their participation in workplace wellness initiatives. For instance, married employees may possess increased familial obligations, resulting in diminished availability or a reduced propensity for exercise. Conversely, solitary employees may exhibit greater flexibility or motivation to participate in such sessions.

Table 4.7 Marital Status of the Respondents

Marital Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	196	50.9	50.9	50.9
	Unmarried	189	49.1	49.1	100.0
	Total	385	100.0	100.0	

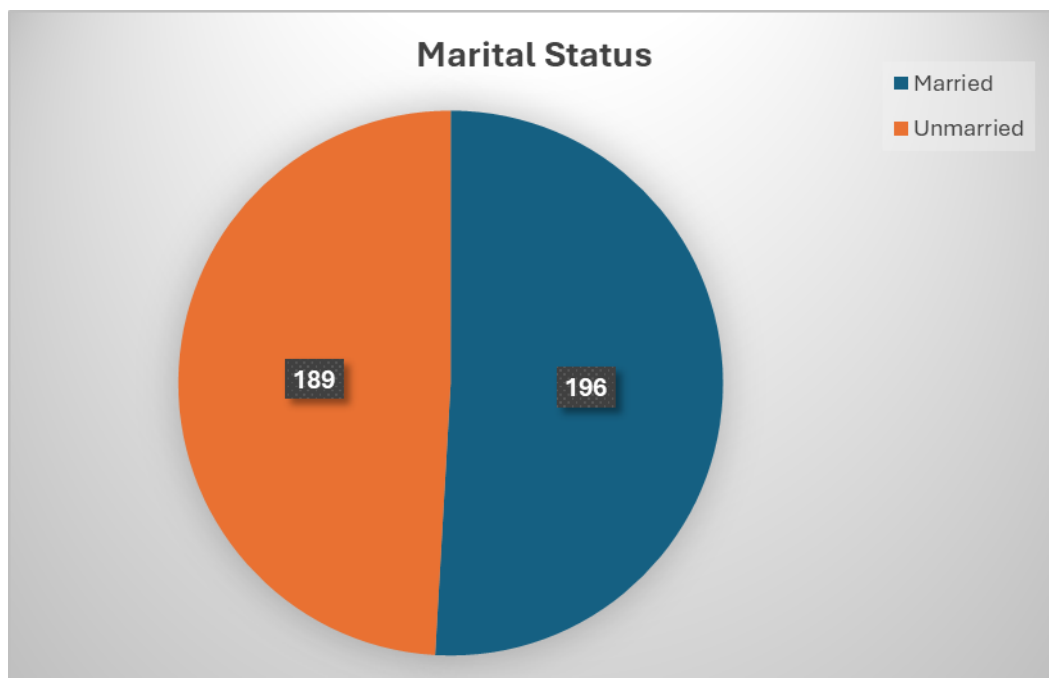


Figure 4.7 Marital Status of the Respondents

Table 4.7 and Pie Chart (Figure 4.7) define the marital status of the respondents. Table 4.7 above shows that of the 385 respondents who were chosen for the study, 196 respondents are married, or 50.9%; and the remaining 189 respondents are unmarried, or 49.1%.

4.3. Results Based on Hypotheses

H1: “There is a significant association between regular workplace workout sessions and improvements in employees' physical health.”

Table 4.8 Descriptive Statistics Table

Descriptive Statistics			
	Mean	Std. Deviation	N
Workplace Workout Session	26.2805	2.95174	385
Employees' Physical Health	24.5481	4.44215	385

The descriptive data indicate that the mean score of employees exercising at work is 26.28, with a standard deviation of 2.95, reflecting rather high and consistent involvement levels among the 385 employees. The average score for employee physical health was 24.55, with a standard deviation of 4.44, indicating a modest health outcome with increased variability. The findings may associate the frequency of workplace exercising sessions with enhancements in employees' physical health. A little standard variation in workout sessions may signify a consistent degree of participation, thus enhancing the reported health advantages.

Table 4.9 Correlations Table

Correlations			
		Workplace Workout Session	Employees' Physical Health
Workplace Workout Session	Pearson Correlation	1	.388**
	Sig. (2-tailed)		.000

	Sum of Squares and Cross-products	3345.704	1952.810
	Covariance	8.713	5.085
	N	385	385
Employees' Physical Health	Pearson Correlation	.388**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	1952.810	7577.361
	Covariance	5.085	19.733
	N	385	385
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.9 indicates a statistically significant and somewhat positive relationship between regular workplace fitness sessions and employees' physical health, as evidenced by a Pearson correlation coefficient of $r = 0.388$, $p < 0.01$. This presents compelling evidence of the correlation between regular attendance at office workout sessions and measurable gains in physical health. The significance level ($p = 0.000$) highlights the robustness of the relationship by excluding random fluctuation as a potential explanation. The findings strongly suggest that incorporating regular workout sessions into workplace wellness programs can effectively promote employees' physical health, reduce healthcare costs, enhance productivity, and foster overall organizational well-being.

H2: “Workplace workout sessions contribute to improved mental well-being among employees.”

Table 4.10 Model Summary Table

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.609 ^a	.370	.369	3.70537
a. Predictors: (Constant), Workplace Workout Session				

Table 4.10 indicates the model summary of workplace workout sessions accounts for 37% of the variance in employees' mental well-being, with an R^2 value of 0.370. The R-value is 0.609, indicating a moderate positive correlation between involvement in office workout sessions and enhanced mental well-being. The standard error of estimate, indicating the average discrepancy between observed mental well-being scores and projected scores, is reported as 3.70537. The data suggest that participation in office workout sessions significantly enhances employees' mental well-being; however, additional external variables may also influence this outcome. This research indicates that including wellness programs into workplace policy is crucial for preserving employees' mental health.

Table 4.11 ANOVA Table

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3093.797	1	3093.797	225.335	.000 ^b
	Residual	5258.489	383	13.730		
	Total	8352.286	384			
a. Dependent Variable: Mental well-being among Employees						
b. Predictors: (Constant), Workplace Workout Session						

Table 4.11 results demonstrate an important association between workplace workout sessions and employees' mental well-being. The regression model is statistically significant, F

(1,383) = 225.335, $p < .001$, demonstrating that workplace workout sessions strongly predict mental well-being. The regression total of squares was 3093.797, significantly larger than the residual sum of squares, 5258.489, indicating that a substantial proportion of the variance in mental well-being is accounted for by workplace fitness sessions. Consequently, it suggests that incorporating a workout session in the workplace will benefit employees' mental well-being.

Table 4.12 Coefficients Table

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.700	1.694		-.413	.680
	Workplace Workout Session	.962	.064	.609	15.011	.000
a. Dependent Variable: Mental well-being among Employees						

Table 4.12 demonstrates a robust favourable relationship between workplace workouts and employees' mental well-being. The unstandardized coefficient, $B = 0.962$, indicates that a one-unit increase in involvement or stress in workplace fitness sessions enhances mental well-being by 0.962 units. The standardized coefficient ($Beta = 0.609$) reaffirms the positive impact on mental well-being, as workplace exercise sessions significantly correlate with the explained variation in the dependent variable, evidenced by a calculated t-value of 15.011 and a significant p-value of 0.000 at conventional levels. The findings indicate that integrating workout sessions into workplace wellness programs is an excellent approach to improving employees' mental well-being.

H3: “Regular participation in workplace workout sessions is associated with increased employee productivity.”

Table 4.13 Descriptive Statistics Table

Descriptive Statistics			
	Mean	Std. Deviation	N
Workplace Workout Session	26.2805	2.95174	385
Employee Productivity	24.6364	4.41325	385

Table 4.13 indicates that consistent participation in workplace workout sessions correlates positively with enhanced employee productivity. The average score achieved in workplace workout sessions is 26.28, with a standard deviation of 2.95, while the average score for employee productivity, based on responses from 385 participants, is 24.64, with a standard deviation of 4.41. The elevated mean scores suggest that employees participating in these sessions see them as productive, indicating that workout sessions positively influence employee performance. The minimal standard deviation of workplace workouts indicates consistent employee participation; however, a marginally higher standard deviation around the mean suggests that the beneficial impact of these sessions may differ among individual employees.

Table 4.14 Correlations Table

Correlations			
		Workplace Workout Session	Employee Productivity
Workplace Workout Session	Pearson Correlation	1	.454**
	Sig. (2-tailed)		.000

	Sum of Squares and Cross-products	3345.704	2270.273
	Covariance	8.713	5.912
	N	385	385
Employee Productivity	Pearson Correlation	.454**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	2270.273	7479.091
	Covariance	5.912	19.477
	N	385	385
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.14 shows the relationship between regular exercise and participation in employees' fitness sessions had a substantial positive relationship, with a Pearson correlation coefficient of 0.454, $p < 0.01$. This relationship will demonstrate a favourable association with employee-reported productivity. A significant implication of the shown association is that wellness programs implemented within the organization, such as offering workplace workout sessions, may enhance employee performance. The findings corroborate the concept that physical activity during work hours enhances productivity, likely by enhancing overall well-being, alleviating stress, and increasing energy levels. These findings underscore the necessity of promoting regular exercise in the workplace to cultivate a more productive work environment.

H4: “There is a positive relationship between the frequency of workplace workout sessions and employee engagement and satisfaction.”

Table 4.15 Descriptive Statistics Table

Descriptive Statistics			
	Mean	Std. Deviation	N
Workplace Workout Session	26.280 5	2.95174	385
Employee Engagement and Satisfaction	24.885 7	4.19789	385

Table 4.15 reveals that the average score for workplace workout sessions is 26.28, with a standard deviation of 2.95, indicating that employees participate in workout sessions with a relatively consistent frequency. Employee engagement and satisfaction have an average score of 24.89, with a standard deviation of 4.20, suggesting a moderate level of engagement and satisfaction among employees. These findings point to a positive relationship between the frequency of workplace workout sessions and employee engagement and satisfaction. As the frequency of participation in workout sessions increases, employees are likely to experience higher levels of engagement and satisfaction at work. This indicates that incorporating regular wellness activities, such as workout sessions, can play a significant role in enhancing employee well-being, potentially leading to improved job performance, morale, and overall satisfaction.

Table 4.16 Correlations Table

Correlations			
		Workplace Workout Session	Employee Engagement and Satisfaction
Workplace Workout Session	Pearson Correlation	1	.411**
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	3345.704	1954.343
	Covariance	8.713	5.089
	N	385	385
Employee Engagement and Satisfaction	Pearson Correlation	.411**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	1954.343	6766.971
	Covariance	5.089	17.622
	N	385	385
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 4.16 indicates a positive association between the frequency of workplace workout sessions and employee engagement and satisfaction, with a Pearson correlation coefficient of 0.411 ($p < 0.01$). Research indicates that an increase in the frequency of workplace workout sessions correlates with enhanced employee engagement and satisfaction levels. This correlation is statistically significant, evidenced by a p-value of 0.000, indicating a robust association between the two variables. The outcome, involving 385 participants, suggests that

regular workout sessions should be implemented in the workplace to enhance employee well-being, foster greater engagement, and improve job satisfaction.

4.4. Results Based on Responses

Table 4.17 Items of Workplace Workout Session

Sr. no.	Workplace Workout Session	Mean	Per.	S.D.	Variance
WWS 1	The workplace ensures the availability of workout sessions during working hours.	3.62	72.47	1.24	1.53
WWS 2	The workout sessions in the workplace cater to various fitness levels.	3.79	75.74	1.06	1.12
WWS 3	The workplace provides adequate space for workout sessions.	3.66	73.30	1.16	1.35
WWS 4	The equipment and resources available for workplace workout sessions meet the expectations of employees.	3.74	74.86	1.09	1.19
WWS 5	Workplace workout sessions have helped to improve the productivity at work.	3.83	76.52	1.08	1.18
WWS 6	The workout sessions at workplace are well structured and appropriate for fitness level.	3.84	76.78	1.10	1.21
WWS 7	The flexibility of the program accommodates the workload and personal commitments.	3.80	75.95	1.08	1.16

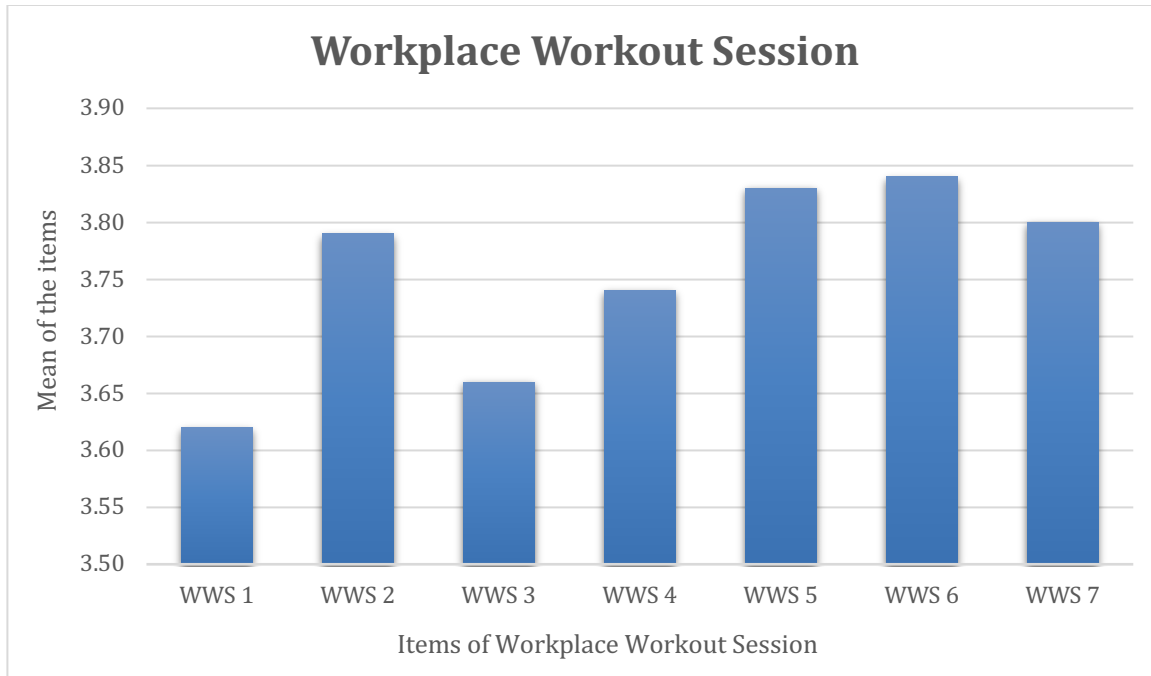


Figure 4.8 Items of Workplace Workout Session

Table 4.17 and Figure 4.8 indicate the statements regarding office workout sessions have yielded significant insights into employee perceptions and preferences. The statement with the highest mean score was WWS6, which received a score of 3.84, indicating that employees highly value the organization's inclusivity in the sessions. Subsequently, WWS5 attained a mean score of 3.83, indicating that employees possess a highly favorable view regarding the productivity advantages derived from these sessions. WWS1 has the lowest mean score of 3.62, signifying issues with accessibility and time convenience. The results indicate that while employees often appreciate structured and outcome-oriented workout sessions at work, there remains a necessity for further efforts to improve accessibility and availability for convenience during work hours.

Table 4.18 Items of Employees' Physical Health

Sr. no.	Employees' Physical Health	Mean	Per.	S.D.	Variance
EPH 1	Workplace workout sessions have helped to maintain a healthy weight.	3.52	70.34	1.23	1.51
EPH 2	Energy levels have improved because of workplace workout sessions.	3.40	67.95	1.29	1.66

EPH 3	Participating in workout sessions has increased the physical stamina of employees.	3.56	71.22	1.18	1.39
EPH 4	Regular workouts at the workplace have improved the posture and balance.	3.52	70.49	1.16	1.35
EPH 5	Workplace workout sessions motivate to maintain a healthy lifestyle.	3.59	71.84	1.23	1.51
EPH 6	Workplace workout sessions help to achieve the personal fitness goals.	3.35	67.01	1.29	1.66
EPH 7	After a workout session individuals feel more physically prepared to handle work demands.	3.61	72.10	1.27	1.61

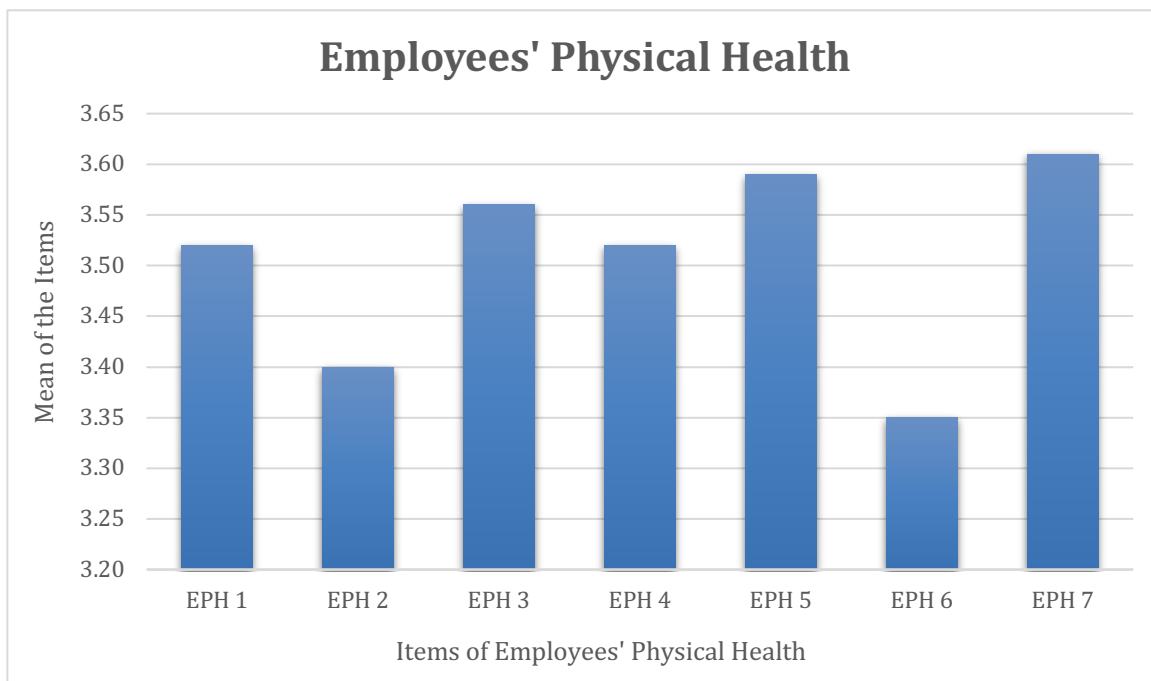


Figure 4.9 Items of Employees' Physical Health

Table 4.18 and Figure 4.9 show the employees' judgments of the contribution of the sessions to their physical fitness revealed significant variances in mean replies. Statement EPH7, with the highest mean of 3.61, indicates that employees are prepared to address work demands immediately following the session, as most recognize its direct and substantial benefits in enhancing workplace readiness. Conversely, the lowest mean for EPH6 was a statement with a mean score of 3.35, indicating that while the contribution of sessions to

personal fitness improvement is appreciated, it is not as substantial as other positive outcomes. This indicates that although employees recognize a general benefit to conducting workouts in the workplace, they view the outcomes concerning personal fitness accomplishments and work preparedness differently. This information will assist organizations in customizing their workout programs to highlight various benefits, aligning with employees' comprehensive health and fitness objectives.

