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A study on perception of professionals on working hours in adopting four day workweek India

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Abstract

India, on the cusp of the Fourth Industrial Revolution, stands at the precipice of a potential paradigm shift in its work culture. This study delves into the feasibility of transitioning to a 4-day workweek, each day consisting of 9 hours of work, a stark departure from the current 12-hour workdays mandated by Indian labour laws. The research investigates crucial factors including mental health, physical wellbeing, quality of life, and productivity within this context, shedding light on the potential benefits and challenges of such a transition. A snowball sampling approach was employed to gather data from a diverse pool of 350 participants. The study began with descriptive analysis, offering a comprehensive understanding of the sampled population. Subsequently, factorial analysis was conducted to infer prevailing trends and preferences among the respondents. Findings: The study's findings are compelling, indicating a substantial readiness among Indian workers to embrace a 4-day workweek with 9-hour workdays. The potential adoption of a 4-day workweek culture in India, featuring 9-hour workdays, holds the promise of elevating both the quality of life and productivity of its workforce. These outcomes align closely with the evolving demands of the Fourth Industrial Revolution and the growing need for more sustainable and employee-centric work environments However, it is vital to acknowledge that this study did not consider the implications of salary adjustments, a critical aspect of such a cultural shift further studies are recommended on it.

Keywords: Employee well-being, sustainable work environment, labour laws, quality of life, productivity, fourth industrial revolution

Introduction

'A compelling argument for limiting working hours to the equivalent of a four-day week, backed by a range of suggested policy initiatives. Particularly valuable is the demonstration of the beneficial effects of reduced hours on the morale and performance of employees, and the account of case studies in reduction from round the.' (Robert Skidelsky, British economic historian, member of the UK House of Lords, and biographer of John Maynard Keynes) (Coote *et al.*, 2021)^[1].

The world has undergone digitalization, which has significantly impacted work culture in recent years, encouraging everyone to work more efficiently in less time. In the digital age, the concept of flexibility has become a magic wand. Realistically, every organization wishes to develop a more flexible work culture. As a possible consequence, the four-day workweek was proposed in the 1970s but is trending now after the pandemic era. (Deshmukh, 2021)^[2].

A four-day workweek is merely a compressed schedule world where employees are impacted to squeeze the number of working hours into four days instead of five. Several studies have shown both workplace productivity and employee satisfaction go up considerably under a more compressed schedule (IG metal, 2020)^[3].

Several world leaders and trade unions, too, have proposed a four-day week to help secure jobs. In August this year, Germany's largest trade union IG Metall pushed for a four-day working week to prevent mass layoffs and salary cuts. (Janice Neipert)^[4].

According to a senior government official cited by the PTI news agency, India is likely to implement four new labor codes on wages, social security, industrial relations, and occupational safety by the next fiscal year beginning 2022-23 (Pti, 2021)^[5].

More than 70 companies had started a six-month experiment on four days working week in Britain.

The companies who participated in this experiment, Concluded that in some cases they had seen a significant improvement and no loss in productivity. (Gross, 2022) ^[6].

Researchers from all around the world are becoming more interested in the four-day workweek due to data demonstrating work culture, work-life balance, physical and mental health, job productivity, and quality of life.

Through the study of several studies addressing the efficacy of fostering a four-day workweek among employees, mostly in foreign countries, this literature review seeks to contextualize research on the four-day/eight/ten-hour workweek in India. This program's research will examine the advantages of productivity, work culture, work-life balance, physical and mental fitness, work productivity, quality of life, and applicability to appropriate firms, enhancing the organization's total productivity rate and work culture.

Objectives of study

- To explore perceived benefits related to mental and physical health by implementing four day work week culture.
- To explore perceived effect of four day workweek culture on work productivity and quality of life.
- To study and compare different working culture like current work culture with extended work shifts and flexible work culture.

Literature Review

Five-Day Workweek

There are 3.32 billion employees working in Organization and industries across the world; out of that 470 million employees are there across India which has Rs. 1,91,705.78 per capita income. (Statista)^[7].

The term 'Workweek' stands for the time spent at work, and the term 'Weekend' stands for the time spent away from work. At the time of the Industrial Revolution, the number of work hours went up to 10 hours per day. There were no rules defining the maximum number of days for weekends till Henry Ford, (an American, founder of the Ford Motor Company, and chief developer of the assembly line technique of mass production) declared a Five-day workweek. He introduced a five-day workweek with a pay of six days, employee's workers get paid one day extra to spend time away from work. "Leisure Time" defined by Henry Ford is quite essential for productivity. The Ford Motor Company's plant workers and staff began working a five-day, 40-hour workweek on May 1st, 1926. (Admin, 2010) ^[8].

In the era, where society draws its attention to work-life balance, more and more employees have started adopting different types of family-friendly environments to fulfill their work and family responsibilities at the same time. Family-friendly employment is classified into three categories: flexible work arrangement, Parental leave, and family support. So, employers can implement flexibility in work according to the organization's affordability and employee's needs. One of the employment norms that this legislation creates is the five-day workweek, which entails five days of duty and two days off each week-typically, Saturday and Sunday.) (Coote *et al.*, 2021)^[1].

Although Ford Corporation limited the maximum number of hours that may be worked per week at 40 at the time this system was originally adopted, 48 hours per week was still the norm. Initially, it was designed to maintain employment during that time of global recession by scaling production output.

While large corporations with strong management capabilities were able to implement this system without much difficulty, many medium-sized and small businesses were compelled to do so in order to prepare for the transition of the large corporations or to comply with legal requirements (because the legal working hours in the Labour Standards Law are 40 hours, then all forms have to set 5 days week if we assume labour for eight hours for five days on weekdays).

When this occurs, "unpaid overtime" frequently resulted and had potential negative impact in form of reduced labour motivation and declining health of employees. The balance between professional.

Four day workweek culture

Nowadays the four-day work week is becoming more popular. The statement "Thank god it's Thursday" is likely to become a defining aspect of the modern workplace, thanks to the acceptance of the four-day workweek and taking into account the shift by various government and business organizations. The worldwide internet is flooded with pages detailing its numerous benefits and advocating it as a practice.

Furthermore, COVID-19 has changed the whole scenario of working culture across the globe. Due to social challenges, companies started adopting four-day workweek culture. Four-day workweek culture involves reduced working hours, without reducing the salary of employees. In recent years some countries like India, Spain, and New Zealand have started implementing four-day workweek culture. (Chung *et al.*, 2022). The strongest reason to adopt a four-day work week culture is improved productivity. Longer working hours lead to negative health outcomes like absenteeism, and sickness. Reduced working hours allow an employee to spend his/her free time for other activities. (New, N.D.).

Labour code

The Workers' empowerment is critical for a thriving and self-sufficient India. Initially, the workers were dealing and struggling with multiple labour legislations which were complicated and didn't provide any relief to the worker class. But now to provide relief and freedom to workers, the government has taken a few steps into consideration. The central government has taken the significant step of codifying 29 laws, allowing employees to enjoy security, respect, and health with ease. These changes in reforms will lead to a better working environment, in turn accelerating the pace of the economy.

There are four codes: the Industrial Relations Code, Social Security Code, Code on Wages, and Code on Occupational Safety, Health, and Working Conditions. Under the new provision of labor laws, instead of the standard 5-day work week, companies can permit their staff to work 4 days per week. Several characteristics of employment and work culture in general may alter - including the working hours, productivity, quality of life, physical and mental health of employees.

As a result of the new labour code, Indian employees may be able to enjoy the benefits of a four-day workweek beginning next year. However, in order to receive a four-day workweek, employees must work 12 hours each day, since the labour ministry has stated that if the plan is approved, they must

Complete a 48-hour work requirement. (Deccan Herald) ^[5]. The worldwide pandemic has altered the conventional offline work culture, and notions like work from home, hybrid work, and remote work have been generally accepted Many employees continue to prefer to work in this new mixed mode, and it is difficult for them to return to the prior 5 day work week mentality. To overcome such issues, the Indian government has instituted a four-day work week culture. (Coote *et al.*, 2021) ^[1].

Global perspective on four-day workweek

The United Arab Emirates (UAE) was first country in world to adopt the 4-day work week and the United States has been experimenting with the 4-day work week since 1990. Numerous world leaders such as Vladimir Putin and Prime Minister of New Zealand Jacinda Ardern have also promoted a change to a four- day work week.

Prime minister of Japan, Yoshihide Suga, also intended to promote work-life balance and the acquisition of new skills in mean time. In an effort to tackle the concept of "Karoshi," which is Japanese term for "death from overwork" which means overtime and overwork deteriorated physical and mental health which leads to increase suicidal attempts. Microsoft tried out a four-day workweek at its office there and discovered that its staff members were not only happier but also noticeably more productive. Work Life Choice Challenge was advertised in Microsoft Japan with the motto "Work for a limited period, relax well, and learn more." (Lunsford)^[9].

Several companies including Wildbit have also adopted this work custom in 2017 and founded positive impact on employees as more emphasis was given to the outcomes and efficiency than number of hours worked in a day. (Fontanelle, 2022)^[10].

A study done in New Zealand on employees of Unilever showed significant improvement in productivity and worklife balance of employees when 4-day work week was implemented. (New Zealand herald), (Bloomberg)^[11].

A few other nations have also tried to experiment with more flexible work schedules. Such as Spain started a 32-hour workweek in an effort to boost employee productivity, mental health, and overall work-life balance. A 50 million euros project was also proposed that would enable businesses to implement four-day workweek. (Guardian, 2021)^[12].

Some Study reveal that many companies adopt four days working culture where Belgian Labour Minister Pierre Yves Dermagne said that the decision resides with the worker, "This has to be done at request of the employee, with the employer giving solid reason for any refusal". That means the employee would be able to plea a Four-day work week, employee would able to work longer each of four days and would able to spend quality time as per their convenience also they can do some efforts to health and physical fitness. (Kelly, 2022)^[13].

Need for shorter working week

Different workplaces around the world have different workculture. The working culture of western countries and India can be clearly distinguished from one another. We see a better and upgraded standard of living in the western part of the world due to the adoption of flexible working models (32 hours, 4-day workweek) for their employees and understanding the complete difference between personal and professional life.

Reduction in overtime

In India employees generally works more than their schedule time as per the need of organization. Most of us consider work to be our first priority whereas it should be of equal importance to our personal life.

Employees in the private sector have to work overtime in past in order to increase productivity and the company's target. Moving to a 4-day working week is seen as a necessary step in liberating people from the restriction and deprivation of work. Beyond that it is seen as important step in extending the freedom of people to realize their talent in other economic activities with the reduction in overtime by getting simultaneously 3-day off in a week.

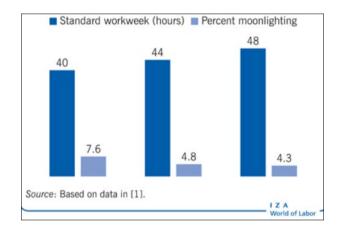


Fig 1: A shorter standard workweek boosts incentives for multiple job holding and undermines work sharing

Oaxaca, R.L. (2014), The effect of overtime regulations on employment, IZA World of Labor. Available at: https://wol.iza.org/articles/effect-of-overtime-regulationson-employment/v1 (Accessed: December 19, 2022).

Standard workweek hours and overtime hours is better regulated in the modern working models like 4-day workweek giving the flexibility to employees to boost their incentives by multiple job holding ^[3].

Talent Attraction and Retention

According to statistics from the Henley Business School, employees of businesses that have embraced a four-day workweek have reported higher levels of happiness (78%), lower levels of stress (70%) and lower rates of job absences (62%) due to staff illness. In addition they would be less likely to quit their job and seek alternative employment, which ultimately leads to reduction in recruitment cost and overall cost by rising productivity, increasing worker morale and reducing the turnover cost.

Businesses in the United Kingdom who have adopted the four-day workweek have been able to save 92 billion euros a year as a result.

One of the major reasons of their retention could be the travelling cost hiking in current working culture which can be pulled down by shorter workweek. Comparing to the benefits of 557.8 million fewer miles per week on average the UK employees are able to cut down their transport cost.

Citizens of Netherland on average only work 29 hours per

week, lowest in the industrialized world. As a result, they have a high employment rate. They prioritize time with their families or participating in non-work-related activities but still able to maintain high rate of productivity. This could be the major attractions for the employers to have an employment in the organizations adopting the shorter workweek. These examples are urging India to experiment on modern working models for giving more flexibility to their working culture. (Janice Neipert)^[4].

The fourday Workweek and the Environment

It is a common misconception that industries and big businesses are responsible for global warming but a multinational study found that the way we live, work and consume are the primary sources of emission. By the introduction of shorter workweek will reduce the working hours that will have the positive effects on reducing carbon emissions, because of the changes in behavior, including reduced commuter travel, eating home-cooked food rather than convenient foods, and spending more time locally would actually stops consumption of high carbon products.

Improves Gender Inequality

During the pandemic, gender equality in the workplace has taken a few steps back, about 3 million women left the labour market in US 2020. Studies shown that women had to drop out from the workforce due to antiquated notions of care giving that lead to gender inequalities in the home, coupled with stress from their jobs and the pandemic itself left women with no options and are struggling from burn out than ever before.

It is obvious that something needs to be changed, and the 4day workweek was the solution for many countries like US to bring equality in workplace and giving ample time to specially women to carry their household responsibilities along with their jobs in hand. It will also allow more flexibility for parents to spend their extra day of running necessary errands and dealing with other family mattersallowing them to be more focused and productive when they are working. Shorter working hours looks like a promising tool to reduce overtime, improves life expectancy, retention rate, gender equality and the environment.

Quality of life

Quality of life is "a subjective appraisal of one's perspective of their reality compared to their aspirations as perceived via their working culture and value system," according to the World Health Organization. It simply means how much a person can enjoy the valued possibilities of their life.

Improved quality of life for workers is the primary goal of the four-day workweek. People can spend more time on their personal priorities, such as spending quality time with family and friends, going to the doctor, developing personally, going to school, travelling, engaging in hobbies, and maintaining and improving their homes, when they have three days off after working four days. (Kagan, J. 2022)^[14]. The core idea underlying QWL is that once an employee realizes that their organization is fulfilling their requirements through the work of the hiring organization (i.e., using the latter's resources), they will be content with their job and life. QWL is a valuable variable in human resource management for understanding and pointing out employee's requirements, identifying strategic gaps within an industry, and taking steps to address as well as enhance the employee's work quality. It guarantees the employee contentment and determination towards the work, which eventually leads to productivity (Lee *et al.*, 2015) ^[15].

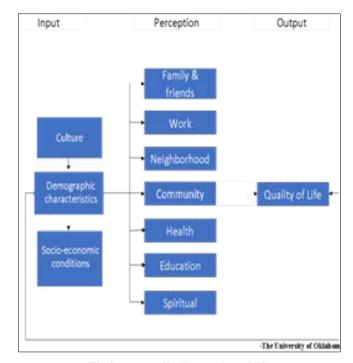


Fig 2: Factor affectiing quality of life

A case study on four-day workweek at perpetual guardian-New Zealand suggests that the various factors such as stress, work-life balance, commitment, leadership, stimulation, empowerment considered to improve the organization's performance and the results are represented and compared to the study the performance as before and after the implementation of 4-day workweek. (Work less, get more: New Zealand firm's four-day week an 'unmitigated success' 2018) ^[16] The results from different global organizations for bringing more balance in employee's life arose the interest of Indian researcher and economist in four-day workweek. (*Management Magazine* 2019) ^[17].

K.R. Shyam Sundar, a labor economist said employees are given the chance to spend more time on recreational pursuits, employees are likely to be ecstatic and better able to handle the pressure of their weekly workload. When people invest more time or involvement in their combined work and family roles brings more satisfaction and workfamily.

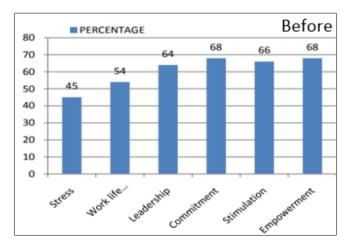


Fig 3: Percentage on different factors

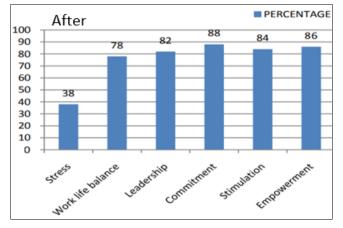


Fig 4: Percentage on different factors

balance. (Greenhaus et al., 2003)^[18]

Working with meaning and purpose is the real goal of minimizing work time, not just freedom from work. It is not only important to find ways to create more free time, but also to do work that increase your happiness level is more also shorter workdays is to facilitate people living more sustainably, it might free up time for low-carbon activities by reducing "convenience" purchasing and energy-intensive travel, more leisure time can promote resource-friendly behavior.

A relationship between productivity and work-life balance

An Indian business intelligence company Beroe made the announcement of 4-day workweek in 2017 in order to help employees to improve your work-life balance without loss of productivity. The business provides data to back up their choice, including an increase in productivity of 200 percent and a rise in customer satisfaction from 8.3 to 9 out of 10. On a scale of 0 to 5, the level of employee satisfaction rose from 3 to 4.3 in six years. Therefore, the study suggests the urge of employees to organization to support their personal development and leisure activities that could well aligned to reach the goals and objectives of the company. (Boroe, 2022) ^[19].

Happiness and Job Satisfaction

All over the world happiness has being happy has been n

defined as an assessment an individual's life, contentment in one's existence, the modulation of positive feelings, and a minimal number of negative thoughts and consequences (Diener, Suh, Lucas, & Smith, 1999)^[20]. Literature suggests that, despite of having positive work attitude, certain emotions are difficult to express or define. HAW is described as "the feeling of happiness in the work itself, the work characteristics, and the entire organization" (Fisher, 2010)^[21] implying that the work involves a variety of attitudes. Job satisfaction can also be defined as the good and pleasant feelings that arise as a result of doing one's job. (Locke, 1976)^[22].

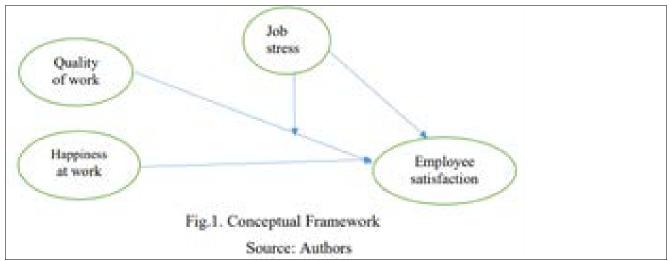
Through research, it is discovered that relevant interest can be divided into two categories: hygiene elements and motivation factors. Hygiene factors such as working conditions, supervision level, the organizational policy and management, interpersonal relations, job stability and wages are important for an employee and in absence of these employee's chances of being dissatisfied increases. (Dartey-Baah & Amoako, 2011) ^[23].