Table 4.19 Items of Mental Well-being Among Employees

Sr. no.	Mental well-being among Employees	Mean	Per.	S.D.	Variance
MWB 1	Regular exercise at the workplace has positively impacted the mental well-being.	3.51	70.13	1.22	1.50
MWB 2	Participating in workplace workout sessions helps to manage work-related stress effectively.	3.57	71.32	1.14	1.31
MWB 3	Workout sessions in the workplace improve work mood and reduce feelings of anxiety or depression.	3.51	70.23	1.22	1.48
MWB 4	Workplace workout sessions contribute to a better balance between the professional and personal life.	3.45	69.04	1.22	1.48
MWB 5	Engaging in workout sessions at work helps to feel more energized and motivated throughout the day.	3.42	68.36	1.27	1.60
MWB 6	Workout sessions help to handle work pressure and demanding situations more effectively.	3.54	70.75	1.20	1.44
MWB 7	Exercise at work enhances the creativity and ability to solve problems effectively.	3.58	71.58	1.17	1.36

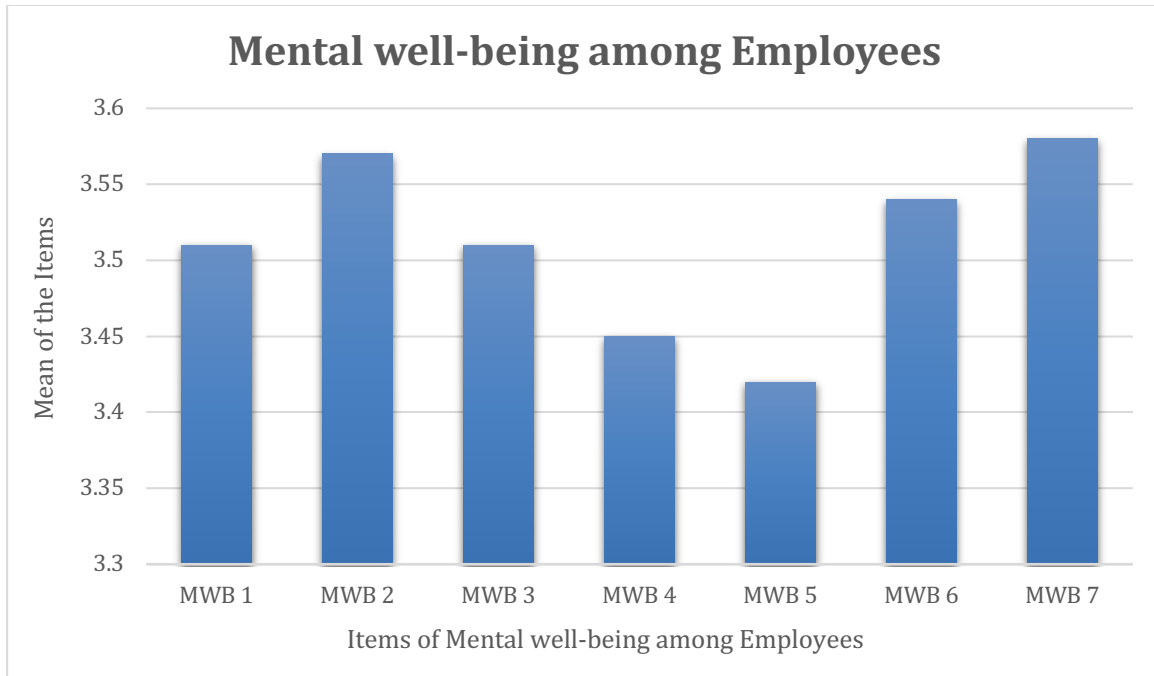


Figure 4.10 Items of Mental Well-being Among Employees

Table 4.19 and Figure 4.10 show the statements regarding employees' mental well-being, as they pertain to the degree of likability towards the advantages of workplace fitness sessions, vary significantly. Statement MWB7, with a mean value of 3.58, indicates that employees concur that their creativity and problem-solving abilities are heightened during training sessions. This has been facilitated by a low standard deviation of 1.17, signifying constant agreement. Conversely, the statement MWB5 had the lowest mean score of 3.42. This suggests that although employees consider office exercise to be invigorating and motivating, they view its influence to be somewhat lesser than that of other advantages. The findings indicate that creativity and problem-solving should be prioritised in areas with minimal impact to enhance the effectiveness of workplace workout programs.

Table 4.20 Items of Employee Productivity

Sr. no.	Employee Productivity	Mean	Per.	S.D.	Varianc e
EP 1	Regular workplace workout sessions improve the ability to concentrate on tasks.	3.49	69.77	1.25	1.56
EP 2	Workout sessions in the workplace reduce the tendency to procrastinate.	3.68	73.51	1.20	1.44

EP 3	Team-based workout activities enhance the productivity by fostering better relationships with coworkers.	3.47	69.35	1.28	1.65
EP 4	Workout sessions help to stay focused and complete tasks with greater accuracy.	3.53	70.60	1.24	1.54
EP 5	Workout sessions motivate to be more present and engaged at work.	3.54	70.75	1.25	1.56
EP 6	Workplace workout sessions have made to be more proactive and goal-oriented in the work.	3.38	67.53	1.32	1.74
EP 7	Workout sessions in the workplace have contributed to an improvement in the quality of the work output.	3.56	71.22	1.24	1.53

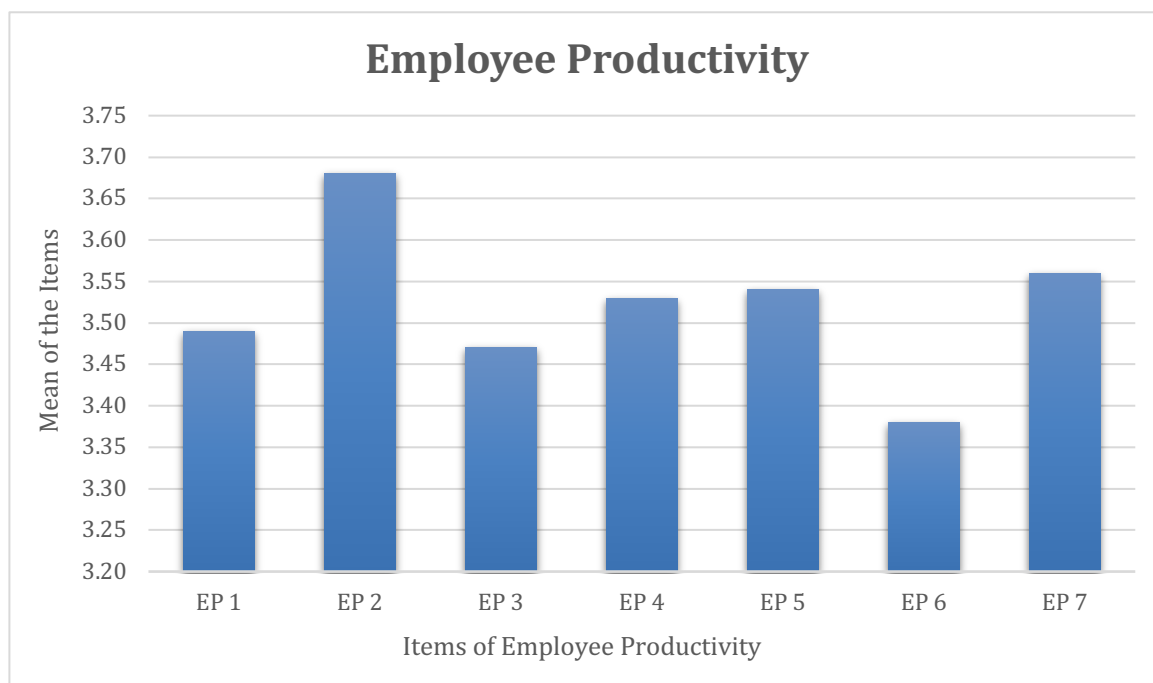


Figure 4.11 Items of Employee Productivity

Table 4.20 and Figure 4.11 show that employee productivity based on workplace fitness sessions yields significant insights, notably with the statements with the highest and lowest mean scores. The statement, EP2 received the highest mean score of 3.68 (73.51%), indicating that employees perceive these sessions as highly effective in mitigating procrastination, thereby establishing a strong correlation between physical activity and the punctual completion of tasks. The statement EP6 received the lowest mean score of 3.38 (67.53%), indicating a

relatively low level of agreement among employees regarding the sessions' impact on their proactivity and goal orientation. The findings suggest that while office gym sessions are often valued for their ability to diminish procrastination, there may be opportunities to enhance these programs to promote proactivity and goal-oriented behavior among employees.

Table 4.21 Items of Employee Engagement and Satisfaction

Sr. no.	Employee Engagement and Satisfaction	Mean	Per.	S.D.	Variance
EES 1	Engaging in workout sessions enhances the ability to think clearly and solve problems at work.	3.54	70.70	1.29	1.66
EES 2	The workout sessions in the workplace motivates to stay more engaged with the job responsibilities.	3.63	72.52	1.15	1.32
EES 3	The availability of workout sessions at work has improved the sense of connection with other employees.	3.62	72.36	1.26	1.59
EES 4	It's easy to balance the work tasks and participate in workplace workout sessions.	3.63	72.52	1.17	1.36
EES 5	The frequency of workout sessions provided by the workplace are satisfactory.	3.47	69.35	1.27	1.61
EES 6	The workout sessions have positively impacted the overall job satisfaction.	3.52	70.44	1.26	1.59
EES 7	The organization's initiative for workplace workouts makes to feel more valued as an employee.	3.49	69.82	1.20	1.43

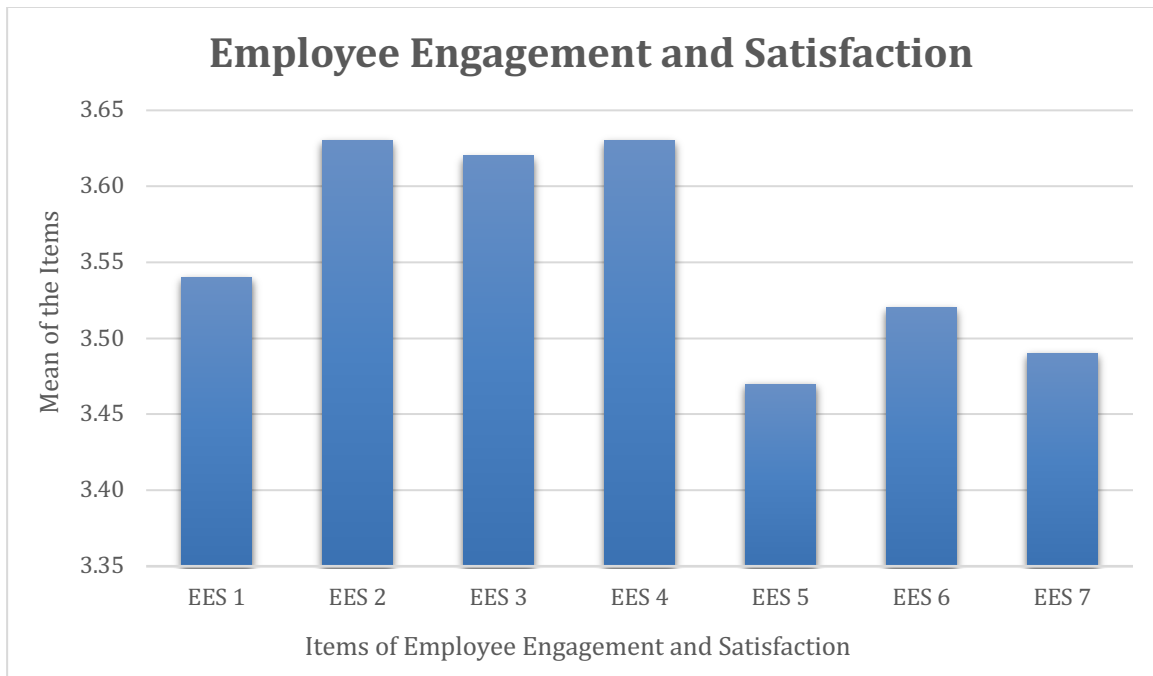


Figure 4.12 Items of Employee Engagement and Satisfaction

Table 4.21 and Figure 4.12 show the mean scores for statements concerning employee engagement and satisfaction revealing key insights into the impact of workplace workout sessions. The highest mean scores, 3.63, are observed for two statements: EES2 and EES4 each with a percentage score of 72.52%. These findings indicate that employees highly value the motivational and work-life balance aspects of workplace workout initiatives. Conversely, the statement with the lowest mean score, 3.47 (69.35%), is EES5. This suggests that while employees recognize the benefits of workout sessions, there is room for improvement in their frequency. Overall, these findings highlight the importance of ensuring adequate frequency of sessions to maximize their positive impact on employee engagement and satisfaction.

4.5. Summary of Findings

The analysis revealed that regular workplace workout sessions significantly enhance employees' physical health, mental well-being, productivity, and engagement. The results showed a moderate to strong positive correlation between participation in fitness sessions and key employee outcomes, including improved focus, reduced stress, and heightened job satisfaction. Specifically, statistical tests confirmed that workout sessions positively influence mental well-being ($R^2 = 0.370$), physical health ($r = 0.388$), productivity ($r = 0.454$), and engagement ($r = 0.411$), affirming all proposed hypotheses. Employees reported increased energy, motivation, and readiness to meet work demands following exercise, while challenges related to accessibility, time constraints, and session frequency remained areas needing

improvement. Demographic factors such as age, experience, and work schedule also affected participation levels and perceptions. Overall, the findings validate the integration of structured, inclusive, and flexible fitness programs as a strategic approach to promote a healthier, more engaged, and productive workforce.

4.6. Conclusion

The findings from Chapter clearly establish that workplace workout sessions significantly contribute to the overall well-being and performance of employees. Through comprehensive data analysis and hypothesis testing, the study confirms that regular participation in such sessions is positively associated with enhanced physical health, mental well-being, productivity, and employee engagement. Demographic factors like age, experience, and work schedule also influence participation patterns and perceptions of effectiveness. Statistical correlations reveal that workplace exercise fosters reduced stress, improved focus, and stronger workplace relationships, though some areas like session accessibility and frequency need further enhancement. Overall, the chapter reinforces the value of integrating well-structured, inclusive, and consistent fitness programs within organizational frameworks to promote a healthier, more satisfied, and more productive workforce.

CHAPTER V: DISCUSSION

5.1 Introduction

The chapter discusses the study's findings of practical effects and connections with previous studies. It indicates that the study shows the positive effects of a workplace exercise program on workers' levels of involvement, productivity, and mental and physical health. Regular participation in structured fitness programs is related to improved attention, reduced stress, increased job satisfaction, and physical fitness. The findings were addressed thoroughly in this chapter, which also focuses on workplace wellness efforts. Such exercises must be included for physical well-being, ideally as part of company policies. Physical activity at work has also been strongly linked to boosting mental health; as a result, it can help workers manage their stress and emotions better. Additionally, there was an improvement in engagement and productivity, two metrics that demonstrate how physical activity influences performance at work as well. Among other advantages, more additional sessions raised job satisfaction and emphasized the importance of continuing wellness initiatives. The study supports workplace fitness initiatives as a way to encourage worker well-being and, in turn, build a profitable business.