The hygiene determinant still seems to be too strong, yet it can only make people happy on the outside and is insufficient to make them happy on the inside.

Motivational factors such as the nature of work, sense of accomplishment, recognition, responsibilities, opportunities for personal growth and advancements assist employees in discovering their value and acknowledgment provided by their organizations. Furthermore, this can boost employee's enthusiasm, which leads to increased internal happiness, and internal happiness leads to satisfaction.

Hygiene aspects cannot provide internal happiness, but they can alter discontentment into zero discontentment and can provide short-term motivation. Motivational components, on the other hand, have a long-term influence by increasing positive feelings towards the job and converting no dissatisfaction into pride leading to satisfaction.

According to Herzberg's two-factor theory, hygiene factors and motivational factors are interconnected, because hygiene factors shift employees from job dissatisfaction to "zero job" dissatisfaction, whereas motivation shift employees from zero job dissatisfaction to job satisfaction (Herzberg *et al.*, 1978)^[24]



Source: Authors

Fig 5: Conceptual framework

Productivity

Productivity is known as efficiency of goods and service produced by manufacturing and service industry. In 2002, OECD (Organization for Economic Co-operation and Development) defined it by the ratio of total output to a single input typically over a period of time, i.e. "volume measure of output to the volume measure of input". Gross domestic product (GDP) or gross value added (GVA) are volume measurements of production, as are volume measures of labour hours, workforce jobs, and employment numbers. General example of the output of labour often referred to as Efficiency of the workforce is the aggregate of goods and services provided by groups of workers produce in a given period of time. Productivity growth at national level, increase living standards due to more real income improved people's ability to purchase goods and services (whether they are luxuries or necessaries), enjoy leisure, education and contribute to social improve and environmental programs. (Kaliski, et al., 2001)^[25].

According to the UAE government, "Longer weekends will increase productivity and enhance work-life balance beginning January 1, 2022." The administration declare that, going forward, all Friday sermons and gratitude will be held after 1.15 pm in accordance with the announcement (Wam, (2021))^[26] The regulation of large firms, the service sector, and the determination of employee production are all significantly impacted by productivity.

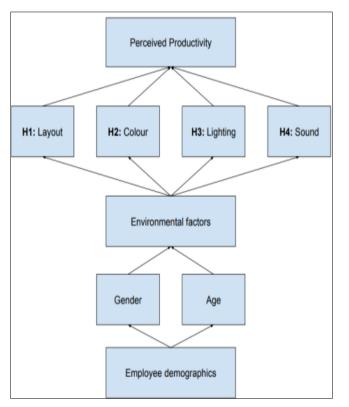


Fig 6: Conceptual Framework on Environmental Psychology (Torvinen, 2022)

Henry Ford (1926) said that after two days off, employees are "so fresh and bright" and "put their efforts more mindfully and sparingly at work." They believe that holidays provide opportunities for persons who are more skilled at using their time effectively. Ford had made the decision to increase productivity since it was predicted that employees would make more effort into job in exchange for more free time. Ford consider adequate free allowed employees more time to spend shopping and consuming more things, which was excellent for business. Ford stated, "It's time we got away of the idea that leisure is either 'lost time' or a luxury of the upper class for workers". (Henry, 2022)^[27].

However, at the same time as productivity is seen as one of the most vital factors affecting in business management and other firms. Many companies have many programs to improve productivity, whether they have programs or not companies frequently looking for drives to improve the quality. So, one of the ways to improve productivity as well as leisure time is four-day workweek, research says that there were increase in leisure time when companies tried the four-day work week when it is compared to five/six-day workweek. Businesses attempted to determine how productivity will impact working hours and working time daily and weekly in order to ensure compliance with the four-day rule. According to some researcher's findings, productivity among workers rises when daily working hours are increased and productivity rises when workers return from the weekend. (Collewet, 2017)^[28].

Standardized assessments of productivity, such as task performance and task accuracy, have typically been limited in duration and scope, as in the majority of published studies. There are different surroundings, notably the surrounding environment, such influence of colour on human performance, colour and arousability, and visual complexity and arousability, according to subsequent experimental research.(Kwallek et al., 2007)^[29]. Some scientists showed that productivity is measured by "Efficiency". As per them efficiency is comprised of two components technical efficiency and allocative efficiency. Technical efficiency of organization must have maximal output from the resources available know as set of input. Allocative efficiency of organization must have optimal balance of inputs, in which one output is measured by three inputs such as labor, capital, material and relation between them at a given time. (Rogers, M. (1998)^[30] Jarkas, Kadri and Youne studied the factor of labour productivity as skills of labor and motivation of labor which determined the productivity of labor on construction process. Unskilled and poorly trained laborers' are commonly characterized with low and faulty outputs coupled with unjustifiable high inputs. (Jarkas et al., 2012) [31]. Based on conceptual framework on environmental psychology below figure was designed to give visual representation of how environmental factors like layout, colour, lighting and sound affect employees' productivity (A study on environmental psychology, n.d.) [32].

Numerous studies have shown that when the number of hours worked decreases, productivity finally increases. According to a poll taken in March 2020, persons who work four-day weeks experience less burnout and are more satisfied with their lives than those who work five-day.^[33] (Ronen & Primps, 1981).

A key performance indicator (KPI) is a quantifiable figure that shows how well a firm is accomplishing its main goals. In the end, company goals are accomplished via staff cooperation. KPIs are used by organizations to assess their progress and performance in achieving goals. A KPI may be thought of as a target that you strive to reach.

Efficiency wages theory

Adam Smith gives theory related to productivity. He states that efficiency wages theory which refers to the level of wages paid to employees is more than minimum wages to boost productivity, attract and retain skilled workers and ensure trust and loyalty. Efficiency wages considerations provide strong incentives for establishing long-term relationships between employers and employees. Wage payments may serve as installment payments for the long term when long-term obligation job contracts become more prevalent. Below graph explains the efficiency wages theory where y-axis is wages and x-axis is labour productivity. (Katz *et al.*, 1986)^[34]

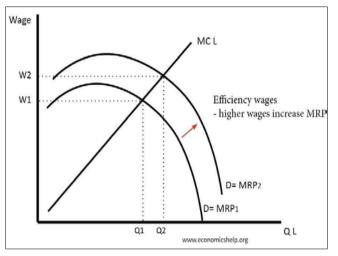


Fig 7: Efficiency graph

Physical fitness and work-life balance

The American Heart Association says, "Physical activity boosts mental wellness. Regular physical activity can relieve tension, stress, anxiety, depression, and anger. You may feel a good sensation immediately following your physical activity, and most people also note an improvement in general well-being over time as physical activity becomes a part of their routine." Physical health is the overall wellbeing of the body and the proper functioning of every organ of individuals, who are not suffering from any kind of disorder and disease. It is a very essential part of our life, to maintain good health to work efficiently. Maintaining physical fitness, it's a difficult task in today's world because life is recognized as too busy, rigid, and stressful in metropolitan cities. In order to maintain good physical fitness, daily exercise and other physical activities are required. One of the reasons is a long workweek and less time to spend on physical fitness. It is well known that working long hours has a negative impact on a person's physical and psychological health. (24) (SNG et al., n.d.) [35]

When someone works long hours, they may experience stress, which prevents them from engaging in any enjoyable activities. Therefore, longer workdays can lead to an imbalance in physical activities like yoga and exercise. (Sondhi *et al.*, 2020)^[36].

Several diseases like diabetes, hypertension, and heart diseases increased because of work life imbalance. Over weight gain due to sedentary work life style leading to several complications. India is having the second largest adult diabetes population. Reduction in working hours avoids sedentariness of employee which avoids obesity kind of risks. (Burton & Turrell, 2000) ^[37].

Irregular work schedules cause sleep disorders, which have a detrimental impact on physical health. Employees who worked long shifts reported more physical health issues. Flexible work hours are beneficial for preserving physical health. (Martens *et al.*, n.d) ^[38].

Regular physical exercise is one of the most important things you can do for your health. Physical activity can strengthen bones and muscles, help us to maintain a healthy weight, increase our ability to carry out daily tasks, and improve cognitive health. Adults who spend less time sitting and engage in any level of moderate-to-vigorous exercise reap some health benefits. Physical activity has a greater influence on your health than very few other lifestyle decisions. Physical activities have health advantages for everyone, age, ability, ethnicity, form, or size are irrelevant. [39].

A healthy diet provides the nutrition a body needs to function properly, preserve wellness, and fight disease. These are some of the impacts of eating a good diet on one's physical health. An energetic individual can exercise more regularly and maintain an active lifestyle thanks to a good diet [40].

Various studies conducted across the world have shown that activities like sports and yoga practices drastically optimize body functions like respiration, heart rate, lowers blood pressure, keeps cardiovascular health problems at bay and helps in reducing chronic back pain or joint pain, among other key physical benefits ^[41].

According to a recent Northwestern Medicine study that was published in JAMA, regular checkups still have many health advantages, especially for at-risk populations, and they must continue. However, there is still no conclusive evidence that they increase adult survival time or prevent cardiovascular events like heart attacks and strokes. The study found that routine check-ups, which need not necessarily be done annually, can increase immunization rates and cancer screenings, improve how patients actually feel after seeing a doctor (patient-reported outcomes), and help to diagnose and treat chronic illnesses like depression and hypertension ^[42].

Reduced working hours led to higher levels of exercise and physical activities, which improved HDL. The rise in physical activity was considerably bigger when it was required that workers use their time off from work for physical activity. It was also linked to improvements in glucose levels and a trend that may indicate impacts on disorders of the upper extremities. This study implies that interventions that somewhat reduce work hours seem to be more successful when the time is used for physical activity. (Von Thiele Schwarz *et al.*, 2008) ^[43].

Physical activity-based worksite health treatments successfully raise levels of physical activity, physical fitness, and subjective health status while preventing an early drop in job capability. Additionally, it has been discovered that these interventions raise levels of subjective physical well-being while lowering levels of headache and neck discomfort as well as the risk of musculoskeletal illnesses. Reduced work hours may boost time for recovering from work stress, reducing interference between different life domains, and increasing time spent engaging in health-promoting leisure activities like physical activity. (Voglino *et al.*, 2022) ^[44].

Mental health

Along with physical health, the number of hours that employees must put in also has an impact on their mental health. In addition to raising the risk of hypertension, cardiovascular disease, chronic infections, diabetes. metabolic syndrome, sleep disturbance, anxiety, depression, and excessive weekly work hours have detrimental impacts on employee's health.

Mental health includes emotional, psychological, and social well-being which influences cognitive processing, comprehension, reasoning and behaviour of an individual. It also determines how one manages stress, inter- personal relationships, and decision-making ability.

The Asian work culture is described as similar to "worker bees" which leads to a prolonged struggle with the overwhelming work load and job stress. The state of sentimental, behavioural, and physical response to unpleasant or distasteful aspects of work, working conditions, and work organizations is referred to as job stress. High levels of frustration, and frequent feelings of being unable to deal with work define this state. (Mishra et al., 2011) [45].

Long working hours have been associated with increased anxiety, distress, suicidal ideation, and worsened emotional well-being in studies. (Li et al., 2019) [46]. Employees with high job requirements due to extreme work and pressure are twice as likely to report anxiety as compared to employees with low job requirements. (Yoon et al., 2018)^[47].

A study conducted on sample of middle-aged British civil servants showed that each 10-hour increase in working hours is associated with a 17% and 22% increase in the likelihood of depressive and anxious symptoms, respectively, in the fully adjusted models. Working more than 55 hours per week is linked with a 2.67-fold risk of depression and a 2.84-fold risk of anxiety in women. Each 10-hour increase in working hours is associated with a 40% and 31% increase in risk of depression and anxiety, respectively. (Virtanen et al., 2011)^[48].

Working overtime means less time for social activities, which harms interpersonal connections, social interchange, and social support, all of which are considered as favorable elements for personal mental health. (Liu et al., 2021)^[49].

Working overtime has been linked to short or erratic sleep

and has been shown to be dose-responsively associated with poorer sleep quality. Long working hours and sleep disruptions have also harmed people's quality of life. (Afonso et al., 2017)^[50].

Individuals who develop continuous sleep problems are more likely to be involved in mishaps, experience greater rates of work abstinence, perform worse on job, have a lower quality of life, and need more medical assistance.

The effects of a 4-day workweek on agile software development teams suggested that the 4-day workweek had increased the employee's stress levels related to their jobs. Despite the rise in work- related stress, the 4- day work week had reduced stress in daily life because of more flexible free time and the absence of commuting. (Topp et al., 2022) [51].

The study conducted to evaluate the effect of working hours on depressive symptoms and the role of job stress among employees in South Korea showed that the prevalence of depressive symptoms was lowest in the 40 hours group and as working time increased the prevalence of depressive symptoms also increased, creating a U-shaped pattern.

According to a 5-year follow-up study of British civil servants, the depressive symptoms were 1.66 times and anxiety symptoms were 1.74 times higher than those of people who worked more than 55 h a week compared to 35-40 h a week. (Yoon et al., 2018)^[47].

The study conducted in Korea where employees were working up to 48 hours or more than that indicated an increase in depression (as measured by the Beck Depression Inventory (BDI), while working up to 60 hours or more showed an increase in depressive symptoms and suicidal thoughts. (Lee et al., 2013) [52].

Using univariate analysis, it was discovered that working overtime is connected with higher Hamilton Depression Scale scores, and it was discovered that working longer hours is associated with greater degrees of depression. Tyssen focused on suicidal inclinations, which are a severe depression-related outcome, and found that working longer hours is connected with suicidal tendencies. (Liu et al., 2021) [49].

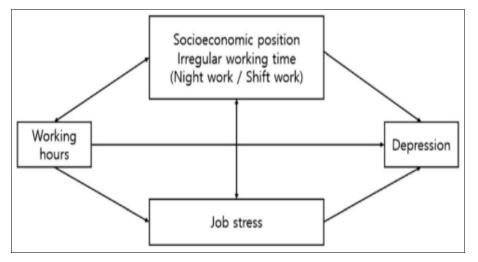


Fig 8: Relationship between working hours and depressive symptoms

The Figure below shows an outline of the relationship between working hours and depressive symptoms. Socioeconomic position and irregular working time were seen as confounders. Job stress is considered as a mediator because, as work hours increase, the hours for workers to be

exposed to job stress become longer and stronger, and the characteristics of the job needing long or short working hours could be related to job stress.

Fig. The outline of the relationship between working hours and depressive symptoms. Note. Socioeconomic position: education level, net monthly income, job category, employment status, Job stress: difficult physical environment, job autonomy, job demand, social support, and reward

Considering the sleep cycle and the imbalance between work and life, long working hours are likely to have a detrimental effect on emotional well-being. (Lee *et al.*, 2013)^[52]

Emotional stability is a personality quality that reflects a person's capacity to remain composed focused, positive, adaptable, and confident in the midst of challenging circumstances. (Huo & Jiang, 2023) A steady emotional state provides assistance to handle situations with self-awareness. Also, Emotional well-being is an essential indicator of overall perceived quality of life and a reliable predictor of emotional function and depression. (Lee *et al.*, 2013) ^[52].

As a result, individuals who have high emotional stability more likely to use an active, problem-solving coping style (for example, proactively identifying methods to deal with job the pressure).

Supporting these claims, a study discovered that those with high emotional stability choose a problem-solving approach over an avoidance coping strategy (i.e., ignorance of stressors), which is chosen by those with low emotional stability. (Huo & Jiang, 2023)^[53].

According to the findings, emotional stability is a better predictor of job performance. Low emotional stability is associated with poor work performance, particularly in task performance, contextual performance, and supervisory assessment. Workers with low emotional stability (high concern) exhibits symptoms such as anxiety, depression, irritability, lack of confidence, emotional reactivity, fear, and insecurity. As a result, individuals are more prone to workplace stress, lack of concentration, and lacks appropriate emotions when dealing with workplace stress.

Emotional stability influences health behaviour patterns and disease progression by effectively responding to health concerns as well as creating social support through interpersonal interactions.

As work hours increases, the possibilities to acquire social support, such as physical activity and connections outside of the job also diminishes. (Lee *et al.*, 2013)^[52].

It is also discovered that emotional stability is the most important predictor of exhaustion. It is also believed that because neurotic people are vulnerable to stress symptoms, they are more prone to exhaustion thus affecting the mental health of an individual. (Michielsen *et al.*, 2003) ^[54].

Methodology

The aim of this primary research is to know about whether the working professionals and employees accept new working culture which is four-day workweek in India and what they considered to be the most significant elements in support of quality of life, productivity, physical health and mental health. As are result of secondary data gathered through the literature review, this study was conducted using quantitative and qualitative method. Firstly, this section will introduce sampling and Survey design, Data analysis consists of descriptive analysis and factorial analysis. To conclude the research we have result and discussion.

Sampling and Survey design

Due to the nature of the study, our study population are working professional and employees as participants. Instead, snowball sampling was applied in order to collect as many as respondents as possible in the short period of time. In addition, the choice of sampling reflected the objectives of the study as it aimed to study which job related factors effect participants' perceived quality of life productivity, physical mental and mental health.

The survey was divided into four parts. The first part began with a disclaimer, introducing the topic and how data was to be overseen. The respondents were made aware of the anonymity of their responses and the possibility of quitting the survey at any point.

The second part of the survey was asked participant about their demographics. The question are like age, gender, state and marital status. The third part of the survey contain questions on the Nature of company, Job designation, job sector working days, working hours, Level of satisfaction, ability to do four day twelve hours and prefer to do four nine hours.

The last part of survey was having different work cultures on Likert scale of 1 to 5 (1 for decrease and 5 for increase) about what they perceived as their quality of life productivity, physical mental and mental health. The questionnaire was prepared on google form and circulated on WhatsApp and LinkedIn on February 2023.

Data analysis

From the 355 respondent, approximately 66.90% were male (N = 237) and 33.10% were female (N = 118). No respondent has chosen option 'other'. Around 30.3% of the respondents were From Gujarat (N = 109) and 25.8% from Maharashtra (N=93). Approximately 78.9% of the participants were work in private industry (N = 284), 48.75% said they will prefer to work four day 12 hours (N = 216) and out of 13.90% respondent (N = 49) work in government company 28% (N=38) were said they prefer to do four day 12 hours of work as shown in pie chart.