The workplace workout session has become an essential strategy to promote employees' welfare and increase organizational productivity. The purpose of this discussion is to detect the benefits, challenges and implementation strategies for workout workouts, improve physical health, reduce stress and emphasize their role in promoting employees' morality. Regular physical activity can increase focus during working hours, increase energy levels and reduce absenteeism, contribute to general job satisfaction. The scope of this discussion involves checking different types of exercise programs such as tensile routine, yoga, meditation and training-based exercises, as well as their viability in different task settings. In addition, it addresses challenges such as lack of time, space boundaries and employee participation, and detects strategies for successful integration, such as flexible training plans and employer incentives. By incorporating workout workouts, organizations can promote a healthy, more committed working group, which can increase efficiency and a positive work environment.

The study indicates that workout sessions in the workplace improve the health and performance of employees. Regular workouts will also benefit physical health, which minimizes health risks and ultimately promotes well-being. They also aim to improve mental

well-being by relieving stress and improving psychological resilience. Employees who regularly attend workplace workout sessions were more productive, and more energy and focus during the day translate into higher efficiency when working. In addition, the frequency of workout sessions correlates strongly with employee engagement and satisfaction, suggesting that wellness programs create a motivating and committed workforce. These results on integrating wellness initiatives into the workplace demonstrate that prioritising employee engagement and health first does result in long-term productivity gains, job happiness, and ultimately, overall success for the workplace. By adopting such initiatives, organizations can create a healthier work environment that benefits both employees and the business.

5.2 Discussion of Results

➤ Results Based on Hypotheses

H1: “There is a significant association between regular workplace workout sessions and improvements in employees' physical health”

The results showed a strong relationship between employees' physical health and regular exercise sessions at work. The health of employees who take part in workplace workout programs was significantly better than that of those who do not. Therefore, it could be concluded with a certain level of assurance that regularly engaging in physically healthy activities at work significantly improves an employee's well-being. This showed the importance of corporate wellness programs for healthier lifestyles, lower healthcare expenses, and increased employee productivity. By encouraging a culture of regular physical activity, companies could promote worker well-being and a more motivated and productive workforce.

The study presented positive connections between regular exercise at the workplace and with physical health of the workers. Employees involved in proper work-related fitness usually tend to have considerable health benefits: regular participation in such activities contributes toward employee wellness. The study showed that workplace wellness programs serve to underscore the benefits of an active lifestyle while curbing health costs and increasing productivity. By encouraging a culture of everyday physical activity, an organization helps improve employees' well-being and created an active and productive workforce (Grande et.al., 2014). The study showed that exercise at work improves employees' mood to concentrate on work, working relationships, and the ability to deal with stress. The advantages of physical activity for comparatively sedentary white-collar workers were highlighted by the modest but consistent self-reported improvements in performance. Employers might use such types of

indications to encourage active breaks, which would improve health, give them a competitive edge, and make their workers more productive. Employee participation would be increased by addressing problems with time management and the way the workplace operates. This would be beneficial to both employees and organizations. The study's cross-over design increases the statistical reliability of these findings (Coulson et al., 2008).

The study discovered that physical exercise significantly enhanced the overall and psychological health-related quality of life of employees in offices, with the advantages being higher for those who were unhealthy. The most beneficial effects were shown with unsupervised activity, but supervised exercise produced a range of outcomes. The impacts on health-related quality of life, however, were limited and did not reach statistical significance. To identify the best forms and intensities of exercise for various medical conditions, more research was required (Nguyen et al., 2021). The purpose of the study was to investigate the impact of a workplace physical activity program that could enhance sedentary employees' capacity to work. Results showed that organized fitness programs in the workplace can improve workers' capacity for mental work. Although the overall outcomes differed, the intervention emphasizes the need for consistent physical activity in reducing the negative impacts of inactive employment and enhancing employee welfare (Díaz-Benito et al., 2022).

H2: “Workplace workout sessions contribute to improved mental well-being among employees”

The study's findings suggested a potential favourable correlation between employees' mental health and their participation in workplace exercise programs. Employees who participate in office fitness programs were much more likely to experience improved mental health outcomes. The results therefore indicated that workplace fitness programs were strongly related to overall health and that companies should incorporate them into their workplace policy. These workplace exercises were crucial, but they were not the only component; they may also affect additional external factors that have an impact on mental health. The finding of the study indicated that regular exercise sessions at work can be effective tactics for enhancing workers' job satisfaction, productivity, and mental health.

Programs for yoga and physical exercise at work were related to a significant decrease in anxiety and depression symptoms, respectively. Their effects on relieving stress were less simple to understand (Chu et al., 2014). Stress management interventions, focusing on cognitive behavioural therapies, mindfulness, and job redesign, were efficient in the study.

Proper implementation and employees' involvement in these seem to enhance the success of these interventions, yet there were shortcomings in long-term impact, effectiveness across contexts, and methodological rigour (Holman et al., 2018). Workplace interventions in male-dominated industries showed limited potential for improving the health and well-being of employees. Interventions that focus on the several levels of action, policies, and environment in which individuals were more successful. A well-maintained workplace program can produce positive health and well-being outcomes despite the level of cultural diversity (Hulls et al., 2022). It has been observed that the mental well-being of employees improves through exposure to nature at the workplace. Encouragement for exercise along with the addition of natural elements stimulates health, performance, and satisfaction with the work. The strategies for sustainability in support of employee relations programs and holistic organizational well-being and productivity were guided by nature exposure networks. (Sadick & Kamardeen ,2020).

H3: “Regular participation in workplace workout sessions is associated with increased employee productivity”

The findings clearly show a positive linear correlation between participation in workplace exercises and productivity. Therefore, regular physical activities can help to promote health, reduce stress, and raise energy levels performance and increased by physical activities on the job. This leads to a more involved, healthier, and productive workforce for the company, so stressing planned workplace fitness programs.

Exercise has a beneficial impact on muscular strength, cardiovascular health, and productivity at work. Due to differences in population and methodology, it was not possible to conduct a thorough analysis of each type of physical exercise. Additionally, because the study did not aim to assess the characteristics of these exercises, there was no economic comparison of the investment because few sources provided such data. Workplace wellness programs that emphasize physical activity have the potential to improve employee health and productivity but to maximize their efficacy and sustainability, more standardization was needed in defining the parameters of physical activity, tracking its effects over time, and comprehending its long-term effects (Castro et al., 2024). Workplace exercise, when strategically introduced before, during, or after working hours, serves to improve attention among employees and thereby reduce unnecessary movements that lead to repetitive strain injuries or work-related musculoskeletal disorders, thereby minimizing procedural errors that could lead to injuries. It also stimulates cognitive function, thus preventing occupational stress

and burnout. The adoption of any workplace exercise programs balances the interests of employees regarding wellness and organizations concerning productivity and minimization of costs due to sick leave (Martinez, 2021).

The office adopted regular movement which fostered the health and performance of employees. In addition, employees were limited by certain barriers such as time constraints and high job demands that hindered them from engaging in physical activity and needed to be resolved. Workplace health promotion finally turned to affect employee health in general and well-being specifically. They showed improved cognitive functions and better health due to physical activity. Hence, the study concludes that increased support of physical activity in the workplace is for the good of employees' health leading to their job performance (Munuo, 2023).

H4: “There is a positive relationship between the frequency of workplace workout sessions and employee engagement and satisfaction”

The study signifies a clear indication regarding a positive relationship between office workouts and employee engagement and satisfaction. Employees who regularly attend workout sessions tend to have better engagement and job satisfaction scores. Routine wellness programming, such as workout sessions, helps in employee wellness, motivation, and overall quality of work performance. Those effective programs create an environment that is much healthier and creates room for productivity at work.

The study emphasizes that training satisfaction and work engagement were key in predicting employee turnover intention. Work engagement mediates the relationship between training satisfaction and turnover; therefore, organizations need training experiences to be improved as a means of retention. While the contributions of the study were important, limitations concerning the sector-specific data, cross-sectional analysis of the data, and cultural influence require more research on industry and area differences (Memon et al., 2016). The study was conducted to analyze the issue of work conditions influencing job satisfaction, life satisfaction and work performance within Slovenian enterprises. The results revealed that while job performance relates positively to job and life satisfaction, it does not take a direct route into well-being the opposite of what earlier studies suggested. This may be because the sample size was quite small, and employees were hesitant to be part of the study due to discomfort or distrust. The study recommended that cohesion should be enhanced and organizational climate improved as it relates to working conditions. Moreover, it is essential that more studies were

conducted on productivity well-being and how relevant remote work is in meeting modern workplace demands (Kosec et al., 2022).

Emphasizing the quality of healthcare services was a factor that employees believe should be taken into consideration when developing strategies that offer stakeholders most especially, employees a competitive advantage and value. Employee engagement, job satisfaction, and perceived service quality were a few important quality drivers. Hospitals were benchmarked against them to determine how connected employees were to their work and environment. Utilizing employees' voluntary work and recognizing their achievements helps healthcare businesses foster a sense of community and dedication, which ultimately improves service quality and organizational effectiveness (Bharath & Sreedevi, 2021).

CHAPTER VI: SUMMARY, IMPLICATIONS AND RECOMMENDATIONS

6.1 Overview

A conclusion is the final part of discussions research papers or arguments that synthesise the most critical points or findings. A conclusion usually summarises the main points while reiterating the significance of the study and may include future recommendations in the last few lines of such conclusions. Therefore, a good conclusion will be remembered in the future when it wraps everything together coherently and powerfully. Workplace workout sessions comprise regular physical fitness or wellness practices that get integrated into the daily movements of employees to achieve a better physical and psychological status (Tomlinson, 2021). These programs are increasingly adopted by various organizations to address modern work-mode challenges which include sedentary lives, workplace stress, and decreased employee engagement rates. They are meant to provide employees with the possibility of physical activity during working hours within their typical working environment contributing to a healthier and more energized workforce.

Workplace workouts sessions are categorized into activities such as yoga, aerobics, strength training, Pilates, mindfulness and corporate fitness programs (Blake, 2013). Such opportunities are provided in organizations to create a better work-life balance, promote good physical health, and develop positive work habits among workers. Moreover, these programs have the potential to alleviate the critical issues confronting workplaces such as stress management, building morale and improving productivity. Such programs give benefits beyond just physical health. Scientific research and experiences in organizations indicate that regular attendance at exercise-generated breaks during the day boosts cognitive function, mood, and energy levels. Physical fitness is positively correlated to lower absenteeism, better problem-solving skills, and increased creativity (DeHaan, 2009). At any point during the workday, an employee can take another active break to reduce mental fatigue and improve concentration and performance.

The success of implementing workplace workout sessions would depend, however, on supportive environments. Organizations are therefore expected to invest in resources like gym facilities, professional trainers, and flexible schedules for the sake of employees' inclusion and accessibility. Motivational factors such as recognition programs, wellness points, or health

insurance benefits are meant to encourage employee participation in the above-mentioned activities. A workplace workout offers infinite advantages, yet some challenges still exist. Factors such as differing levels of fitness, personal preference, time limitations and culture variations can serve as deterrents to participation (Ramalho & Petrica, 2023). Tackling these challenges requires careful planning, consultative input from employees and a commitment to promoting a culture of health and wellness. The companies that can surmount these obstacles and provide effective programs will harvest the long-term advantages of lower healthcare costs, improved employee retention, and better organizational performance.

6.2 Summary of the chapters

Chapter 1: Introduction

This chapter provides an overview of the research by emphasizing the background, context and significance of the study. It elaborates on the research problem and objectives, thereby giving some insights into the significance of the study. This section briefly highlights the scope of the study, the research questions and the objectives. The introduction provides the context for understanding the study's purpose and its significance to the body of knowledge, both academically and practically.

Chapter 2: Literature Review

The literature review aims to delve into earlier studies and theories on the research topic, identifying key trends, gaps and frameworks. It appraises and critiques established knowledge and pinpoints areas requiring further scrutiny. This places the study within the relevant academic framework and rationalizes its research objectives and relevance. This chapter bridges the past findings with a focus on the present study.

Chapter 3: Methodology

This chapter details the research design, population, sampling techniques, and data collection methods. It describes tools and procedures for data analysis and how these align with the concept of the study. Ethical issues and limitations are addressed, which ensure reliability and credibility of the approach. The methodology works as a guide to allow replication of the entire study.

Chapter 4: Results

This chapter presents and comprises results that includes tables, graphs and charts for visual clarity. The data is analyzed and interpreted into patterns, correlations and major trends.

Each result is associated with particular research questions or hypotheses, which provide insight for each part of the aims of the study. The focus is on further understanding and actionability.

Chapter 5: Discussion

The discussion centers on interpreting the results of the study and analyzing their implications relative to the objectives of the research and the existing literature. It reviews how the results confirm or contradict previous work, thus reflecting their relevance and possible utility. This section critically evaluates any unexpected outcomes, highlights limitations, and suggests areas for further exploration. The emphasis remains on placing these findings in a broader context without concluding formally.

6.3 Summary of Findings

6.3.1 Result Based on Demographic Profiles

- In the category of gender of the respondents showed that out of the 385 respondents who were chosen for the study, 225 were male, i.e. 58.4%, and the remaining 160 were female, i.e. 41.6%.
- In the category of age of respondents resulted that of the 385 respondents who were chosen for the study, 65 were under 18 years old or 16.9%; 86 were between 18 and 25 years old or 22.3%; 108 were between 25 and 35 years old or 28.1%; 79 were between 35 and 45 years old or 20.5%; and the remaining 47 were 45 years old and above or 12.2%.
- In the category of designation of the respondents showed that of the 385 respondents who were chosen for the study, 91 were junior staff, or 23.6%; 110 were executive or 28.6%; 101 were mid-level employees or 26.2%; and the remaining 83 were management employees or 21.6%.
- In the category of work schedule of the respondents showed that of the 385 respondents who were chosen for the study, 177 had full-time work schedules or 46.0%; 79 had part-time work schedules or 20.5%; and the remaining 129 had shift-based work schedules or 33.5%.
- In the category of years of experience of respondents defined that of the 385 respondents who were chosen for the study, 111 respondents had less than 1 year of experience or 28.8%; 132 respondents had 1-5 years of experience or 34.3%; 74 respondents had 6-10 years of experience or 19.2%; and the remaining 68 respondents have more than 10 years of experience or 17.7%.

- In the category of location of the respondents, of the 385 respondents who were chosen for the study, 233 respondents were from urban areas, or 60.5%; and the remaining 152 respondents were from rural areas or 39.5%.
- In the category of marital status of the respondents, it was defined that of the 385 respondents who were chosen for the study, 196 respondents were married, or 50.9%; and the remaining 189 respondents were unmarried or 49.1%.

6.3.2 Results Based on Hypothesis

H1: “There is a significant association between regular workplace workout sessions and improvements in employees' physical health.”

- The descriptive statistics indicate that employees who exercise at the workplace report a mean score of 26.28 (SD = 2.95), thereby indicating high and fairly consistent participation among 385 employees. The mean physical health score amounted to 24.55 (SD = 4.44), which is comparatively lower and indicates modest health outcomes with increased variance. These findings suggest that regular workplace exercise programs were among the possible determinants of employee physical health with significantly greater participation strengthening these benefits.
- The results showed that there was a statistically significant positive correlation of regular workplace workout sessions with physical health among employees, as measured by the Pearson correlation coefficient therebetween which has a value of $r = 0.388$, $p < 0.01$. The significance level ($p = .000$) confirms strong evidence of the relationship and rules out random variation. The findings further supported the fact that regular workplace workout sessions have the potential to improve physical health and reduce healthcare costs and productivity losses from ill health while improving overall organizational well-being.

H2: “Workplace workout sessions contribute to improved mental well-being among employees.”

- The hypothesis revealed that workplace work-out sessions explain 37% of the variance in employees' mental well-being ($R^2 = 0.370$) with an R-value of 0.609 indicating a moderate positive correlation. The standard error of estimate is 3.70537, which is the average amount of deviation observed and predicted mental well-being scores. The findings proved that the workplace workout sessions are significantly contributing to mental well-being, while other factors might also contribute. This emphasizes the need for incorporating wellness programs into workplace policies to promote mental health for employees.
- The findings highlighted a significant correlation between workplace workout sessions and employees' mental well-being. The regression model gives statistically significant $F(1,383)$

= 225.335, $p < .001$, indicating that such workout sessions perform a strong prediction on predicting mental well-being. Its regression sum of squares (3093.797) exceeds the residual sum of squares (5258.489), thereby showing that these sessions explain a considerable portion of the variance in mental well-being as such. It suggested that exercise sessions in the workplace could greatly add to the benefits of mental health for employees.

- The study demonstrated a significant positive relationship between workplace workouts and employees' mental well-being. This suggests that each unit increase in workplace fitness involvement increases mental well-being by 0.962 units. The standardized coefficient (Beta = 0.609) confirms these results with a t-value of 15.011 and $p < 0.001$. These findings have profound implications in favor of workplace workout sessions as an effective means of improving the mental well-being of employees.

H3: “Regular participation in workplace workout sessions is associated with increased employee productivity.”