Approximately, out of 78.80% respondent were of private industry 48.75% (N = 216) were prefer to do four day 12 hours of work and out of 13.90% of respondent are from government company 28% (N = 38) were said they will prefer to do four day workweek.

 Table 1: The Demographic Information and Characteristics of Study Participants

Characteristics		No. of Respondent (N)	Percentage (%)
Age	21-30 year	292	82.20%
	31-40 year	48	13.60%
	41-50 year	7	1.90%
	Above 50 year	8	2.20%
Gender	Male	237	66.90%
	Female	118	33.10%
Nature of company	Government	49	13.90%

	Semi Government	9	2.50%
	Private	280	78.80%
	Public Sector Undertaking (Psu)	17	4.70%
Job designation	Upper Level Management	130	36.50%
	Middle Level Management	200	56.30%
	Lower Level Management	26	7.20%
Job sector	IT	122	34.30%
	Pharma	136	38.40%
	Other	97	27.30%
Work status	Work From Office	247	69.60%
	Work From Home	40	11.40%
	Hybrid Model (Both)	67	18.90%
Travelling time	No Travelling Time Is Required	66	18.70%
	Less Than 1 Hour	180	50.70%
	1-2 Hours	89	25.10%
	More Than 2 Hours	20	5.60%
Working days	Less Than 4 Days	0	0.00%
	4 Days	12	3.30%
	5 Days	170	47.90%
	6 Days	172	48.50%
Working hours	Less Than 6hours	5	1.40%
	6 Hours	16	4.50%
	8 Hours	207	58.20%
	10 Hours	100	28.10%
	12 Hours	28	7.80%
No of leaves	05-10 Leaves	159	44.80%
	10-15 Leaves	107	30.10%
	15-20 Leaves	89	25.10%

There are 50.98% of respondent were travel less than 1 hour out of them (N=86) respondent will prefer to do four day 12 hours and 25.35% respondent travel 1-2 hours per day out of which 45.55% respondent would like to prefer four day

workweek. Based on work status such as hybrid mode, work from home, work from office combined 487.88% individuals work 5 days a week and 49.01% are working 6 days a week.

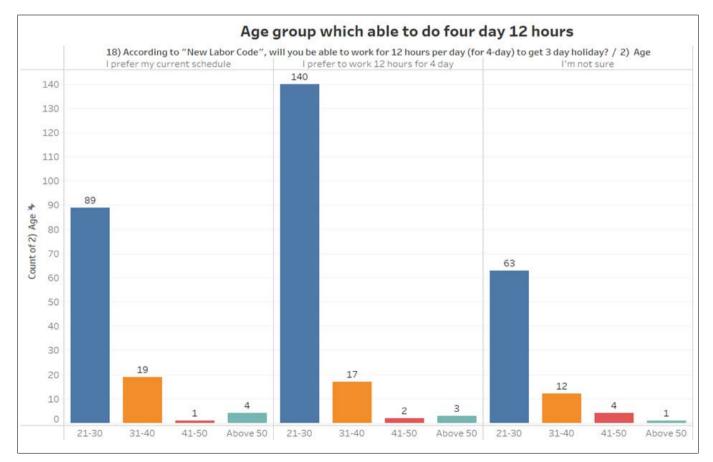


Fig 9: From Tableau showing people preference of four day workweek over travelling time

Working Days				
Work Status	4 days	5 days	6 days	Less th
Hybrid mode (both o		57	9	
Work from Home	4	28	8	
Work from Office	6	85	157	1

Fig 10: From tableau showing number of people according to work status and working days

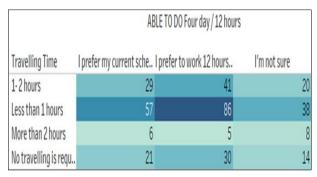


Fig 11: From Tableau count of people according their age group and preference to do four day workweek with 12 hours per day

Factorial Analysis

As our study contained different variables in the data set and to check the correlation and factorize the variables, before the actual factorization was done, KMO and Bartlett's test(Table-2) were performed where the KMO (Kaiser-Mayer-Olkin) test was executed to determine the sample reasonability to perform factor analysis and the P-value was found to be more than 0.7 (>0.7), i.e. 0.931 which establishes the fact that the sample data is reasonable for performing the factor analysis, along with it Bartlett's test for examining the use of factor analysis, the significance level was found 0.000 which again confirms that we can move forward with our research using the factor analysis. The understudy data was found to have a commonality value of more than 0.5, which says that the data will be able to explain more than 50% of the variance in the given data set. Altogether the sample has a significant value of more than 1.0 (> 1.0), which further supports the exhaustive factor analysis of the generated values in Table 3*

Table 2: Result of KMO and Bartlett's Test

Kaiser-Meyer-Olkin Mea Adequacy	.931	
Bartlett's Test Of Sphericity	Approx. Chi-Square	11866.183
	Df	435
	Sig.	.000

The KMO test measures the sampling adequacy; the KMO value was (p > 0.05), the sample was sufficient for applying the factor analysis, and Bartlett's test of sphericity tests whether the correlation matrix was an identity matrix or not. Bartlett's Test of Sphericity was significant.

Table 3: Rotation Component Matrix

Current work culture	1	2	3	4	5	6	
CWQOL	.100	.002	.040	.857	052	040	
CWPD	.101	082	009	.748	.036	042	
CWPH	134	.072	.097	.856	019	.013	
CWMH	062	.026	.124	.860	036	.063	
	nded S	hift ef	fect				
FOUR12QOL	.309	.798	.027	.047	.077	.129	
FOUR12PD	.273	.721	.043	.064	.141	.062	
FOUR12PH	.243	.862	.044	041	.138	.132	
FOUR12MH	.266	.852	016	043	.109	.124	
Flex	ible w	ork sh	ift				
FOUR9QOL	.610	.144	011	.041	.624	.215	
FOUR9PD	.581	.110	.036	013	.644	.176	
FOUR9PH	.523	.228	.059	082	.725	.181	
FOUR9MH	.499	.239	.044	070	.729	.204	
Phy	ysical v	wellne	SS				
PHEX	.611	.150	.060	.012	.195	.644	
PHNTRI	.627	.195	.016	053	.231	.632	
PHPYAC	.618	.203	.008	.001	.196	.668	
PHCUP	.499	.251	.057	005	.211	.656	
Wo	rk life	balan	ce				
QOLFMY	.833	.129	.035	.022	.176	.272	
QOLHAPY	.846	.145	.068	.003	.140	.250	
QOLJS	.853	.195	.061	.040	.154	.208	
QOLGRW	.886	.167	.059	.063	.080	.162	
QOLSKL	.844	.191	.062	.072	.096	.202	
PDETHU	.864	.179	.039	013	.226	.045	
PDPF	.834	.186	.022	026	.208	.092	
PDENV	.881	.193	.008	002	.184	.060	
PDIPR	.853	.191	.024	021	.210	.089	
PDSLE	.785	.142	005	077	.163	.176	
Me	ental V	Vellnes	SS	-	-		
MHST	.021	008	.922	.046	027	047	
MHANX	.006	.007	.945	.067	.016	003	
MHDP	042	.023	.947	.061	.031	.025	
MHEM	.236	.061	.642	.094	.060	.120	
		·	·	·			

 Table 4: Composite Reliability (CR), Average Variance Extracted (AVE) and MSV

	CR	AVE	MSV
Flexible work culture	0.938	0.836	0.570
Current work culture	0.856	0.601	0.029
Mental wellness	0.950	0.865	0.029
Extended shift effect	0.894	0.682	0.283
Work life balance	0.958	0.766	0.707
Physical wellness	0.948	0.820	0.707

Above mentioned table are the output are of the tests that were done in IBM SPSS V 22 Software, where data was insert for factorized in the IBM SPSS V 23 software to further perform the Confirmatory Factor analysis CFA along with the structural equation model on the theoretical hypothesized model of the variables in order to check for connections across latent factors and to identify which factors are impacting which variables in the predicted model, the factored data was then used to conduct confirmatory factor analysis in IBM AMOS V 23 software and structural equation modelling and to find out what factors are having particular impact on various variables in our hypothesized model, for doing so CR (Composite Reliability), AVE (average variance extracted), MSV (Maximum shared variance) values are checked to make sure that the grouped factors are closely associated with each other. As that Composite Reliability numbers are all above 0.70, so reliability is not questionable for the above factor model. Here, AVE value is observed above 0.50. So validity holds by the above factor model. Discriminant validity holds by the model, as MSV values are higher than the square of highest correlation values of the respective factor. So they have correlation amongst them, the values so obtained supported and gave a positive sign to carry CFA for our study, To carry out CFA and to demonstrate that the model is a good fit, To check association amongst different variables the hypothesized path diagram was drawn in AMOS Graphics software and all endogenous, as well as exogenous variables, are placed also the error variables are also applied in the variables that are required and the variables were connected with the arrows to test the theoretical assumed model, After that variables were correlated by clicking with the help of plugins to try our research study.

Hypothetical model

From the above tables 5 we can say that all the relations (variables raltions to respective factors) are statistically significant as p_vluaes are less than 0.01. They are indicated as *** significant with 99% level of confidence. From the below table 6, we can see that all factor loadings are above 0.50. If fit statistics are not matching with the recommendations then we need to modify the above model.