- The hypothesis stated a positive correlation between consistent participation in workplace workout sessions and improved employee productivity. The average workplace workout score based on 385 participants was 26.28 (SD=2.95), while the average productivity scores were 24.64 (SD=4.41). High mean scores indicate that the employees believe these sessions have enhanced their productivity. A low standard deviation for workout sessions indicates a high level of participation in the sessions, while the slightly higher deviation in productivity scores indicates that these sessions may have a varied impact on different individuals.
- The findings demonstrated that a significant positive correlation exists between regular exercise and attendance at workplace fitness sessions, as evidenced by a Pearson correlation coefficient of 0.454 ($p < 0.01$). This correlation further depicts a good connection with employee-reported productivity. These findings also indicated the fact that wellness programs such as workout sessions in workplaces would improve employee performance based on better general well-being, lessening stress levels and boosting energy levels.

H4: “There is a positive relationship between the frequency of workplace workout sessions and employee engagement and satisfaction.”

- The hypothesis showed an average score of 26.28 (SD = 2.95) for workplace workout sessions which indicated that average participation levels by employees were very constant. Employee engagement and satisfaction had an average score of 24.89 (SD = 4.20). These were considered moderate levels of employee engagement and satisfaction. The study

implies that the frequency of workout sessions correlates positively with employee engagement and satisfaction.

- The findings resulted in a positive and significant correlation between an increase in the frequency of workplace workout sessions and employee engagement and job satisfaction (Pearson r , 0.411, $p < 0.01$). With a p -value of 0.000, the association for this correlation is further supported. Based on the results from the 385 surveyed participants, one can conclude that increased frequency of workplace workout sessions enhances employee well-being, fosters increased engagement levels and improves overall job satisfaction, thus highlighting the importance of incorporating these activities regularly into wellness programs.

6.4 Suggestions and Recommendations

- i) **Implement Regular Fitness Programs:** The study should provide structured workplace workout programs that include various options like yoga and aerobics and mindfulness exercises. All programs should provide activities for different levels of fitness to enhance inclusivity and build participation. Flexible scheduling and workout spaces will help enhance participation in workouts without affecting employees' work schedules.
- ii) **Foster a Supportive Environment:** Employers must design an environment that encourages employees to engage in workout sessions. This can be done through programs such as wellness challenges, rewards, or fitness activities for teams. By offering gym facilities, ergonomic training, or virtual access for remote employees, organizations can make it accessible and inclusive for all employees.
- iii) **Promote Health Benefits Awareness:** Organizations should actively train their employees on the physical, mental and professional health benefits of workplace workout sessions to encourage participation. Ongoing communication campaigns, wellness seminars, and stories of success can show employees how wellness sessions can build better health, relieve stress, and increase productivity.
- iv) **Enhance Employee Productivity:** Organizations must attach workout sessions to overall productivity objectives, emphasizing their effects on energy levels, mental performance, and work outcomes. This might include tracking and highlighting gains in employee performance measures, such as lower absenteeism, increased output, or enhanced teamwork through better physical and mental health.
- v) **Address Participation Challenges:** To overcome barriers, such as time constraints and fitness preferences, organizations should provide flexible short workout options. Programs

designed for specific demographic and professional profiles will ensure increased engagement among employees. For example, ergonomic stretches for desk workers or virtual fitness classes for remote staff could better satisfy needs and preferences.

- vi) Integrate Wellness into Organizational Policy:** Workplace workout sessions must be an official organizational policy to underscore their significance and provide longevity. Allowing a special budget for wellness programs offering incentives such as wellness points or rewards and periodically assessing the effect through surveys and productivity rates can provide lasting success and evidence of measurable value for the organization.

6.5 Implications of the study

The study highlighted the serious implications of having workout sessions in the workplace. Regular fitness sessions enhance the physical and mental health of employees and contribute significantly to increased productivity, engagement, and satisfaction. By instituting a culture of well-being in the organizations, they reduce the levels of stress and create high morale among employees to have a healthy workforce that directly affects performance and success in the organization. Furthermore, the positive associations exhibited between workout frequency and some chief indicators such as mental health and job satisfaction point towards the necessity of incorporating wellness initiatives in the top priorities of an organization. The results suggest that workplace fitness programs shall not only benefit the employee but return benefits into the employer in the long run, such as lower rates of absenteeism and increased retention, thus culminating in a highly energized and resilient workplace environment.

6.6 Limitations and Challenges of the Study

- i) Self-Reported Data and Bias:** Self-reported questionnaires and surveys were used in the study to assess employee engagement, mental health, and productivity. However, such data collection methods are susceptible to biases, including social desirability bias, where respondents may feel that it is more acceptable or favorable to answer in a particular way rather than telling the whole truth. These factors could affect the reliability of the findings.
- ii) Limited Generalizability:** The study collected data from 385 participants and this sampling might not represent all industries, job roles or organizational structures. Differences among sectors in workplace culture, management practices and employee demographics could act as moderating variables on the dependent variables, making it harder to generalize the findings to a wider audience.
- iii) Impact of External Variables:** External factors that improve or impair employees' physical or mental well-being, such as personal health habits, family obligations, financial

pressure or external stressors were not considered in the research. These variables can undoubtedly affect the results, making it difficult to attribute all changes directly to the workplace workout sessions.

- iv) Variability in Participation:** While the levels of participation were generally consistent, individual contribution levels in the frequency, intensity and enjoyment of the workout sessions were not explicitly explored. The differences in levels of fitness, motivation and interest among the employees could have impacted the benefits gained through these sessions, yielding diverse results in productivity and satisfaction.
- v) Short-Term Focus:** The study mainly focused on short-term effects and did not track the long-term effects of workplace workout sessions. Whether the changes in well-being, engagement, and productivity observed will last for a long period or if these benefits need further interventions to be maintained could not be determined.
- vi) Logistical and Operational Challenges:** Inadequate consideration was given to practical challenges like time management, accommodating various employee fitness levels and resource availability (space, trainers, or equipment). Such dimensions have substantial implications for exercise program feasibility and effectiveness in distinct workplace scenarios in organizations facing financial constraints or high workloads.

6.7 Future scope of the study

- i) Impact of Personalized Programs:** Research can explore the effectiveness of personalized fitness programs depending on the various personalized needs, interests and levels of fitness of an employee, thus aiding any organization in promoting more inclusive and relevant health initiatives.
- ii) Exploration of Non-Physical Activities:** Further research could examine the incorporation of other wellness activities such as mindfulness training, meditation or stress management workshops and their effects on employee well-being and performance.
- iii) Technology Integration:** Future studies would include the inclusion of digital tools, for instance fitness apps, wearable devices or virtual workout sessions which might be a great facilitator to employee involvement and engagement, especially hybrid or remote working situations.
- iv) Cost-Benefit Analysis:** Further study can involve the economic assessment of workplace exercise programs by examining their effect on healthcare costs, absenteeism and employee turnover to estimate their return on investment to the organization.

- v) **Investigating Barriers to Participation:** Future studies can explore other barriers, like time, culture or disinterest, that may restrict the employees' involvement in workout programs. This will guide organizations to overcome those barriers and make programs more accessible and inclusive.
- vi) **Incorporating Psychological Measures:** The study can include detailed psychological measures, such as stress levels, resilience and emotional well-being, which can provide a more comprehensive understanding of the mental health benefits associated with workplace workout sessions.

6.8 Conclusion

In conclusion, this study demonstrates that regular workplace workout sessions significantly enhance employee physical health, mental well-being, productivity, engagement, and job satisfaction. The integration of fitness programs into daily work routines addresses modern workplace challenges such as stress, sedentary behavior, and low morale, while also contributing to a healthier organizational culture. Despite some participation barriers and contextual limitations, the findings affirm the value of structured, inclusive, and well-supported wellness initiatives. Organizations that prioritize such interventions are likely to benefit from improved employee performance, reduced absenteeism, and stronger retention, ultimately fostering a more resilient and energized workforce.

REFERENCES

- Abdin, S., Welch, R.K., Byron-Daniel, J. and Meyrick, J., 2018. The effectiveness of physical activity interventions in improving well-being across office-based workplace settings: a systematic review. *Public Health*, 160, pp.70–76.
- Adjerid, I., Loewenstein, G., Purta, R. and Striegel, A., 2022. Gain-loss incentives and physical activity: the role of choice and wearable health tools. *Management Science*, 68(4), pp.2642–2667.
- AGARWAL, P., 2021. *A study of work life balance of corporate women employees in Delhi NCR* (Doctoral dissertation, Doctoral Dissertation, Shri Jagdishprasad Jhabarmal Tibrewala University).
- Allan, J.L., Querstret, D., Banas, K. and de Bruin, M., 2016. Environmental interventions for altering eating behaviours of employees in the workplace: a systematic review. *Obesity Reviews*, 18, pp.214–226.
- Almerri, H.S.H., 2023. Investigating the impact of organizational culture on employee retention: Moderating role of employee engagement. *Journal of System and Management Sciences*, 13(4), pp.488–507.
- Amaya, M., Donegan, T., Conner, D., Edwards, J. and Gipson, C., 2019. Creating a culture of wellness: A call to action for higher education, igniting change in academic institutions. *Building Healthy Academic Communities Journal*, 3(2).
- Ammendolia, C., Côté, P., Cancelliere, C., Cassidy, J.D., Hartvigsen, J., Boyle, E. and Amick, B., 2016. Healthy and productive workers: using intervention mapping to design a workplace health promotion and wellness program to improve presenteeism. *BMC Public Health*, 16(1), pp.1–18.
- Andreasson, J. and Johansson, T., 2014. The fitness revolution: Historical transformations in the global gym and fitness culture. *Sport Science Review*, 23, pp.111–191.
- Arazi, H., Asadi, A., Aziri, H., Asadi, A., Arazi, H., Asadi, A. and Asadi, A., 2011. Effects of 8 weeks equal-volume resistance training with different workout frequency on maximal strength, endurance and body composition. *Int J Sports Sci Eng*, 5(2), pp.112-8.
- Au, C.Y., Sng, C.M.N., Heng, J., Nguyen, T.T., Yeo, J.C. and Bhagat, A.A.S., 2025. Gamifying Resistance Training with Wearable Sensors. *Sensors*, 25(9), p.2662.

- Baechle, T.R., 2008. *Essentials of strength training and conditioning*. 2nd ed. Human Kinetics.
- Bai, Z., Xu, C., Ailikamujiang, A., & Sun, Y., 2025. The dark side of gamification: an experimental study on digital fitness apps. *Kybernetes*, 54(15), 7842-7867.
- Baicker, K., Cutler, D.M. and Song, Z., 2010. *Workplace wellness programs can generate savings. Health Affairs*, 29(2), pp.304–311.
- Bajaj, K.K., 2023. Mental health support programs in the workplace and their effect on employee well-being and productivity. *Tuijin Jishu/Journal of Propulsion Technology*.
- Bakker, A.B. and de Vries, J.D., 2021. *Job Demands–Resources theory and self-regulation: New explanations and remedies for job burnout. Anxiety, Stress and Coping*, 34(1), pp.1–21.
- Bandyopadhyay, G., 2018. *Determinants of psychological well-being and its impact on mental health*. In: *Issues on Health and Healthcare in India: Focus on the North Eastern Region*, pp.53–95.
- Barbier, M., Hansez, I., Chmiel, N. and Demerouti, E., 2013. *Performance expectations, personal resources, and job resources: How do they predict work engagement? European Journal of Work and Organizational Psychology*, 22(6), pp.750–762.
- Bartelme, V., 2014. *The effect of using a workplace fitness center on employees' nutrition and fitness behaviors*.
- Bartlett, M.J., Arslan, F.N., Bankston, A. and Sarabipour, S., 2021. Ten simple rules to improve academic work–life balance. *PLoS Computational Biology*, 17.
- Bauman, A., Chau, J., Engelen, L., Fedel, K., Do, A., Kingham, M. and Sukala, W., 2016. More standing and just as productive: Effects of a sit-stand desk intervention on call center workers' sitting, standing, and productivity at work in the Opt to Stand pilot study. *Unpublished manuscript*.
- Baxter, S., Campbell, S., Sanderson, K., Cazaly, C., Venn, A., Owen, C. and Palmer, A.J., 2015. *Development of the Workplace Health Savings Calculator: a practical tool to measure economic impact from reduced absenteeism and staff turnover in workplace health promotion. BMC Research Notes*, 8, pp.1–12.

- Beehr, T.A. and Newman, J.E., 1978. *Job stress, employee health, and organizational effectiveness: A facet analysis, model, and literature review*. *Personnel Psychology*, 31(4), pp.665–699.
- Benjak, T., 2012. Walk your way to health: October 15 – World Walking Day. *Croatian Medical Journal*, 53, pp.507–508.
- Bensa, K. and Širok, K., 2023. Is it time to re-shift the research agenda? A scoping review of participation rates in workplace health promotion programs. *International Journal of Environmental Research and Public Health*, 20.
- Berry, L.L., Mirabito, A.M. and Baun, W.B., 2010. What's the hard return on employee wellness programs? *ORG: Transformational Leadership (Topic)*.
- Betthausen, L.M., Stearns-Yoder, K.A., McGarity, S., Smith, V., Place, S. and Brenner, L.A., 2020. *Mobile app for mental health monitoring and clinical outreach in veterans: mixed methods feasibility and acceptability study*. *Journal of Medical Internet Research*, 22(8), e15506.
- Bharath, M. and Sreedevi, V., 2021. *Zoom in on the levels of employee engagement, perception, satisfaction; employee roles influenced–health care sample study*. *Vilakshan-XIMB Journal of Management*, 18(1), pp.62–75.
- Bhui, K., Dinos, S., Galant-Miecznikowska, M., de Jongh, B. and Stansfeld, S., 2016. *Perceptions of work stress causes and effective interventions in employees working in public, private and non-governmental organisations: a qualitative study*. *BJPsych Bulletin*, 40(6), pp.318–325.
- Biddle, S. and Goudas, M., 1996. Analysis of children's physical activity and its association with adult encouragement and social cognitive variables. *Journal of School Health*, 66(2), pp.75-78.
- Biswas, J., Hasan, M.N., Gazi, M.S.R. and Rahman, M.M., 2025. Enhancing mental well-being: An artificial intelligence model for predicting mental disorders. *Array*, 26, p.100417.
- Blagov, E., Simeonova, B. and Bogolyubov, P., 2013, July. Motivating the adoption and usage of corporate web 2.0 systems using fitness gamification practices. In *2013 IEEE 15th Conference on Business Informatics*. pp. 420-427. IEEE.

- Blake, H., Zhou, D. and Batt, M.E., 2013. Five-year workplace wellness intervention in the NHS. *Perspectives in Public Health*, 133(5), pp.262–271.
- Bortolotti, T., Boscari, S. and Danese, P., 2015. *Successful lean implementation: Organizational culture and soft lean practices. International Journal of Production Economics*, 160, pp.182–201.
- Boutcher, S.H., 2011. High-intensity intermittent exercise and fat loss. *Journal of Obesity*, 2011(1), p.868305.
- Bowne, D.W., Russell, M.L., Morgan, J., Optenberg, S.A. and Clarke, A.E., 1984. Reduced disability and health care costs in an industrial fitness program. *Journal of Occupational Medicine: Official Publication of the Industrial Medical Association*, 26(11), pp.809–816.
- Boyne, P., Welge, J., Kissela, B. and Dunning, K., 2017. *Factors influencing the efficacy of aerobic exercise for improving fitness and walking capacity after stroke: a meta-analysis with meta-regression. Archives of Physical Medicine and Rehabilitation*, 98(3), pp.581–595.
- Brady, A., 2011. *The role of self-efficacy and possible selves as related to personal goals in an employee wellness program*. East Carolina University.
- Bravata, D.M., Smith-Spangler, C., Sundaram, V., Gienger, A.L., Lin, N., Lewis, R., ... and Sirard, J.R., 2007. Using pedometers to increase physical activity and improve health: a systematic review. *JAMA*, 298(19), pp.2296–2304.
- Bredahl, T.V.G., Særvoll, C.A., Kirkelund, L., Sjøgaard, G. and Andersen, L.L., 2015. When intervention meets organisation, a qualitative study of motivation and barriers to physical exercise at the workplace. *The Scientific World Journal*, 2015(1), p.518561.
- Bretland, R.J. and Thorsteinsson, E.B., 2015. *Reducing workplace burnout: The relative benefits of cardiovascular and resistance exercise. PeerJ*, 3, e891.
- Brinkley, A., McDermott, H., Grenfell-Essam, R. and Munir, F., 2017. *It's time to start changing the game: a 12-week workplace team sport intervention study. Sports Medicine—Open*, 3(1), pp.1–11.
- Brown, S.L. and Brown, R.M., 2015. Connecting prosocial behavior to improved physical health: Contributions from the neurobiology of parenting. *Neuroscience & Biobehavioral Reviews*, 55, pp.1-17.