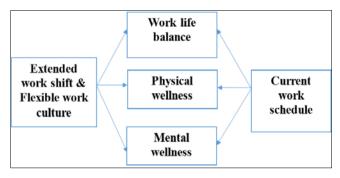


Fig 12: Hypothetical model

			0				
			Estimate	S.E.	C.R.	P	Label
QOLFMY	<	Work life balance	1.086	.054	20.108	***	par_1
QOLHAPY	<	Work life balance	1.058	.052	20.399	***	par_2
QOLGRW	<	Work life balance	1.037	.050	20.588	***	par_3
QOLSKL	<	Work life balance	1.047	.053	19.884	***	par_4
PDETHU	<	Work life balance	1.034	.052	19.931	***	par_5
PDPF	<	Work life balance	1.012	.055	18.493	***	par_6
PDENV	<	Work life balance	1.035	.052	19.855	***	par_7
PDSLE	<	Work life balance	1.000				
FOUR12QOL	<	Extended shift effect	1.000				
FOUR12PD	<	Extended shift effect	.815	.060	13.521	***	par_8
FOUR12PH	<	Extended shift effect 1.146 .060 19.134		19.134	***	par_9	
FOUR12MH	<	Extended shift effect	1.138	.060	18.827	18.827 ***	
MHST	<	Mental wellness	1.000				
MHANX	<	Mental wellness	1.016	.033	30.471	***	par_11
MHDP	<	Mental wellness	.973	.033	29.343	***	par_12
CWQOL	<	Current work culture	1.000				
CWPD	<	Current work culture .744 .065 11.389 ***		par_13			
CWPH	<	Current work culture	.998	.064	15.617	***	par_14
CWMH	<	Current work culture	1.038	.067	15.559	***	par_15
FOUR9QOL	<	Flexible work culture	1.000				
FOUR9PH	<	Flexible work culture	1.242	.053	23.484	***	par_16
FOUR9MH	<	Flexible work culture	1.266	.054	23.402	***	par_17
PHEX	<	Physical wellness	1.000				
PHPYAC	<	Physical wellness	1.041	.033	31.693	***	par_18
PHCUP	<	Physical wellness	.865	.038	22.794	***	par_19
PHNTRI	<	Physical wellness	.983	.032	30.310	***	par_35
QOLJS	<	Work life balance	1.050	.050	20.985	***	par_38

Table 5: Regression weights

Table 6: Standard regression weights

		Standard regression weights	Estimate
QOLFMY	<	Work life balance	.892
QOLHAPY	<	Work life balance	.903
QOLGRW	<	Work life balance	.909
QOLSKL	<	Work life balance	.886
PDETHU	<	Work life balance	.883
PDPF	<	Work life balance	.837
PDENV	<	Work life balance	.880
PDSLE	<	Work life balance	.798
FOUR12QOL	<	Extended shift effect	.787
FOUR12PD	<	Extended shift effect	.672

FOUR12PH	<	Extended shift effect	.918
FOUR12MH	<	Extended shift effect	.902
MHST	<	Mental wellness	.901
MHANX	<	Mental wellness	.952
MHDP	<	Mental wellness	.936
CWQOL	<	Current work culture	.774
CWPD	<	Current work culture	.603
CWPH	<	Current work culture	.846
CWMH	<	Current work culture	.852
FOUR9QOL	<	Flexible work culture	.810
FOUR9PH	<	Flexible work culture	.965
FOUR9MH	<	Flexible work culture	.960
Table 6		Standard regression weights	Estimate
PHEX	<	Physical wellness	.913
PHPYAC	<	Physical wellness	.942
PHCUP	<	Physical wellness	.835
PHNTRI	<	Physical wellness	.930
QOLJS	<	Work life balance	.922

Table 7: Correlation

Work life balance	<>	Extended shift effect	.526
Work life balance	<>	Mental wellness	.047
Work life balance	<>	Current work culture	008
Work life balance	<>	Flexible work culture	.755
Physical wellness	<>	Work life balance	.840
Extended shift effect	<>	Mental wellness	.032
Extended shift effect	<>	Current work culture	010
Extended shift effect	<>	Flexible work culture	.532
Physical wellness	<>	Extended shift effect	.531
Mental wellness	<>	Current work culture	.169
Mental wellness	<>	Flexible work culture	.045
Physical wellness	<>	Mental wellness	.033
Current work culture	<>	Flexible work culture	101
Physical wellness	<>	Current work culture	032
Physical wellness	<>	Flexible work culture	.722

From the following table 7, From above table we can say that there is significant relation between factor like work life balance with extended shift effect, flexible work culture, physical wellness as p value is *** (0.000). To evaluate the model fit, statistical values were examined; CMIN (Chi-square value by degree of freedom), CFI (Comparative Fit Index), RMSE (Root Mean Square Error), and TLI (Tucker Lewis Index) values should be near to the optimal weight

for the best fit to be confirmed. CMIN (Chi-square value by degree of freedom) of 3.161, Comparative fit index (CFI) of 0.937, Tucker Lewis Index (TLI) of 0.928, and root-mean-squared error of approximation (RMSEA) of 0.078 indicate that the model has obtained an excellent outcome to be referred to as model fit. And the significant probability level was achieved (P = 0.001).

Table 8: Covariance

		Covariance	Estimate	S.E.	C.R.	Р
Work life balance	<>	Extended shift effect	.564	.076	7.462	***
Work life balance	<>	Current work culture	008	.055	139	.890
Work life balance	<>	Flexible work culture	.729	.078	9.397	***
Physical wellness	<>	Work life balance	.979	.094	10.402	***
Extended shift effect	<>	Mental wellness	.042	.075	.566	.572
Extended shift effect	<>	Current work culture	010	.060	166	.868
Extended shift effect	<>	Flexible work culture	.545	.072	7.607	***
Physical wellness	<>	Extended shift effect	.658	.085	7.772	***
Mental wellness	<>	Current work culture	.198	.069	2.859	.004
Mental wellness	<>	Flexible work culture	.053	.066	.806	.420
Physical wellness	<>	Mental wellness	.047	.080	.588	.556
Physical wellness	<>	Current work culture	035	.064	554	.579
Physical wellness	<>	Flexible work culture	.805	.083	9.674	***

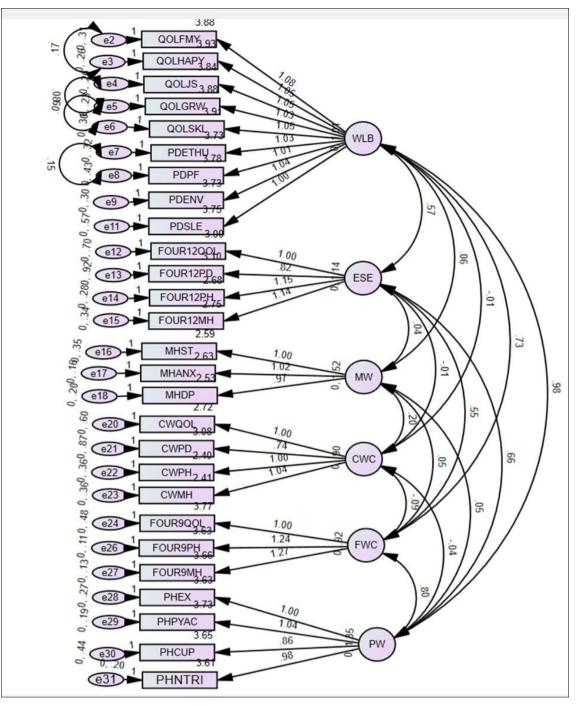


Fig 13: Amos Diagram Showing association of variable with different Factors

Result and Conclusion

The question in minds of people, working employee is that would India be able to implement four-day workweek. Some companies of India claiming that implementation of this working culture will be good for employee to do fourday work and enjoy the rest off-days. But some have saying that people may not like to work with 12hous per day.

We have done a research on the implementation of four day workweek. As the above estimates table shows that work life balance which include quality of life and productivity is significant as p value is (0.000) and correlation shows that good correlated but with flexible work culture it is highly correlated which conclude that the people would prefer to do extended work shift (12 hours per days) but they would like to go for flexible work culture more as correlated value is. 729. Also with physical health extended shift culture and flexible both are significant but flexible is again higher than extended shift because correlated value is. 805. Therefore the quality of life, productivity and physical health or activity of working professional seems to be increase in the four day with 12 hours per day and very effective in flexible work culture 9 hours.

Along with the survey questions we have added a space for suggestions of respondents with this part we came to know different perspectives of employees. The following chart shows suggestion of respondent which emphasize on implementation of four day work week with 9 hours also respondent suggest for four day 10 hours also they agree upon four day workweek but instead of having 12 hours they would like to go for 9 or 10 hours.

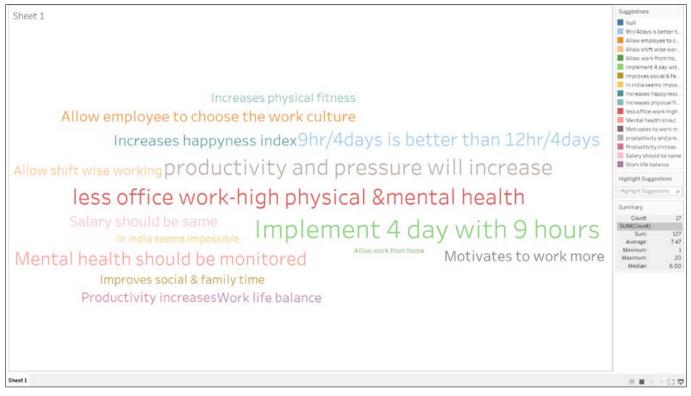


Fig 14: Word cloud created by Tableau

Limitation

In our study, most of the respondents are from the adult population; different age groups could have widened the scope of the study.