- Brownson, R.C., Baker, E.A., Deshpande, A.D. and Gillespie, K.N., 2018. *Evidence-based public health*. Oxford University Press.
- Bungum, T.J., Orsak, K.C. and Chng, C.L., 1997. Factors affecting exercise adherence at a worksite wellness program. *American Journal of Health Behavior*, 21(1).
- Burn, N.L., Norton, L., Drummond, C. and Norton, K.I., 2017. Changes in physical activity behaviour and health risk factors following a randomised controlled pilot workplace exercise intervention. *AIMS Public Health*, 4, pp.189–201.
- Burton, W.N., McCalister, K.T., Chen, C. and Edington, D.W., 2005. The association of health status, worksite fitness center participation, and two measures of productivity. *Journal of Occupational and Environmental Medicine*, 47, pp.343–351.
- Busse, C., Kach, A.P. and Wagner, S.M., 2017. *Boundary conditions: What they are, how to explore them, why we need them, and when to consider them*. *Organizational Research Methods*, 20(4), pp.574–609.
- Butler, C.E., Clark, B.R., Burlis, T.L., Castillo, J.C. and Racette, S.B., 2015. *Physical activity for campus employees: a university worksite wellness program*. *Journal of Physical Activity and Health*, 12(4), pp.470–476.
- Calderwood, C., ten Brummelhuis, L.L., Patel, A.S., Watkins, T., Gabriel, A.S. and Rosen, C.C., 2021. Employee physical activity: A multidisciplinary integrative review. *Journal of Management*, 47(1), pp.144–170.
- Calley, N.G., 2010. *Program development in the 21st century: An evidence-based approach to design, implementation, and evaluation*. Sage Publications.
- Cancelliere, C., Cassidy, J.D., Ammendolia, C. and Côté, P., 2011. Are workplace health promotion programs effective at improving presenteeism in workers? A systematic review and best evidence synthesis of the literature. *BMC Public Health*, 11, pp.1–11.
- Cao, Y., Bunger, A.C., Hoffman, J. and Robertson, H.A., 2016. Change communication strategies in public child welfare organizations: Engaging the front line. *Human Service Organizations: Management, Leadership & Governance*, 40(1), pp.37–50.
- Castro, R.E.A., Quillca, R.N.R., Alegre, L.R.R., Padilla, R.D.P.L. and Egúzquiza-Rodríguez, M.J., 2024. Impact of physical activity-based workplace wellness programs on improving worker productivity and health. *Chemical Engineering Transactions*, 111, pp.601–606.

- Chaturvedi, S. and Rathore, A.S., 2021. Virtual wellness program for employees during pandemic COVID-19. *International Journal of Recent Advances in Multidisciplinary Topics*, 2(6), pp.218–221.
- Chau, J.Y., Engelen, L., Kolbe-Alexander, T., Young, S., Olsen, H., Gilson, N. and Brown, W.J., 2019. “In Initiative Overload”: Australian perspectives on promoting physical activity in the workplace from diverse industries. *International Journal of Environmental Research and Public Health*, 16(3), p.516.
- Chernoff, R., 2020. *Wellness interventions in the workplace*.
- Chu, A.H., Koh, D., Moy, F.M. and Müller-Riemenschneider, F., 2014. Do workplace physical activity interventions improve mental health outcomes? *Occupational Medicine*, 64(4), pp.235–245.
- Chu, C., Driscoll, T. and Dwyer, S., 1997. The health–promoting workplace: an integrative perspective. *Australian and New Zealand Journal of Public Health*, 21(4), pp.377–385.
- Chung, C.F., Gorm, N., Shklovski, I.A. and Munson, S., 2017. Finding the right fit: Understanding health tracking in workplace wellness programs. In: *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, pp.4875–4886.
- Clark, A.D., 2008. The new frontier of wellness. *Benefits Quarterly*, 24(2), pp.23–28.
- Cloninger, C.R., 2006. The science of well-being: an integrated approach to mental health and its disorders. *World psychiatry*, 5(2), p.71.
- Conn, V.S., Hafdahl, A.R., Cooper, P.S., Brown, L.M. and Lusk, S.L., 2009. Meta-analysis of workplace physical activity interventions. *American Journal of Preventive Medicine*, 37(4), pp.330–339.
- Conrad, P. and Walsh, D.C., 1992. The new corporate health ethic: Lifestyle and social control of work. *International Journal of Health Services*, 22, pp.111–189.
- Cooke, R.A. and Rousseau, D.M., 1988. Behavioral norms and expectations: A quantitative approach to the assessment of organizational culture. *Group & Organization Studies*, 13(3), pp.245–273.
- Corley, A., Hammond, N.E. and Fraser, J.F., 2010. The experiences of health care workers employed in an Australian intensive care unit during the H1N1 Influenza pandemic of

2009: a phenomenological study. *International Journal of Nursing Studies*, 47(5), pp.577–585.

Coulson, J.C., McKenna, J. and Field, M., 2008. Exercising at work and self-reported work performance. *International Journal of Workplace Health Management*, 1(3), pp.176–197.

Coulson, J.C., McKenna, J. and Field, M., 2008. Exercising at work and self-reported work performance. *International Journal of Workplace Health Management*, 1(3), pp.176–197.

Crause O' Brien, R., 1995. Employee involvement in performance improvement: a consideration of tacit knowledge, commitment and trust. *Employee Relations*, 17(3), pp.110–120.

Dabkowski, E., Porter, J.E., Barbagallo, M., Prokopiv, V., Snell, C. and Missen, K., 2023. A systematic literature review of workplace physical activity programs: an exploration of barriers and enabling factors. *Cogent Psychology*, 10(1), p.2186327.

Dalleck, L.C. and Kravitz, L., 2002. The history of fitness: From primitive to present times, how fitness has evolved and come of age. *IDEA Health & Fitness Source*, 20(1), pp.26-34.

Dangelmaier, M., Bauer, W., Vocke, C. and Melcher, V., 2015. Work and workout-how to introduce healthy workload at workplaces. *Procedia Manufacturing*, 3, pp.4971-4977.

Danna, K. and Griffin, R.W., 1999. Health and well-being in the workplace: A review and synthesis of the literature. *Journal of Management*, 25(3), pp.357–384.

Daraojimba, R.E., Elufioye, O.A., Ndubuisi, N.L., Awonuga, K.F., Omolara, L. and Asuzu, O.F., 2024. Reviewing employee well-being and mental health initiatives in contemporary HR practices. *International Journal of Science and Research Archive*.

Datta, R. and Henry, M., 2006. Lactic acid: recent advances in products, processes and technologies—a review. *Journal of Chemical Technology & Biotechnology: International Research in Process, Environmental & Clean Technology*, 81(7), pp.1119–1129.

De Bloom, J., Sianoja, M., Korpela, K., Tuomisto, M., Lilja, A., Geurts, S. and Kinnunen, U., 2017. Effects of park walks and relaxation exercises during lunch breaks on recovery from job stress: Two randomized controlled trials. *Journal of Environmental Psychology*, 51, pp.14–30.

De Jong, J.P. and Den Hartog, D.N., 2007. How leaders influence employees' innovative behaviour. *European Journal of Innovation Management*, 10(1), pp.41–64.

- Deci, E.L. and Ryan, R.M., 2012. Self-determination theory. In: *Handbook of Theories of Social Psychology*, 1(20), pp.416–436.
- DeHaan, R.L., 2009. Teaching creativity and inventive problem solving in science. *CBE—Life Sciences Education*, 8(3), pp.172–181.
- Del Pozo-Cruz, B., del Pozo-Cruz, J., Adsuar, J.C., Parraca, J. and Gusi, N., 2013. Reanalysis of a tailored web-based exercise programme for office workers with sub-acute low back pain: assessing the stage of change in behaviour. *Psychology, Health & Medicine*, 18(6), pp.687–697.
- Delgado-Serrano, M.M., Melichová, K., Mac Fadden, I. and Cruz-Piedrahita, C., 2024. Perception of green spaces' role in enhancing mental health and mental well-being in small and medium-sized cities. *Land Use Policy*, 139, p.107087.
- Demou, E., MacLean, A., Cheripelli, L.J., Hunt, K. and Gray, C.M., 2018. Group-based healthy lifestyle workplace interventions for shift workers: a systematic review. *Scandinavian Journal of Work, Environment & Health*, 44(6), p.568.
- Díaz-Benito, V.J., Moro, M.I.B., Vanderhaegen, F., Remón, Á.L.C., Lozano, J.A.S., Fernández-Pola, E.C. and Pérez, J.P.H., 2022. Intervention of physical exercise in the workplace on work ability, depression, anxiety and job satisfaction in workers with sedentary tasks. *Work*, 72(3), pp.921–931.
- Drannan, J.D., 2016. The relationship between physical exercise and job performance: the mediating effects of subjective health and good mood. Doctoral dissertation. Bangkok University.
- Duggleby, W., Cooper, D. and Penz, K., 2009. Hope, self-efficacy, spiritual well-being and job satisfaction. *Journal of Advanced Nursing*, 65(11), pp.2376–2385.
- Eather, N., Babic, M., Riley, N., Harris, N., Jung, M., Jeffs, M., Barclay, B. and Lubans, D.R., 2020. Integrating high-intensity interval training into the workplace: The Work-HIIT pilot RCT. *Scandinavian journal of medicine & science in sports*, 30(12), pp.2445-2455.
- Eddington, I., 2006. An historical explanation of the development of occupational health and safety and the important position it now occupies in society. In: *Proceedings of the 1st Queensland Safety Forum (AEC 2006)*.

- Elavsky, S. and McAuley, E., 2007. Exercise and self-esteem in menopausal women: a randomized controlled trial involving walking and yoga. *American Journal of Health Promotion*, 22(2), pp.83–92.
- Elbe, A.M., Barene, S., Strahler, K., Krustup, P. and Holtermann, A., 2016. Experiencing flow in a workplace physical activity intervention for female health care workers: A longitudinal comparison between football and Zumba. *Women in Sport and Physical Activity Journal*, 24(1), pp.70–77.
- Emerson, N.D., Merrill, D.A., Shedd, K., Bilder, R.M. and Siddarth, P., 2017. Effects of an employee exercise programme on mental health. *Occupational Medicine*, 67(2), pp.128–134.
- Ensari, I., Sandroff, B.M. and Motl, R.W., 2016. Effects of single bouts of walking exercise and yoga on acute mood symptoms in people with multiple sclerosis. *International Journal of MS Care*, 18(1), pp.1–8.
- Etemadi, M., Shameli, K., Hassan, N.A., Zakaria, Z., Khairudin, N.B.B.A. and Hara, H., 2016. A review of the importance of physical fitness to company performance and productivity. *American Journal of Applied Sciences*, 13(11), pp.1104–1118.
- Fabius, R. and Phares, S., 2021. Companies that promote a culture of health, safety, and wellbeing outperform in the marketplace. *Journal of Occupational and Environmental Medicine*, 63(6), pp.456–461.
- Fadare, S., Gulanes, A., De la Cruz Torres, J., Guiao, E.M.N. and Tagaylo, J.P., 2024. Enhancing physical activity through information technology: current trends and future directions. *Salud, Ciencia y Tecnología*.
- Fang, Y.Y., Huang, C.Y. and Hsu, M.C., 2019. Effectiveness of a physical activity program on weight, physical fitness, occupational stress, job satisfaction and quality of life of overweight employees in high-tech industries: a randomized controlled study. *International Journal of Occupational Safety and Ergonomics*, 25(4), pp.621–629.
- Feldiansyah, F., 2024. Analysis of corporate communication strategies in enhancing company image. *PERSPEKTIF*.
- Feuerhahn, N., Sonnentag, S. and Woll, A., 2014. Exercise after work, psychological mediators, and affect: A day-level study. *European Journal of Work and Organizational Psychology*, 23(1), pp.62–79.

- Fjeldsoe, B., Neuhaus, M., Winkler, E. and Eakin, E., 2011. Systematic review of maintenance of behaviour change following physical activity and dietary interventions. *Health Psychology*, 30(1), pp.99.
- Fliess, S. and Volkers, M., 2020. Trapped in a service encounter: Exploring customer lock-in and its effect on well-being and coping responses during service encounters. *Journal of Service Management*, 31(1), pp.79–114.
- Flynn, J.P., Gascon, G., Doyle, S., Matson Koffman, D.M., Saringer, C., Grossmeier, J., Tivnan, V. and Terry, P., 2018. Supporting a culture of health in the workplace: a review of evidence-based elements. *American Journal of Health Promotion*, 32(8), pp.1755–1788.
- Follmer, K.B. and Jones, K.S., 2018. Mental illness in the workplace: An interdisciplinary review and organizational research agenda. *Journal of Management*, 44(1), pp.325–351.
- Franco, L.M., Bennett, S. and Kanfer, R., 2002. Health sector reform and public sector health worker motivation: A conceptual framework. *Social Science & Medicine*, 54(8), pp.1255–1266.
- Friis, R.H., 2015. *Occupational health and safety for the 21st century*. Jones & Bartlett Publishers.
- Garber, C.E., Blissmer, B., Deschenes, M.R., Franklin, B.A., Lamonte, M.J., Lee, I.M., ... and Swain, D.P., 2011. Quantity and quality of exercise for developing and maintaining cardiorespiratory, musculoskeletal, and neuromotor fitness in apparently healthy adults: Guidance for prescribing exercise. *Medicine & Science in Sports & Exercise*, 43(7), pp.1334–1359.
- Garne-Dalgaard, A., Mann, S., Bredahl, T.V.G. and Stochkendahl, M.J., 2019. Implementation strategies, and barriers and facilitators for implementation of physical activity at work: a scoping review. *Chiropractic & Manual Therapies*, 27(1), pp.1–13.
- Gauci, C., 2013. *Physical activity and mental well-being*.
- Gea Cabrera, A., Caballero, P., Wanden-Berghe, C., Sanz-Lorente, M. and López-Pintor, E., 2021. Effectiveness of workplace-based diet and lifestyle interventions on risk factors in workers with metabolic syndrome: a systematic review, meta-analysis and meta-regression. *Nutrients*, 13(12), p.4560.
- Gebhardt, D.L. and Crump, C.E., 1990. Employee fitness and wellness programs in the workplace. *The American Psychologist*, 45(2), pp.262–272.

Gehlich, K.H., Beller, J., Lange-Asschenfeldt, B., Köcher, W., Meinke, M.C. and Lademann, J., 2020. Consumption of fruits and vegetables: improved physical health, mental health, physical functioning and cognitive health in older adults from 11 European countries. *Aging & Mental Health*, 24(4), pp.634-641.

Genin, P.M., Degoutte, F., Finaud, J., Pereira, B., Thivel, D. and Duclos, M., 2017. Effect of a 5-month worksite physical activity program on tertiary employees overall health and fitness. *Journal of Occupational and Environmental Medicine*, 59(2), pp.e3–e10.

Getman, A.P., Yaroshenko, O.M., Demenko, O.I., Lutsenko, O.Y. and Prokopiev, R.Y., 2024. Gamification for staff motivation: Impact on work efficiency and corporate culture at the international level. *Journal of Economics and Management*, 46(1), pp.274-299.

Gipson, C., Mutchler, J. and Mallhi, A., 2023. Elementary school teachers' development of a sense of community in the workplace through the participation in a fitness and mindfulness program: Direct original research. *Research Directs in Health Sciences*, 3(1).

Gjestvang, C., Stensrud, T., Paulsen, G. and Haakstad, L.A., 2021. Stay true to your workout: does repeated physical testing boost exercise attendance? A one-year follow-up study. *Journal of Sports Science & Medicine*, 20(1), p.35.

Gobbo, S., Bullo, V., Bergamo, M., Duregon, F., Vendramin, B., Battista, F., ... and Bergamin, M., 2019. Physical exercise is confirmed to reduce low back pain symptoms in office workers: A systematic review of the evidence to improve best practices in the workplace. *Journal of Functional Morphology and Kinesiology*, 4(3), p.43.

Goetzel, R.Z. and Ozminkowski, R.J., 2008. The health and cost benefits of work site health-promotion programs. *Annual Review of Public Health*, 29, pp.303–323.

Goetzel, R.Z., Henke, R.M., Tabrizi, M., Pelletier, K.R., Loeppke, R., Ballard, D.W., ... and Metz, R.D., 2014. Do workplace health promotion (wellness) programs work? *Journal of Occupational and Environmental Medicine*, 56(9), pp.927–934.

Goetzel, R.Z., Ozminkowski, R.J., Bowen, J. and Tabrizi, M.J., 2008. Employer integration of health promotion and health protection programs. *International Journal of Workplace Health Management*, 1(2), pp.109–122.

Goetzel, R.Z., Ozminkowski, R.J., Sederer, L.I. and Mark, T.L., 2002. The business case for quality mental health services: Why employers should care about the mental health and

well-being of their employees. *Journal of Occupational and Environmental Medicine*, pp.320–330.

Gough, D., 2007. Weight of evidence: A framework for the appraisal of the quality and relevance of evidence. *Research Papers in Education*, 22(2), pp.213–228.

Grande, A.J., Silva, V. and Parra, S.A., 2014. Effectiveness of exercise at workplace in physical fitness: uncontrolled randomized study. *Einstein (Sao Paulo)*, 12(1), pp.55–60.

Gray, J., 2023. *The philosophy of exercise professional education*. Doctoral dissertation. University of Gloucestershire.

Griffiths, A., 1996. The benefits of employee exercise programmes: a review. *Work & Stress*, 10(1), pp.5–23.

Grimani, A., Aboagye, E. and Kwak, L., 2019. The effectiveness of workplace nutrition and physical activity interventions in improving productivity, work performance and workability: A systematic review. *BMC Public Health*, 19, pp.1–12.

Grol, R., 2001. Successes and failures in the implementation of evidence-based guidelines for clinical practice. *Medical Care*, 39(8), pp.II46–II54.

Grover, A. and Singh, R.B., 2019. Health policy, programmes and initiatives. In: *Urban Health and Wellbeing*, pp.251–266.