Our study did not include the salary of employees however under the code of law four day work week will decrease take home salary of employee to boost provident fund.

Our study did not include scheduling changes: implementing four day workweek may require changes to the existing work schedule, including staggered shifts or compressed workdays. This could pose challenges in coordinating employee's schedules and maintaining the effective communication within teams, particularly if different individuals or teams have varying day off.

References

- 1. Coote A, Harper A, Stirling A. The case for a four-day week. Polity Press; c2021.
- Deshmukh DT. Can 4-day a week be a new working week in the days to come? YMER Digital. 2021;20(11):127-131. https://doi.org/10.37896/ymer20.11/12
- The Economist Newspaper. (n.d.). IG Metall is pushing for a four-Day Week. The Economist. https://www.economist.com/business/2020/08/20/ig-
- metall-is-pushing-for-a-four-day-week
 Hedges J. (n.d.). A look at JSTOR.
- https://www.jstor.org/stable/41838141
 5. Migrator. Four-day workweek, new salary structure likely to be implemented in India under New Labour codes. Deccan Herald; c2021. https://www.deccanherald.com/national/four-day-workweek-new-salary-structure-likely-to-be-implemented-in-india-under-new-labour-codes-1064177.html
- 6. Gross J. 4-day workweek brings no loss of productivity, companies in experiment say. The New York Times;

c2022 Sept 22.

https://www.nytimes.com/2022/09/22/business/four-day-work-week-uk.html

- GmbH SE. Tibco Data Science / StatisticaTM. Statistica.com by StatSoft (Europe) GmbH: Fast, Efficient and User-friendly Data Analysis – with TIBCO® Data Science / Statistica TM; c2022. http://www.statistica.com/
- Sopher P. Where the five-day workweek came from. The Atlantic; c2018a. https://www.theatlantic.com/business/archive/2014/08/w here-the-five-day-workweek-came-from/378870/
- Lunsford R. Four-Day Workweek: The Microsoft Japan Experience. Four-Day Workweek: The Microsoft Japan Experience [Preprint]. Available at: https://doi.org/VC20032
- Fontinelle A. (n.d.). The impact of working a 4-Day Week. Investopedia. https://www.investopedia.com/theimpact-of-working-a-4-day-week-5203640
- 11. Nov NH, Nov, 1. Giant Unilever keeping four-day working week in NZ after trial. NZ Herald; c2023. https://www.nzherald.co.nz/business/global-giantunilever-keeping-four-day-working-week-in-nzaftertrial/6Q4KHHDJ3REMNMK3STNCTJISWA/
- 12. Guardian News and Media. Spain to launch trial of fourday Working Week. The Guardian; c2021. https://www.theguardian.com/world/2021/mar/15/spainto-launch-trial-of-four-day-working-week
- Kelly J. Belgium is the latest country to join the four-day workweek. Forbes; c2022. https://www.forbes.com/sites/jackkelly/2022/02/15/belgi um-is-the-latest-country-to-join-the-four-day-workweek/
- 14. Kagan J. (n.d.). What is quality of life? Why it's important and how to improve it. Investopedia. https://www.investopedia.com/terms/q/quality-of-life.asp
- 15. Lee JS, Back KJ, Chan ESW. Quality of work life and

job satisfaction among frontline hotel employees. International Journal of Contemporary Hospitality Management. 2015;27(5):768-789. https://doi.org/10.1108/ijchm-11-2013-0530

- 16. Work less, get more: New Zealand firm's four-day week an unmitigated success; c2018. https://www.theguardian.com/world/2018/jul/19/workless-get-more-new-zealand-firms-four-day-week-anunmitigated-success
- 17. Management Magazine; c2019. https://management.co.nz/news/perpetual-guardianreleases-four-day-week-white-paper
- Greenhaus JH, Collins KM, Shaw JD. The relation between work–family balance and quality of life. Journal of Vocational Behavior. 2003;63(3):510-531. https://doi.org/10.1016/s0001-8791(02)00042-8
- Beroe Inc. Advantage Procurement (no date) Beroe Inc. Advantage Procurement. Available at: https://www.beroeinc.com/ (Accessed: December 14, 2022).
- Diener E, Suh EM, Lucas RE, Smith HL. Subjective well-being: Three decades of progress. Psychological Bulletin. 1999;125(2):276-302. https://doi.org/10.1037/0033-2909.125.2.276
- 21. O'Donnell KP, Pajaro MG, Vincent ACJ. How does the accuracy of fisher knowledge affect seahorse conservation status? Animal Conservation. 2010;13(6):526-533.
- 22. Frenkel S. Book reviews: Handbook of industrial and organizational psychology. Journal of Industrial Relations. 1977;19(3):321-322. https://doi.org/10.1177/002218567701900310
- 23. Application of Frederick Herzberg's two-factor theory in assessing and (n.d.-a). https://www.researchgate.net/profile/Kwasi-Dartey-Baah/publication/230823567_Application_of_Frederick_Herzberg%27s_Two-Factor_theory_in_assessing_and_understanding_employ ee_motivation_at_work_A_Ghanaian_Perspective/links/0912f5050f77fb5674000000/Application-of-Frederick-Herzbergs-Two-Factor-theory-in-assessing-and-understanding-employee-motivation-at-work-A-
 - Ghanaian-Perspective.pdf
- 24. Alrawahi S, Sellgren SF, Altouby S, Alwahaibi N, Brommels M. The application of Herzberg's two-factor theory of motivation to job satisfaction in clinical laboratories in Omani Hospitals. Heliyon; c2020. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC748643 7/
- 25. Kaliski BS. Encyclopedia of busine\$ and finance by Burton S. Kaliski. Open Library; c1970. https://openlibrary.org/books/OL16968853M/Encyclope dia_of_busine_and_finance
- 26. Wam. UAE government announces four and Half Day Working Week, wam. WAM. Available at; c2021. https://www.wam.ae/en/details/1395303000412 (Accessed: November 29, 2022).
- 27. Henry Ford. Wikipedia. Wikimedia Foundation. Available at; c2022. https://en.wikipedia.org/wiki/Henry_Ford#Fiveday_workweek (Accessed: December 10, 2022)
- 28. Working Hours and Productivity, IZA Discussion Papers, No. 10722, Institute of Labor Economics (IZA), Bonn (Collewet, Marion; Sauermann, Jan 2017).

- 29. Kwallek N, Soon K, Lewis CM. Work week productivity, visual complexity, and individual environmental sensitivity in three offices of different color interiors, Color Research & Application. 2007;32(2):130-143. Available at: https://doi.org/10.1002/col.20298
- 30. The definition and measurement of productivity Mark Rogers. (n.d.). https://melbourneinstitute.unimelb.edu.au/downloads/wo rking-paper-series/wp1998n09.pdf
- Jarkas AM, Kadri CY, Younes JH. A survey of factors influencing the productivity of construction operatives in the state of Qatar. International Journal of Construction Management. 2012;12(3):1-23. https://doi.org/10.1080/15623599.2012.10773192
- 32. (A study on environmental psychology, n.d.)
- 33. Ronen S, Primps SB. The compressed work week as organizational change: Behavioral and Attitudinal Outcomes. Academy of Management Review. 1981;6(1):61-74.
 https://doi.org/10.5465/cmr.1081.4288003

https://doi.org/10.5465/amr.1981.4288003.

- Katz LF. Efficiency wage theories: A partial evaluation. NBER Macroeconomics Annual. 1986;1:235-276. https://doi.org/10.1086/654025
- 35. Effectiveness of a four-days/eight hour work week. (n.d.-a). https://commons.erau.edu/cgi/viewcontent.cgi?article=1
- 023&context=ww-research-methods-rsch202
 36. Sondhi ERS, Sandhu DV, Goyal DS. Determinant analysis and effect of variables on work life balance of PSPCL employees. International Journal of Psychosocial Rehabilitation. 2020;24(04):3136-3147. https://doi.org/10.37200/ijpr/v24i4/pr201424
 Occupation, Hours Worked, and Leisure-Time Physical ActivityNicola W. Burton, MPsych,1 and Gavin Turrell, Ph.D
- Burton NW, Turrell G. Occupation, hours worked, and leisure-time physical activity. Preventive Medicine. 2000;31(6):673-681.
- https://doi.org/10.1006/pmed.2000.0763
 38. Martens MF, Nijhuis FJ, Van Boxtel MP, Knottnerus JA. Flexible work schedules and mental and physical health. A study of a working population with non-traditional working hours. Journal of Organizational Behavior. 1999;20(1):35-46.

https://doi.org/10.1002/(sici)1099-

1379(199901)20:1<35::aid-job879>3.0.co;2-z

- Centers for Disease Control and Prevention. Benefits of physical activity. Centers for Disease Control and Prevention; c2023. https://www.cdc.gov/physicalactivity/basics/pahealth/index.htm
- 40. Life, Work L. for. Physical effects of a good diet; c2020. website.

https://www.learningforlifeandwork.co.uk/post/physicaleffects-of-a-gooddiat#...tout_When@2008(20pageon%20pageon%20page)20page20page

diet#:~:text=When%20a%20person%20eats%20a%20he althy%20diet%2C%20the,the%20person%20to%20exer cise%20frequently%20and%20stay%20active.