Grzyb, K., Candow, D.G., Schoenfeld, B.J., Bernat, P., Butchart, S. and Neary, J.P., 2022. Effect of equal volume, high-repetition resistance training to volitional fatigue, with different workout frequencies, on muscle mass and neuromuscular performance in postmenopausal women. *The Journal of Strength & Conditioning Research*, 36(1), pp.31–36.

Gubler, T., Larkin, I. and Pierce, L., 2018. Doing well by making well: The impact of corporate wellness programs on employee productivity. *Management Science*, 64(11), pp.4967–4987.

Hartfiel, N., Havenhand, J., Khalsa, S.B., Clarke, G. and Krayner, A., 2011. The effectiveness of yoga for the improvement of well-being and resilience to stress in the workplace. *Scandinavian Journal of Work, Environment & Health*, pp.70–76.

- Herbert, C., Meixner, F., Wiebking, C. and Gilg, V., 2020. Regular physical activity, short-term exercise, mental health, and well-being among university students: The results of an online and a laboratory study. *Frontiers in Psychology*, 11, p.509.
- Heuse, S., Gekeler, B. and Fodor, D., 2021. The role of physical exercise as a personal resource against job stress. *International Journal of Occupational Safety and Ergonomics*, 27(4), pp.1251–1260.
- Hodgins, M., Fleming, P. and Griffiths, J., 2017. *Promoting health and well-being in the workplace: Beyond the statutory imperative*. Bloomsbury Publishing.
- Hoff, J. and Helgerud, J., 2004. Endurance and strength training for soccer players: physiological considerations. *Sports Medicine*, 34, pp.165–180.
- Holman, D., Johnson, S. and O'Connor, E., 2018. Stress management interventions: Improving subjective psychological well-being in the workplace. In: *Handbook of Well-being*. DEF Publishers.
- Horwitz, J.R., Kelly, B.D. and DiNardo, J.E., 2013. Wellness incentives in the workplace: Cost savings through cost shifting to unhealthy workers. *Health Affairs*, 32(3), pp.468–476.
- Hosker, D.K., Elkins, R.M. and Potter, M.P., 2019. Promoting mental health and wellness in youth through physical activity, nutrition, and sleep. *Child and Adolescent Psychiatric Clinics*, 28(2), pp.171–193.
- Huang, H., Mattke, S., Batorsky, B., Miles, J., Liu, H. and Taylor, E., 2016. Incentives, program configuration, and employee uptake of workplace wellness programs. *Journal of Occupational and Environmental Medicine*, 58(1), pp.30–34.
- Hulls, P.M., Richmond, R.C., Martin, R.M., Chavez-Ugalde, Y. and de Vocht, F., 2022. Workplace interventions that aim to improve employee health and well-being in male-dominated industries: a systematic review. *Occupational and Environmental Medicine*, 79(2), pp.77–87.
- Hulsey, N., 2019. Gamified Health and Bodies. In *Games in Everyday Life: For Play* (pp. 137-159). Emerald Publishing Limited.
- Hunter, J.R., Gordon, B.A., Bird, S.R. and Benson, A.C., 2018. Perceived barriers and facilitators to workplace exercise participation. *International Journal of Workplace Health Management*, 11(5), pp.349–363.

Imamura, K., Kawakami, N., Inoue, A., Shimazu, A., Tsutsumi, A., Takahashi, M. and Totsuzaki, T., 2016. Work engagement as a predictor of onset of major depressive episode (MDE) among workers, independent of psychological distress: A 3-year prospective cohort study. *PLOS ONE*, 11(2), e0148157.

Jackson, S., 2022. *Communication and job satisfaction: The impact on team building and employee turnover in Philadelphia, Pennsylvania*. Doctoral dissertation. Colorado Technical University.

Jakobsen, M.D., Sundstrup, E., Brandt, M. and Andersen, L.L., 2017. Psychosocial benefits of workplace physical exercise: Cluster randomized controlled trial. *BMC Public Health*, 17, pp.1–8.

Jakobsen, M.D., Sundstrup, E., Brandt, M., Jay, K., Aagaard, P. and Andersen, L.L., 2015. Physical exercise at the workplace prevents deterioration of work ability among healthcare workers: Cluster randomized controlled trial. *BMC Public Health*, 15, pp.1–9.

James, E.P. and Zoller, H.M., 2018. Resistance training:(Re) shaping extreme forms of workplace health promotion. *Management Communication Quarterly*, 32(1), pp.60-89.

Jemmott, J.B., Jemmott, L.S., Ngwane, Z., Zhang, J., Heeren, G.A., Icard, L.D. and Carty, C., 2014. Theory-based behavioral intervention increases self-reported physical activity in South African men: A cluster-randomized controlled trial. *Preventive Medicine*, 64, pp.114–120.

Jindo, T., Kai, Y., Kitano, N., Tsunoda, K., Nagamatsu, T. and Arao, T., 2020. Relationship of workplace exercise with work engagement and psychological distress in employees: A cross-sectional study from the MYLS study. *Preventive Medicine Reports*, 17, p.101030.

Johan, A., Kekalih, A., Purwito Adi, N., Roestam, A.W. and Soemarko, D.S., 2023. The effect of physical training program for fitness improvement on sickness absence of workers at a chemical company in Indonesia. *Occupational and Environmental Medicine Journal of Indonesia*, 1(1), p.6.

Johnson, S.S., 2017. The art of health promotion. *American Journal of Health Promotion*, 31, pp.353–366.

Jones, A.M. and Carter, H., 2000. The effect of endurance training on parameters of aerobic fitness. *Sports medicine*, 29(6), pp.373-386.

- Jones, D., Molitor, D. and Reif, J., 2018. What do workplace wellness programs do? Evidence from the Illinois Workplace Wellness Study. *Health Economics eJournal*.
- Jones, D., Molitor, D. and Reif, J., 2019. What do workplace wellness programs do? Evidence from the Illinois workplace wellness study. *The Quarterly Journal of Economics*, 134(4), pp.1747-1791.
- Jordan, B., 2009. Blurring boundaries: The “real” and the “virtual” in hybrid spaces. *Human organization*, 68(2), pp.181-193.
- Joyce, D. and Lewindon, D., eds., 2014. *High-performance training for sports*. Human Kinetics.
- Jung, S. and Cha, Y., 2013. Wellness in the workplace: Health promotion programs.
- Jurca, R.A.D.I.M., Lamonte, M.J., Barlow, C.E., Kampert, J.B., Church, T.S. and Blair, S.N., 2005. Association of muscular strength with incidence of metabolic syndrome in men. *Medicine and Science in Sports and Exercise*, 37(11), p.1849.
- Kahn, E.B., Ramsey, L.T., Brownson, R.C., Heath, G.W., Howze, E.H., Powell, K.E. and Corso, P., 2002. The effectiveness of interventions to increase physical activity: A systematic review. *American Journal of Preventive Medicine*, 22(4), pp.73–107.
- Kappen, D.L., Mirza-Babaei, P. and Nacke, L.E., 2020. Technology facilitates physical activity through gamification: a thematic analysis of an 8-week study. *Frontiers in Computer Science*, 2, p.530309.
- Karatrantou, K., Batatolis, C., Chatzigiannis, P., Vasilopoulou, T., Melissopoulou, A., Ioakimidis, P. and Gerodimos, V., 2023. An enjoyable workplace combined exercise program for health promotion in trained employees: yoga, pilates, and circuit strength training. *Sports*, 11(4), p.84.
- Karatrantou, K., Gerodimos, V., Manouras, N., Vasilopoulou, T., Melissopoulou, A., Mesiakaris, A.F. and Theodorakis, Y., 2020. Health-promoting effects of a concurrent workplace training program in inactive office workers (HealPWorkers): A randomized controlled study. *American Journal of Health Promotion*, 34(4), pp.376–386.
- Kari, T., Kettunen, E., Moilanen, P. and Frank, L., 2017. Wellness technology use in everyday life: A diary study. *Bled eConference*.

- Kawabata, M. and Mallett, C.J., 2011. Flow experience in physical activity: Examination of the internal structure of flow from a process-related perspective. *Motivation and Emotion*, 35, pp.393–402.
- Kay, K. and Edgley, G., 2018. Evaluation of a new recovery college: Delivering health outcomes and cost efficiencies via an educational approach. *Mental Health and Social Inclusion*, 23(1), pp.36–46.
- Kent, K., Goetzel, R.Z., Roemer, E.C., Prasad, A. and Freundlich, N., 2016. Promoting healthy workplaces by building cultures of health and applying strategic communications. *Journal of Occupational and Environmental Medicine*, 58(2), pp.114–122.
- Kets de Vries, M., 2020. Can organizations provide wellness? *The CEO Whisperer*.
- Kirsten, W., 2010. Making the link between health and productivity at the workplace – a global perspective. *Industrial Health*, 48(3), pp.251–255.
- Kirsten, W., 2010. Promoting physical activity at the workplace: a global view. *British Journal of Sports Medicine*, 44(Suppl 1), pp.i73–i74.
- Knapen, J., Vancampfort, D., Moriën, Y. and Marchal, Y., 2015. Exercise therapy improves both mental and physical health in patients with major depression. *Disability and Rehabilitation*, 37(16), pp.1490–1495.
- Knightley, E., Koutsopoulou, G. and Keyworth, C., 2023. Changes in office workers' lived experiences of their own eating habits since working from home due to the COVID-19 pandemic: An interpretative phenomenological analysis. *Appetite*, 188, p.106760.
- Kompf, J. U. S. T. I. N., NSCA-CPT, N. T., & SPENCER NADOLSKY, M. D., 2014. The scope of practice for personal trainers. *NSCA Personal Trainer Q*, 1, pp. 4-8.
- Kosec, Z., Sekulic, S., Wilson-Gahan, S., Rostohar, K., Tusak, M. and Bon, M., 2022. Correlation between employee performance, well-being, job satisfaction, and life satisfaction in sedentary jobs in Slovenian enterprises. *International Journal of Environmental Research and Public Health*, 19(16), p.10427.
- Kossek, E.E., Wipfli, B., Thompson, R. and Brockwood, K., 2017. The Work, Family, and Health Network organizational intervention: Core elements and customization for diverse occupational health contexts.

- Kraemer, W.J. and Ratamess, N.A., 2004. Fundamentals of resistance training: progression and exercise prescription. *Medicine & Science in Sports & Exercise*, 36(4), pp.674–688.
- Krans, M., van der Wiele, L., Bullen, N., Diamond, M., van Dantzig, S., de Ruyter, B.E. and van Lans, A., 2019. A group intervention to improve physical activity at the workplace. In: *International Conference on Persuasive Technology*.
- Krekel, C., Ward, G. and De Neve, J., 2019. Employee wellbeing, productivity, and firm performance. *Labour: Personnel Economics eJournal*.
- Kumar, A. and Singh, K., 2022. Effectiveness of workplace yoga interventions to ensure employees' wellness and resilience to stress.
- Kumar, V. and Pansari, A., 2015. Measuring the benefits of employee engagement. *MIT Sloan management review*, 56(4), p.67.
- Lachance, J.P., Corbière, M., Hains-Monfette, G. and Bernard, P., 2022. Clearing your mind of work-related stress through moderate-to-vigorous and leisure-time physical activity: What ‘dose’ it take? *Applied Research in Quality of Life*, 17(3), pp.1583–1596.
- Lakshyayog, 2023. Production of fit city: Physical (in) activity, body and everyday space in Delhi. *Social Change*, 53(2), pp.226-239.
- Lattie, E.G., Adkins, E.C., Winkquist, N., Stiles-Shields, C., Wafford, Q.E. and Graham, A.K., 2019. Digital mental health interventions for depression, anxiety, and enhancement of psychological well-being among college students: systematic review. *Journal of medical Internet research*, 21(7), p.e12869.
- Laux, R.C., Corazza, S.T. and Andrade, A., 2018. Workplace physical activity program: An intervention proposal. *Revista Brasileira de Medicina do Esporte*, 24, pp.238–242.
- Laxmeshwar, B. and Amarnatha, K.K., 2016. Exercise and stress: Get moving to manage stress. *Indian Journal of Applied Research*, 5(12), pp.511–512.
- Lee, J.Y., Rocco, T.S. and Shuck, B., 2020. What is a resource: Toward a taxonomy of resources for employee engagement. *Human Resource Development Review*, 19(1), pp.5–38.
- Leiter, M.P. and Maslach, C., 2005. *Banishing burnout: Six strategies for improving your relationship with work*. John Wiley & Sons.

- Lennefer, T., Lopper, E., Wiedemann, A.U., Hess, U. and Hoppe, A., 2020. Improving employees' work-related well-being and physical health through a technology-based physical activity intervention: A randomized intervention-control group study. *Journal of Occupational Health Psychology*, 25(2), p.143.
- Levenson Jr, R.L., 2007. Prevention of traumatic stress in law enforcement personnel: A cursory look at the roles of peer support and critical incident stress management. *Forensic Examiner*, 16(3), pp.16.
- Lier, L.M. and Breuer, C., 2020. The motivating power of gamification: does the inclusion of game elements increase the effectiveness of worksite health promotion programs?. *International Journal of Workplace Health Management*, 13(1), pp.1-15.
- Lin, W., Koopmann, J. and Wang, M., 2020. How does workplace helping behavior step up or slack off? Integrating enrichment-based and depletion-based perspectives. *Journal of Management*, 46(3), pp.385–413.
- Lister, C., West, J.H., Cannon, B., Sax, T. and Brodegard, D., 2014. Just a fad? Gamification in health and fitness apps. *JMIR serious games*, 2(2), p.e3413.
- Little, A., Wordsworth, R. and Malinen, S., 2020. Workplace exercise programmes—how organizational factors influence employee participation. *Development and Learning in Organizations: An International Journal*, 34(6), pp.37-39.
- Loisel, P., Buchbinder, R., Hazard, R., Keller, R., Scheel, I., van Tulder, M. and Webster, B., 2005. Prevention of work disability due to musculoskeletal disorders: The challenge of implementing evidence. *Journal of Occupational Rehabilitation*, 15, pp.507–524.
- Ma, C., Ren, L. and Zhao, J., 2021. Coping with stress: How hotel employees fight to work. *Sustainability*, 13(19), p.10887.
- Madison, K.M., 2016. The risks of using workplace wellness programs to foster a culture of health. *Health Affairs*, 35(11), pp.2068-2074.
- Mahapatra, D.M. and Baral, S.K., 2022. Redefining tectonic start-ups in India during pandemic time. *International Journal of Finance, Entrepreneurship & Sustainability*.
- Mai, P., 2018. *The effects of stress on employees in the public sector*. Doctoral dissertation. California State University, Northridge.

- Malik, S.H., Blake, H. and Suggs, L.S., 2014. A systematic review of workplace health promotion interventions for increasing physical activity. *British Journal of Health Psychology*, 19(1), pp.149–180.
- Manley, K., Sanders, K., Cardiff, S. and Webster, J., 2011. Effective workplace culture: The attributes, enabling factors and consequences of a new concept. *International Practice Development Journal*, 1(2), pp.1–29.
- Martinez, V.M., 2021. The importance of workplace exercise. *Revista Brasileira de Medicina do Trabalho*, 19, pp.523–528.
- Martinez, V.M.L., 2021. The importance of workplace exercise. *Revista Brasileira de Medicina do Trabalho*, 19(4), p.523.
- Martínez-López, E. and Grajales, I.C., 2010. [A health promotion programme's effectiveness in reducing medical care costs]. *Revista de Salud Pública*, 12(6), pp.938–949.
- Martínez-Pardo, E., Romero-Arenas, S., Martínez-Ruiz, E., Rubio-Arias, J.A. and Alcaraz, P.E., 2014. Effect of a whole-body vibration training modifying the training frequency of workouts per week in active adults. *The Journal of Strength & Conditioning Research*, 28(11), pp.3255–3263.
- Mathauer, I. and Imhoff, I., 2006. Health worker motivation in Africa: The role of non-financial incentives and human resource management tools. *Human Resources for Health*, 4(1), pp.1–17.
- Mattke, S., Schnyer, C. and Van Busum, K.R., 2012. A review of the U.S. workplace wellness market. *Rand Health Quarterly*, 2(4), p.7.
- Mazur, B. and Mazur-Małek, M., 2017. Towards corporate wellness: Health culture and wellness programs. *Journal of Intercultural Management*, 9(3), pp.45–61.
- McGill, S., 2010. Core training: Evidence translating to better performance and injury prevention. *Strength & Conditioning Journal*, 32(3), pp.33–46.
- Memon, M.A., Salleh, R. and Baharom, M.N.R., 2016. The link between training satisfaction, work engagement and turnover intention. *European Journal of Training and Development*, 40(6), pp.407–429.

- Merrill, R.M., Aldana, S.G., Garrett, J. and Ross, C., 2011. Effectiveness of a workplace wellness program for maintaining health and promoting healthy behaviors. *Journal of occupational and environmental medicine*, 53(7), pp.782-787.
- Merrill, R.M., Aldana, S.G., Pope, J.E., Anderson, D.R., Coberley, C.R. and Whitmer, R.W. (HERO Research Study Subcommittee), 2012. Presenteeism according to healthy behaviors, physical health, and work environment. *Population Health Management*, 15(5), pp.293–301.
- Michaels, C.N. and Greene, A.M., 2013. Worksite wellness: Increasing adoption of workplace health promotion programs. *Health Promotion Practice*, 14(4), pp.473–479.
- Michalchuk, V.F., Lee, S., Waters, C.M., Hong, O.S. and Fukuoka, Y., 2022. Systematic review of the influence of physical work environment on office workers' physical activity behavior. *Workplace Health & Safety*, 70, pp.97–119.
- Michie, S., West, R., Sheals, K. and Godinho, C.A., 2018. Evaluating the effectiveness of behavior change techniques in health-related behavior: A scoping review of methods used. *Translational Behavioral Medicine*, 8(2), pp.212–224.
- Michie, S., Yardley, L., West, R., Patrick, K. and Greaves, F., 2017. Developing and evaluating digital interventions to promote behavior change in health and health care: Recommendations resulting from an international workshop. *Journal of Medical Internet Research*, 19(6), e232.
- Miller, C.J., Smith, S.N. and Pugatch, M., 2020. Experimental and quasi-experimental designs in implementation research. *Psychiatry Research*, 283, p.112452.
- Miragaia, D.A.M. and Aleixo, J.M.S., 2021. Organisational productivity: perceptions about the influence of workplace physical activity programs on performance, wellness and worker satisfaction. *European Journal of International Management*, 15(2–3), pp.391–414.
- Miyamoto, S.W., Henderson, S., Young, H.M., Pande, A. and Han, J.J., 2016. Tracking health data is not enough: A qualitative exploration of the role of healthcare partnerships and mHealth technology to promote physical activity and to sustain behavior change. *JMIR mHealth and uHealth*, 4(1), e4814.
- Monteagudo, P., Cordellat, A., Roldán, A., Gómez-Cabrera, M.C., Pesce, C. and Blasco-Lafarga, C., 2021. Exploring potential benefits of accumulated multicomponent-training in

non-active older adults: From physical fitness to mental health. *International Journal of Environmental Research and Public Health*, 18(18), p.9645.

Moreira, S., Criado, M.B., Ferreira, M.S., Machado, J., Gonçalves, C., Clemente, F.M. and Santos, P.C., 2022. Positive effects of an online workplace exercise intervention during the COVID-19 pandemic on quality-of-life perception in computer workers: A quasi-experimental study design. *International Journal of Environmental Research and Public Health*, 19(5), p.3142.

Moreira-Silva, I., Teixeira, P.M., Santos, R., Abreu, S., Moreira, C. and Mota, J., 2016. The effects of workplace physical activity programs on musculoskeletal pain: a systematic review and meta-analysis. *Workplace health & safety*, 64(5), pp.210-222.

Muchiri, C.T., 2022. Impact of work-related stress on employee's performance in the Kenya Disciplined Services. *Reviewed Journal International of Business Management*, 3(1), pp.22–37.

Mujtaba, B.G. and Cavico, F.J., 2013. Corporate wellness programs: Implementation challenges in the modern American workplace. *International Journal of Health Policy and Management*, 1(3), p.193.

Munuo, G., 2023. Physical activity at work and job performance: A qualitative study of physical activity at work from the perspective of office workers in Tanzania.

Nägel, I.J., 2013. *Stress at work and exercise during leisure time*. Doctoral dissertation.

Nderitu, M.W. and Ndeto, M., 2019. Influence of workplace environment on employee productivity in Nairobi City County. *International Academic Journal of Human Resource and Business Administration*, 3(7), pp.117–139.

Nelson, J., 2018. *Workplace wellness programs: Healthy lifestyles and economic success*.

Nguyen, T.M., Nguyen, V.H. and Kim, J.H., 2021. Physical exercise and health-related quality of life in office workers: A systematic review and meta-analysis. *International Journal of Environmental Research and Public Health*, 18(7), p.3791.

Noorbakhsh, M., Nourbakhsh, P. and Navabi Nejad, S., 2018. The effect of physical activity on productivity, reducing absence and work engagement in female employees of Islamic Azad University. *Sport Management Journal*, 10(3), pp.594–581.

Nutbeam, D., 2000. Health literacy as a public health goal: A challenge for contemporary health education and communication strategies into the 21st century. *Health Promotion International*, 15(3), pp.259–267.

O'Donovan, G., Blazeovich, A.J., Boreham, C., Cooper, A.R., Crank, H., Ekelund, U., ... and Stamatakis, E., 2010. The ABC of physical activity for health: A consensus statement from the British Association of Sport and Exercise Sciences. *Journal of Sports Sciences*, 28(6), pp.573–591.

Oja, P., Titze, S., Bauman, A., De Geus, B., Krenn, P., Reger-Nash, B. and Kohlberger, T., 2011. Health benefits of cycling: A systematic review. *Scandinavian Journal of Medicine & Science in Sports*, 21(4), pp.496–509.

Ojo, S.O., Bailey, D.P., Brierley, M.L., Hewson, D.J. and Chater, A.M., 2019. Breaking barriers: Using the behavior change wheel to develop a tailored intervention to overcome workplace inhibitors to breaking up sitting time. *BMC Public Health*, 19(1), pp.1–17.

Ojo, S.O., Bailey, D.P., Chater, A.M. and Hewson, D.J., 2018. The impact of active workstations on workplace productivity and performance: A systematic review. *International Journal of Environmental Research and Public Health*, 15(3), p.417.

Olpin, M.N., 1996. *Perceived stress levels and sources of stress among college students: Methods, frequency, and effectiveness of managing stress by college students*. Southern Illinois University at Carbondale.

Oppezzo, M. and Schwartz, D.L., 2014. Give your ideas some legs: The positive effect of walking on creative thinking. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 40(4), p.1142.

Ornek, O.K. and Esin, M.N., 2020. Effects of a work-related stress model based mental health promotion program on job stress, stress reactions and coping profiles of women workers: A control group study. *BMC Public Health*, 20, pp.1–14.

Ostelo, R.W. and de Vet, H.C., 2005. Clinically important outcomes in low back pain. *Best Practice & Research Clinical Rheumatology*, 19(4), pp.593–607.

Otenyo, E.E. and Smith, E.A., 2017. An overview of employee wellness programs (EWPs) in large US cities: Does geography matter? *Public Personnel Management*, 46(1), pp.3–24.

- Ozdamli, F. and Milrich, F., 2023. Positive and negative impacts of gamification on the fitness industry. *European journal of investigation in health, psychology and education*, 13(8), pp.1411-1422.
- Panjaitan-Drioadisuryo, R.D. and Cloud, K., 1999. Gender, self-employment and microcredit programs: An Indonesian case study. *The Quarterly Review of Economics and Finance*, 39(5), pp.769–779.
- Parks, K.M. and Steelman, L.A., 2008. Organizational wellness programs: A meta-analysis. *Journal of Occupational Health Psychology*, 13(1), pp.58–68.
- Pastors, J.G., Franz, M.J., Warshaw, H., Daly, A. and Arnold, M.S., 2003. How effective is medical nutrition therapy in diabetes care? (Commentary). *Journal of the American Dietetic Association*, 103(7), pp.827–832.
- Patterson, G.T., Chung, I.W. and Swan, P.G., 2012. The effects of stress management interventions among police officers and recruits. *Campbell Systematic Reviews*, 8(1), pp.1–54.
- Payne, J., Cluff, L., Lang, J., Matson-Koffman, D. and Morgan-Lopez, A., 2018. Elements of a workplace culture of health, perceived organizational support for health, and lifestyle risk. *American Journal of Health Promotion*, 32(7), pp.1555–1567.
- Peñalver, J., Salanova, M., Martínez, I.M. and Schaufeli, W.B., 2019. Happy-productive groups: How positive affect links to performance through social resources. *The Journal of Positive Psychology*, 14(3), pp.377–392.
- Peñalvo, J.L., Sagastume, D., Mertens, E., Uzhova, I., Smith, J., Wu, J.H. and Mozaffarian, D., 2021. Effectiveness of workplace wellness programmes for dietary habits, overweight, and cardiometabolic health: a systematic review and meta-analysis. *The Lancet Public Health*, 6(9), pp.e648–e660.
- Penedo, F.J. and Dahn, J.R., 2005. Exercise and well-being: A review of mental and physical health benefits associated with physical activity. *Current Opinion in Psychiatry*, 18(2), pp.189–193.
- Penwell-Waines, L., Cronholm, P., Brennan, J., Romain, A., Runyan, C., Buck, K. and Talen, M., 2020. Getting it off the ground: Key factors associated with implementation of wellness programs. *Family Medicine*, 52(3), pp.182–188.

- Pereira, M.J., Coombes, B.K., Comans, T.A. and Johnston, V., 2015. The impact of onsite workplace health-enhancing physical activity interventions on worker productivity: A systematic review. *Occupational and Environmental Medicine*, 72(6), pp.401–412.
- Perrault, E.K., Hildenbrand, G.M. and Rnroh, R.H., 2020. Employees' refusals to participate in an employer-sponsored wellness program: Barriers and benefits to engagement. *Compensation & Benefits Review*, 52(1), pp.8–18.
- Pickett, A.C. and Cunningham, G.B., 2017. Physical activity for everybody: A model for managing weight stigma and creating body-inclusive spaces. *Quest*, 69(1), pp.19–36.
- Pogrebtsova, E., Tondello, G.F., Premasukh, H. and Nacke, L.E., 2017. Using Technology to Boost Employee Wellbeing? How Gamification Can Help or Hinder Results. *PGW@CHI PLAY*.
- Powell, J., Hamborg, T., Stallard, N., Burls, A., McSorley, J., Bennett, K. and Christensen, H., 2013. Effectiveness of a web-based cognitive-behavioral tool to improve mental well-being in the general population: Randomized controlled trial. *Journal of Medical Internet Research*, 15(1), p.e2.
- Pressler, A., Knebel, U., Esch, S., Kölbl, D., Esefeld, K., Scherr, J., Haller, B., Schmidt-Trucksäss, A., Krcmar, H., Halle, M. and Leimeister, J.M., 2010. An internet-delivered exercise intervention for workplace health promotion in overweight sedentary employees: a randomized trial. *Preventive medicine*, 51(3-4), pp.234-239.
- Prieske, O., Dalager, T., Herz, M., Hortobagyi, T., Sjøgaard, G., Sjøgaard, K. and Granacher, U., 2019. Effects of physical exercise training in the workplace on physical fitness: a systematic review and meta-analysis. *Sports medicine*, 49(12), pp.1903-1921.
- Priyadharshini, S.K., 2019. Redefining workplace wellness: Wearable technology and corporate wellness. *Ushus Journal of Business Management*, 18(2), pp.43–53.
- Pronk, N.P., Whitsel, L.P., Ablah, E., Anderson III, R.E. and Imboden, M., 2025. Building a culture of healthy living in the workplace. *Progress in cardiovascular diseases*.
- Pronk, N.P. and Kottke, T.E., 2009. Physical activity promotion as a strategic corporate priority to improve worker health and business performance. *Preventive Medicine*, 49(4), pp.316–321.
- Pronk, N.P., Bender, E.G. and Katz, A.S., 2016. Health, function, and performance benefits of workplace strength training programs. *ACSM's Health & Fitness Journal*, 20, pp.69–71.

- Proper, K. and van Mechelen, W., 2008. Effectiveness and economic impact of worksite interventions to promote physical activity and healthy diet. *Geneva: World Health Organization*, 4.
- Proper, K.I., Staal, B.J., Hildebrandt, V.H., Van der Beek, A.J. and Van Mechelen, W., 2002. Effectiveness of physical activity programs at worksites with respect to work-related outcomes. *Scandinavian Journal of Work, Environment & Health*, pp.75–84.
- Rada, R.E. and Johnson-Leong, C., 2004. Stress, burnout, anxiety and depression among dentists. *Journal of the American Dental Association*, 135(6), pp.788–794.
- Rajagopal, T., 2010. Mental well-being at the workplace. *Indian Journal of Occupational and Environmental Medicine*, 14(3), pp.63–65.
- Raju, P.G., 2017. Impact of work-family conflicts on professional and personal outcomes and the need for work-family enrichment: An investigation of non-managerial hotel personnel in India. *South Asian Journal of Management*, 24(3).
- Ramalho, A. and Petrica, J., 2023. The quiet epidemic: An overview of emerging qualitative research trends on sedentary behavior in aging populations. *Healthcare*, 11(15), p.2215.
- Reif, J., Chan, D., Jones, D., Payne, L. and Molitor, D., 2020. Effects of a workplace wellness program on employee health, health beliefs, and medical use: a randomized clinical trial. *JAMA internal medicine*, 180(7), pp.952-960.
- Reiss-Brennan, B., 2014. Mental health integration. *Journal of Primary Care & Community Health*, 5, pp.55–60.
- Ren, X., Yu, B., Lu, Y. and Brombacher, A., 2018. Exploring cooperative fitness tracking to encourage physical activity among office workers. *Proceedings of the ACM on Human-Computer Interaction*, 2(CSCW), pp.1–20.
- Ren, X., Yu, B., Lu, Y., Chen, Y. and Pu, P., 2019. HealthSit: Designing posture-based interaction to promote exercise during fitness breaks. *International Journal of Human-Computer Interaction*, 35(10), pp.870-885.
- Rezai, R., SantaBarbara, N., Almirol, E., Shedd, K., Terry, E., Park, M. and Comulada, W.S., 2020. Efficacy and costs of a workplace wellness programme. *Occupational Medicine*, 70(9), pp.649-655.

- Richardson, K.M. and Rothstein, H.R., 2008. Effects of occupational stress management intervention programs: A meta-analysis. *Journal of Occupational Health Psychology*, 13(1), pp.69.
- Robertson, M.M., Ciriello, V.M. and Garabet, A.M., 2013. Office ergonomics training and a sit-stand workstation: Effects on musculoskeletal and visual symptoms and performance of office workers. *Applied Ergonomics*, 44(1), pp.73–85.
- Robroek, S.J., Van Lenthe, F.J., Van Empelen, P. and Burdorf, A., 2009. Determinants of participation in worksite health promotion programmes: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, 6, pp.1–12.
- Rojatz, D., Merchant, A. and Nitsch, M., 2017. Factors influencing workplace health promotion intervention: a qualitative systematic review. *Health promotion international*, 32(5), pp.831-839.
- Rosenberg, A.R., Bradford, M.C., Junkins, C.C., Taylor, M., Zhou, C., Sherr, N. and Joyce, P., 2019. Effect of the promoting resilience in stress management intervention for parents of children with cancer (PRISM-P): A randomized clinical trial. *JAMA Network Open*, 2(9), p.e1911578.
- Sachsenmaier, D., 2011. *Global perspectives on global history: Theories and approaches in a connected world*. Cambridge University Press.
- Sadick, A.M. and Kamardeen, I., 2020. Enhancing employees' performance and well-being with nature exposure embedded office workplace design. *Journal of Building Engineering*, 32, p.101789.
- Safeer, R. and Allen, J., 2019. Defining a culture of health in the workplace. *Journal of occupational and environmental medicine*, 61(11), pp.863-867.
- Saini, A., 2025. Impact of Global Health Security for Sustainable Growth of the Service Industry in Delhi, NCR Region, India. *NCR Region, India (April 09, 2025)*.
- Saito, J., Odawara, M., Takahashi, H., Fujimori, M., Yaguchi-Saito, A., Inoue, M., Uchitomi, Y. and Shimazu, T., 2022. Barriers and facilitative factors in the implementation of workplace health promotion activities in small and medium-sized enterprises: a qualitative study. *Implementation science communications*, 3(1), p.23.
- Saltin, B., 1992. Sedentary lifestyle: an underestimated health risk. *Journal of internal medicine*, 232(6), pp.467-469.

- Samdal, G.B., Eide, G.E., Barth, T., Williams, G. and Meland, E., 2017. Effective behaviour change techniques for physical activity and healthy eating in overweight and obese adults: Systematic review and meta-regression analyses. *International Journal of Behavioral Nutrition and Physical Activity*, 14, pp.1–14.
- Sangachin, M.G. and Cavuoto, L.A., 2015. Worksite exercise programs: Why do employees participate? In: *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 59(1), pp.1197–1201. *SAGE Publications*.
- Santa Barbara, N., Rezai, R., Terry, E., Shedd, K. and Comulada, W.S., 2022. Preliminary efficacy and acceptability of an online exercise and nutrition workplace wellness program: A brief report. *Workplace Health & Safety*, 70(2), pp.90–96.
- Santos, H.G., Chiavegato, L.D., Valentim, D.P., da Silva, P.R. and Padula, R.S., 2016. Resistance training program for fatigue management in the workplace: Exercise protocol in a cluster randomized controlled trial. *BMC Public Health*, 16, pp.1–11.
- Santos, I.L. and Miragaia, D., 2023. Physical activity in the workplace: A cost or a benefit for organizations? A systematic review. *International Journal of Workplace Health Management*, (ahead-of-print).
- Scherrer, P., Sheridan, L., Sibson, R., Ryan, M.M. and Henley, N., 2010. Employee engagement with a corporate physical activity program: the global corporate challenge. *International Journal of Business Studies: A Publication of the Faculty of Business Administration, Edith Cowan University*, 18(1), pp.125-139.
- Schultz, A.B. and Edington, D.W., 2007. Employee health and presenteeism: A systematic review. *Journal of Occupational Rehabilitation*, 17, pp.547–579.
- Scott, J., Oxlad, M., Dodd, J., Szabo, C., Deussen, A. and Turnbull, D., 2022. Promoting health behavior change in the preconception period: Combined approach to intervention planning. *JMIR Formative Research*, 6(4), e35108.
- Seymour, A. and Dupré, K., 2008. Advancing employee engagement through a healthy workplace strategy.
- Shamseer, L., Moher, D., Clarke, M., Gherzi, D., Liberati, A., Petticrew, M. and Stewart, L.A., 2015. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: Elaboration and explanation. *BMJ*, 349.

- Sharifzadeh, M., 2013. Does fitness and exercises increase productivity? Assessing health, fitness, and productivity relationship. *American Journal of Management*, 13(1), pp.32–52.
- Sharma, S.D., Chauhan, A. and Khanna, S., 2012. Stress management through yoga practices in the corporate sector. *African Journal of Business Management*, 6(37), p.10117.
- Shaw, W.S., Reme, S.E. and Boot, C.R., 2012. Health and wellness promotion in the workplace. In: *Handbook of Occupational Health and Wellness*. Boston, MA: Springer US, pp.365–382.
- Shephard, R.J., 1996. Worksite fitness and exercise programs: a review of methodology and health impact. *American Journal of Health Promotion*, 10(6), pp.436–452.
- Shifrin, N.V. and Michel, J.S., 2022. Flexible work arrangements and employee health: A meta-analytic review. *Work & Stress*, 36(1), pp.60–85.
- Shifrin, N.V. and Michel, J.S., 2021. Flexible work arrangements and employee health: A meta-analytic review. *Work & Stress*, 36, pp.60–85.
- Sholar, B., 2017. *Getting the work out of workouts: Evaluating the effectiveness and outcomes of a physical exercise motivational intervention for older workers*.
- Sigblad, F., Savela, M. and Okenwa Emegwa, L., 2020. Managers' perceptions of factors affecting employees' uptake of workplace health promotion (WHP) offers. *Frontiers in public health*, 8, p.508860.
- Sliter, M. and Yuan, Z., 2015. Workout at work: laboratory test of psychological and performance outcomes of active workstations. *Journal of occupational health psychology*, 20(2), p.259.
- Smith, B. and McGannon, K.R., 2018. Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology*, 11(1), pp.101–121.
- Smith, B., 2023. Keynote 1: Moving social work: A new evidence-based and co-produced programme to promote physical activity to disabled people. *European Journal of Public Health*, 33(Suppl 1), ckad133-001.
- Song, Z. and Baicker, K., 2019. Effect of a workplace wellness program on employee health and economic outcomes: A randomized clinical trial. *JAMA*, 321(15), pp.1491–1501.

- Soni, R., Tomar, M. and Riyal, S., 2020. ANALYSIS OF EMPLOYEES' FITNESS CONDITION AND EMPLOYERS' HEALTH PRESERVATION MEASURES IN PRIVATE ORGANIZATIONS AT DELHI-NCR. *JIMS*, 8, p.43.
- Stathokostas, L., Little, R.M., Vandervoort, A.A. and Paterson, D.H., 2012. Flexibility training and functional ability in older adults: a systematic review. *Journal of aging research*, 2012(1), p.306818.
- Stern, M., 2008. The fitness movement and the fitness center industry, 1960-2000. In *Business history conference. Business and economic history on-line: Papers presented at the BHC annual meeting* (Vol. 6, p. 1). Business History Conference.
- Stoewen, D.L., 2016. Wellness at work: Building healthy workplaces. *The Canadian Veterinary Journal*, 57(11), p.1188.
- Stokes, G.C., Henley, N.S. and Herget, C., 2006. Creating a culture of wellness in workplaces. *North Carolina medical journal*, 67(6), pp.445-448.
- Stork, M.J., Marcotte-Chénard, A., Jung, M.E. and Little, J.P., 2023. Exercise in the workplace: examining the receptivity of practical and time-efficient stair-climbing “exercise snacks”. *Applied Physiology, Nutrition, and Metabolism*, 49(1), pp.30-40.
- Strijk, J.E., Proper, K.I., van Mechelen, W. and van der Beek, A.J., 2013. Effectiveness of a worksite lifestyle intervention on vitality, work engagement, productivity, and sick leave: Results of a randomized controlled trial. *Scandinavian Journal of Work, Environment & Health*, pp.66–75.
- Sullivan, A., 2014. *Health and wellness programs in Massachusetts' public sector*.
- Sumińska, S., 2021. [The impact of physical activity on cognitive functions]. *Medycyna Pracy*.
- Swayze, J.S. and Burke, L.A., 2013. Employee wellness program outcomes: A case study. *Journal of Workplace Behavioral Health*, 28(1), pp.46–61.
- Tapia, G., Cancino, J., Castro, M., Núñez, Ó., Pavez, R., Villagrán, C. and Zbinden, H., 2022. Regular exercise reduces stress and improves attention levels and academic performance of university students during final exams. *Available at SSRN: 4075700*.

Tapp, L., 2024. Technology Interventions and Support for Total Worker Health®. *The Wiley Guide to Strategies, Ideas, and Applications for Implementing a Total Worker Health Program*, pp.135-162.

Tavoian, D. and Craighead, D.H., 2023. Deep breathing exercise at work: Potential applications and impact. *Frontiers in Physiology*, 14, p.23.

Ten Brummelhuis, L.L., Calderwood, C., Rosen, C.C. and Gabriel, A.S., 2021. Is physical activity before the end of the workday a drain or a gain? Daily implications on work focus on regular exercisers. *The Journal of Applied Psychology*.

Tenison, E.J., 2022. *The efficacy and acceptability of a virtual versus hybrid wellness program on health outcomes among faculty and staff at a Northeastern university during COVID-19*. Doctoral dissertation. Northern Illinois University.

Thauer, C.R., 2014. Goodness comes from within: Intra-organizational dynamics of corporate social responsibility. *Business & Society*, 53(4), pp.483–516.

Thøgersen-Ntoumani, C. and Fox, K.R., 2005. Physical activity and mental well-being typologies in corporate employees: A mixed methods approach. *Work & Stress*, 19(1), pp.50–67.

Todorović, N., Štajer, V., Korovoljev, D. and Maksimović, N., 2020. Exercise at workplace: An overview.

Tomlinson, R.A., 2021. *Get moving: A grounded theory analysis of employees' perceptions of physical activity participation in workplace wellness programs*. Temple University.

Treasure, J., Schmidt, U. and Kan, C., 2019. An illustration of collaborative care with a focus on the role of fathers in Maudsley Anorexia Nervosa Treatment for Adults (MANTRA). *Journal of Clinical Psychology*, 75(8), pp.1403–1414.

Underdown, K.O., McCabe, C.L. and McCabe, M.F., 2022. Creating and maintaining balance: Work-life balance, self-care, and mindfulness. In: *Handbook of Research on Future of Work and Education: Implications for Curriculum Delivery and Work Design*. IGI Global, pp.533–545.

Unsal, N., Weaver, G., Bray, J. and Bibeau, D., 2021. A scoping review of economic evaluations of workplace wellness programs. *Public health reports*, 136(6), pp.671-684.

Vatan, M.H., Noorbakhsh, M., Nourbakhsh, P. and Nejad, S.N., 2017. The effect of physical activity on resiliency and productivity and reducing staff absence based on public health of university's female staff. *PODIUM Sport, Leisure and Tourism Review*, 6(2), pp.294–309.

Vilela, B.L., Benedito Silva, A.A., de Lira, C.A. and Andrade, M.D., 2015. Workplace exercise and educational program for improving fitness outcomes related to health in workers: A randomized controlled trial. *Journal of Occupational and Environmental Medicine*, 57, pp.235–240.

Vohra, N., Chari, V., Mathur, P., Sudarshan, P., Verma, N., Mathur, N., Thakur, P., Chopra, T., Srivastava, Y., Gupta, S. and Dasmahapatra, V., 2015. Inclusive workplaces: Lessons from theory and practice. *Vikalpa*, 40(3), pp.324-362.

von Thiele Schwarz, U. and Hasson, H., 2011. Employee self-rated productivity and objective organizational production levels: Effects of worksite health interventions involving reduced work hours and physical exercise. *Journal of Occupational and Environmental Medicine*, 53, pp.838–844.

Walsh, S.M., Meyer, M., Gamble, A., Patterson, M.S. and Moore, J.B., 2017. A systematic review of rural, theory-based physical activity interventions. *American Journal of Health Behavior*, 41(3), pp.248–258.

Weare, K., 2013. Developing mindfulness with children and young people: A review of the evidence and policy context. *Journal of Children's Services*, 8(2), pp.141–153.

Wei, M., Kampert, J.B., Barlow, C.E., Nichaman, M.Z., Gibbons, L.W., Paffenbarger, R.S. and Blair, S.N., 1999. Relationship between low cardiorespiratory fitness and mortality in normal-weight, overweight, and obese men. *JAMA*, 282(16), pp.1547–1553.

Wein, D., 2015. Worksite wellness programs offer valuable benefits to both employers and employees. *Employment Relations Today*, 41, pp.35–43.

Weiss, H.M. and Cropanzano, R., 1996. Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In: Staw, B.M. and Cummings, L.L., eds. *Research in Organizational Behavior: An Annual Series of Analytical Essays and Critical Reviews*, Vol. 18. Elsevier Science/JAI Press, pp.1–74.

Wenker, M., 2022. *Physical exercise at the workplace: How do employees perceive such an offer and how is it related with their well-being?* Master's thesis.

- Westcott, W.L., 2012. Resistance training is medicine: Effects of strength training on health. *Current Sports Medicine Reports*, 11(4), pp.209–216.
- Westmattelmann, D., Kuen, L. and Schewe, G., 2021. E-health apps in workplace health management – An analysis of determinants and effects on employee health. In: *European Conference on Information Systems (ECIS)*.
- Whitehead, D., 2006. Workplace health promotion: The role and responsibility of health care managers. *Journal of Nursing Management*, 14(1), pp.59–68.
- Whitlock, E.P., Orleans, C.T., Pender, N. and Allan, J., 2002. Evaluating primary care behavioural counselling interventions: An evidence-based approach. *American Journal of Preventive Medicine*, 22(4), pp.267–284.
- Whitsel, L.P., Ablah, E. and Richards, T., 2023. Editors’ desk – Creating a movement for healthy physical activity at work. *American Journal of Health Promotion*, 37, pp.722–723.
- Wikman, A., Wardle, J. and Steptoe, A., 2011. Quality of life and affective well-being in middle-aged and older people with chronic medical illnesses: A cross-sectional population-based study. *PLoS ONE*, 6(4), e18952.
- Williams, N., 2008. Workplace workout. *Occupational Health & Wellbeing*, 60(7), 26-32.
- Williams-Karnesky, R.L., Greenbaum, A. and Paul, J.S., 2020. Surgery resident wellness programs: The current state of the field and recommendations for creation and implementation. *Advances in Surgery*, 54, pp.149–171.
- Williamson, J.W., 2016. *Awareness of physical activity health benefits can influence participation and dose*.
- Wiltsey Stirman, S., Kimberly, J., Cook, N., Calloway, A., Castro, F. and Charns, M., 2012. The sustainability of new programs and innovations: A review of the empirical literature and recommendations for future research. *Implementation Science*, 7(1), pp.1–19.
- Woodbrey, E. and SantaBarbara, N., 2023. Barriers and facilitators to long-term engagement and retention in worksite wellness programs: A systematic review with recommendations for practice. *Medicine & Science in Sports & Exercise*.
- World Health Organization, 2019. *Global action plan on physical activity 2018–2030: More active people for a healthier world*. Geneva: World Health Organization.

Wydział and Zarządzania, 2018. Towards corporate wellness: Health culture and wellness programs.

Yassi, A., 2005. Health promotion in the workplace – The merging of the paradigms. *Methods of Information in Medicine*, 44(2), pp.278–284.

Zatsiorsky, V.M., Kraemer, W.J. and Fry, A.C., 2020. *Science and practice of strength training*. Human Kinetics.

Zavanela, P.M., Crewther, B.T., Lodo, L., Florindo, A.A., Miyabara, E.H. and Aoki, M.S., 2012. Health and fitness benefits of a resistance training intervention performed in the workplace. *Journal of Strength & Conditioning Research*, 26(3), pp.811–817.

Zerfass, A., Verčič, D., Nothhaft, H. and Werder, K.P., 2020. Strategic communication: Defining the field and its contribution to research and practice. In: Zerfass, A., ed. *Future Directions of Strategic Communication*. Routledge, pp.159–177.

Zhang, M., 2025. Gamification of Fitness and Training. *Technology, Sport and Recreation*, pp.30-43.

Zimring, C., Joseph, A. and Choudhary, R., 2004. The role of the physical environment in the hospital of the 21st century: A once-in-a-lifetime opportunity. *Concord, CA: The Center for Health Design*, p.311.

APPENDIX

Questionnaire

Dear Sir/Madam,

Your assistance in completing this survey would be greatly appreciated as your views can help me to complete my research work titled *“Workout sessions in the Workplace”* more appropriately. If you have any inquiries, please feel free to mail on

Please express the degree to which you feel the following emotions using a five-point Likert scale ranging from 1 – 5, where 1 = Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), and 5 = Strongly Agree (SA).

Your participation in this study will be highly appreciated, and the information you provide will be used for academic purposes only.

● Demographics Profile:

1. Gender

- a) Male
- b) Female

2. Age

- a) Below 18 years old
- b) 18 - 25 years old
- c) 25 - 35 years old
- d) 35 - 45 years old
- e) 45 years old and above

3. Designation

- a) Junior Staff
- b) Mid-level employees
- c) Executive
- d) Management

4. Work schedule

- a) Full-Time
- b) Part-Time
- c) Shift based work

5. Years of Experience

- a) Less than 1 year
- b) 1-5 years
- c) 6-10 years
- d) More than 10 years

6. Location

- a) Urban
- b) Rural

7. Marital status

- a) Married
- b) Unmarried

● **Workplace Workout Session**

Please give a response regarding the Workplace Workout Session

Sr. no.	Workplace Workout Session	SD	D	N	A	SA
1.	The workplace ensures the availability of workout sessions during working hours.					
2.	The workout sessions in the workplace cater to various fitness levels.					
3.	The workplace provides adequate space for workout sessions.					
4.	The equipment and resources available for workplace workout sessions meet the expectations of employees.					

5.	Workplace workout sessions have helped to improve the productivity at work.					
6.	The workout sessions at workplace are well structured and appropriate for fitness level.					
7.	The flexibility of the program accommodates the workload and personal commitments.					

- **Employees' Physical Health**

Please give a response regarding the Employees' Physical Health

Sr. no.	Employees' Physical Health	SD	D	N	A	SA
1.	Workplace workout sessions have helped to maintain a healthy weight.					
2.	Energy levels have improved because of workplace workout sessions.					
3.	Participating in workout sessions has increased the physical stamina of employees.					
4.	Regular workouts at the workplace have improved the posture and balance.					
5.	Workplace workout sessions motivate to maintain a healthy lifestyle.					
6.	Workplace workout sessions help to achieve the personal fitness goals.					
7.	After a workout session individuals feel more physically prepared to handle work demands.					

- **Mental well-being among Employees**

Please give a response regarding the Mental well-being among Employees

Sr. no.	Mental well-being among Employees	SD	D	N	A	SA
1.	Regular exercise at the workplace has positively impacted the mental well-being.					
2.	Participating in workplace workout sessions helps to manage work-related stress effectively.					
3.	Workout sessions in the workplace improve work mood and reduce feelings of anxiety or depression.					
4.	Workplace workout sessions contribute to a better balance between the professional and personal life.					
5.	Engaging in workout sessions at work helps to feel more energized and motivated throughout the day.					
6.	Workout sessions help to handle work pressure and demanding situations more effectively.					
7.	Exercise at work enhances the creativity and ability to solve problems effectively.					

- **Employee Productivity**

Please give a response regarding the Employee Productivity

Sr. no.	Employee Productivity	SD	D	N	A	SA

1.	Regular workplace workout sessions improve the ability to concentrate on tasks.					
2.	Workout sessions in the workplace reduce the tendency to procrastinate.					
3.	Team-based workout activities enhance the productivity by fostering better relationships with coworkers.					
4.	Workout sessions help to stay focused and complete tasks with greater accuracy.					
5.	Workout sessions motivate to be more present and engaged at work.					
6.	Workplace workout sessions have made to be more proactive and goal-oriented in the work.					
7.	Workout sessions in the workplace have contributed to an improvement in the quality of the work output.					

- **Employee Engagement and Satisfaction**

Please give a response regarding the Employee Engagement and Satisfaction

Sr. no.	Employee Engagement and Satisfaction	SD	D	N	A	SA
1.	Engaging in workout sessions enhances the ability to think clearly and solve problems at work.					
2.	The workout sessions in the workplace motivates to stay more engaged with the job responsibilities.					

3.	The availability of workout sessions at work has improved the sense of connection with other employees.					
4.	It's easy to balance the work tasks and participate in workplace workout sessions.					
5.	The frequency of workout sessions provided by the workplace are satisfactory.					
6.	The workout sessions have positively impacted the overall job satisfaction.					
7.	The organization's initiative for workplace workouts makes to feel more valued as an employee.					

I sincerely appreciate your time and cooperation.

Please check to make sure that all the questions are answered.

Thank you so much for your contribution.