41. Desai S. Yoga for physical, mental and psychological well-being - times of India. The Times of India; c2021 Jan 21. https://timesofindia.indiatimes.com/lifestyle/health-fitness/health-news/yoga-for-physicalmental-and-psychological-wellbeing/articleshow/80385514.cms

- 42. Kristin S. Routine medical checkups have important health benefits. News Center; c2021. https://news.feinberg.northwestern.edu/2021/06/11/routi ne-medical-checkups-have-important-health-benefits/
- 43. Von Thiele Schwarz U, Lindfors P, Lundberg U. Healthrelated effects of worksite interventions involving physical exercise and reduced work hours. Scandinavian Journal of Work, Environment & amp; Health. 2008;34(3):179-188. https://doi.org/10.5271/sjweh.1227
- 44. Voglino G, Savatteri A, Gualano MR, Catozzi D, Rousset S, Boietti E, *et al.* How the reduction of working hours could influence health outcomes: A systematic review of published studies. BMJ Open; c2022, 12(4). https://doi.org/10.1136/bmjopen-2021-051131
- 45. Mishra B, Mehta S, Sinha N, Shukla S, Ahmed N, Kawatra A, *et al.* Evaluation of work place stress in Health University Workers: A study from rural india. Indian Journal of Community Medicine. 2011;36(1):39. https://doi.org/10.4103/0970-0218.80792
- 46. Li Z, Dai J, Wu N, Jia Y, Gao J, Fu H, *et al.* Effect of long working hours on depression and mental well-being among employees in Shanghai: The role of having leisure hobbies. International Journal of Environmental Research and Public Health. 2019a;16(24):4980. https://doi.org/10.3390/ijerph16244980
- 47. Yoon Y, Ryu J, Kim H, Kang C, Won, Jung-Choi K. Working Hours and depressive symptoms: The role of Job Stress Factors. Annals of Occupational and Environmental Medicine; c2018, 30(1). https://doi.org/10.1186/s40557-018-0257-5
- 48. Virtanen M, Ferrie JE, Singh-Manoux A, Shipley MJ, Stansfeld SA, Marmot MG, *et al.* Long working hours and symptoms of anxiety and depression: A 5-year follow-up of the Whitehall II Study. Psychological Medicine. 2011;41(12):2485-2494. https://doi.org/10.1017/s0033291711000171
- Liu X, Wang C, Wang J, Ji Y, Li S. Effect of long working hours and insomnia on depressive symptoms among employees of Chinese internet companies. BMC Public Health; c2021, 21(1). https://doi.org/10.1186/s12889-021-11454-9
- Afonso P, Fonseca M, Pires JF. Impact of working hours on sleep and Mental Health. Occupational Medicine. 2017;67(5):377-382. https://doi.org/10.1093/occmed/kqx054
- 51. Topp J, Hille JH, Neumann M, Mötefindt D. How a 4day work week and remote work affect agile software development teams. Lecture Notes in Business Information Processing; c2022. p. 61-77.
- https://doi.org/10.1007/978-3-030-94238-0_4
 52. Lee KH, Kim JE, Kim YK, Kang DM, Yun MJ, Park SG, *et al.* Long working hours and emotional well-being in Korean manufacturing industry employees. Annals of Occupational and Environmental Medicine. 2013;25(1):38. https://doi.org/10.1186/2052-4374-25-38
- Huo M, Jiang Z. Work-role overload, work–life conflict, and perceived career plateau: The moderating role of emotional stability. Human Resource Management; c2023. https://doi.org/10.1002/hrm.22167
- Michielsen HJ, De Vries J, Van Heck GL. Psychometric qualities of a brief self-rated fatigue measure. Journal of Psychosomatic Research. 2003;54(4):345-352.

https://doi.org/10.1016/s0022-3999(02)00392-6

- 55. Flexible work schedules and mental and physical health. A study of a (n.d.-b). https://onlinelibrary.wiley.com/doi/pdf/10.1002/%28SIC I%291099-1379%28199901%2920%3A1%3C35%3A%3AAID-JOB879%3E3.0.CO%3B2-Z
- 56. https://www.bing.com/ck/a?!&&p=94f08e1f17145f1eJm ltdHM9MTY4MjIwODAwMCZpZ3VpZD0xZTU3Yzl mNi05MDlkLTY4MTEtM2RjYS1kYjQ5OTEyZjY5M GUmaW5zaWQ9NTIyMQ&ptn=3&hsh=3&fclid=1e57c 9f6-909d-6811-3dcadb49912f690e&psq=IMPACT+OF++REGULAR+EXE RSICE+++ON+PHYSICAL+FITNESS&u=a1aHR0cH M6Ly93d3cuY2RjLmdvdi9waHlzaWNhbGFjdGl2aXR5 L2Jhc2ljcy9wYS1oZWFsdGgvaW5kZXguaHRt&ntb=1
- https://www.bing.com/ck/a?!&&p=ce8fa8e5dbd76aafJm ltdHM9MTY4MjIwODAwMCZpZ3VpZD0xZTU3Yzl mNi05MDlkLTY4MTEtM2RjYS1kYjQ5OTEyZjY5M GUmaW5zaWQ9NTQ0NA&ptn=3&hsh=3&fclid=1e57 c9f6-909d-6811-3dca-

db49912f690e&psq=IMPACT+IF+ADEQUETE+DIET +ON+PHYSICAL+HEALTH+&u=a1aHR0cHM6Ly93d 3cubGVhcm5pbmdmb3JsaWZlYW5kd29yay5jby51ay9 wb3N0L3BoeXNpY2FsLWVmZmVjdHMtb2YtYS1nb2 9kLWRpZXQjOn46dGV4dD1XaGVuJTIwYSUyMHB1 cnNvbiUyMGVhdHMlMjBhJTIwaGVhbHRoeSUyMG RpZXQlMkMlMjB0aGUsdGhlJTIwcGVyc29uJTIwdG8 lMjBleGVyY2lzZSUyMGZyZXF1ZW50bHklMjBhbm QlMjBzdGF5JTIwYWN0aXZlLg&ntb=1

58. https://www.bing.com/ck/a?!&&p=8f506622beef1ec5Jm ltdHM9MTY4MjIwODAwMCZpZ3VpZD0xZTU3Yzl mNi05MDlkLTY4MTEtM2RjYS1kYjQ5OTEyZjY5M GUmaW5zaWQ9NTQzNw&ptn=3&hsh=3&fclid=1e57 c9f6-909d-6811-3dca-

db49912f690e&psq=IMPACT+OF+PHYCAL++ACTIV ITIES+LIKE+YOGA+ON+PHYSICAL+HEALTH&u= a1aHR0cHM6Ly90aW1lc29maW5kaWEuaW5kaWF0a W1lcy5jb20vbGlmZS1zdHlsZS9oZWFsdGgtZml0bmV zcy9oZWFsdGgtbmV3cy95b2dhLWZvci1waHlzaWNh bC1tZW50YWwtYW5kLXBzeWNob2xvZ2ljYWwtd2 VsbC1iZWluZy9hcnRpY2xlc2hvdy84MDM4NTUxNC 5jbXMjOn46dGV4dD1WYXJpb3VzJTIwc3R1ZGllcyU yMGNvbmR1Y3RIZCUyMGFjcm9zcyUyMHRoZSUy MHdvcmxkJTIwaGF2ZSUyMHNob3duLG9yJTIwam9 pbnQlMjBwYWluJTJDJTIwYW1vbmclMjBvdGhlciUy MGtleSUyMHBoeXNpY2FsJTIwYmVuZWZpdHMu& ntb=1

59. NORTHWESTERN MEDICINE FENBURG SCHOOL Medicine

https://www.bing.com/ck/a?!&&p=c27e60ed380800c1J mltdHM9MTY4MjIwODAwMCZpZ3VpZD0xZTU3Yz lmNi05MDlkLTY4MTEtM2RjYS1kYjQ5OTEyZjY5M GUmaW5zaWQ9NTE5MA&ptn=3&hsh=3&fclid=1e57 c9f6-909d-6811-3dca-

db49912f690e&psq=IMPACT+OF+REGULAR+CHEC K+UPS+ON+PHYSICAL+HEALTH&u=a1aHR0cHM6 Ly9uZXdzLmZlaW5iZXJnLm5vcnRod2VzdGVybi5lZ HUvMjAyMS8wNi8xMS9yb3V0aW5lLW1lZGljYWwt Y2hlY2t1cHMtaGF2ZS1pbXBvcnRhbnQtaGVhbHRoL WJlbmVmaXRzLw&ntb=1

60. Von Thiele Schwarz U, Lindfors P, Lundberg U. Healthrelated effects of worksite interventions involving physical exercise and reduced work hours. Scandinavian Journal of Work, Environment, amp; Health. 2008;34(3):179-188. https://doi.org/10.5271/sjweh.1227

- 61. Voglino G, Savatteri A, Gualano MR, Catozzi D, Rousset S, Boietti E, *et al.* (n.d.). How the reduction of working hours could influence health outcomes: A systematic review of published studies. BMJ open. https://pubmed.ncbi.nlm.nih.gov/35365508/
- 62. Mishra B. Evaluation of work place stress in Health University Workers: A study from rural india. Indian Journal of Community Medicine. 2011;36(1):39. Available at: https://doi.org/10.4103/0970-0218.80792.
- 63. Li Z. Effect of long working hours on depression and mental well-being among employees in Shanghai: The role of having leisure hobbies. International Journal of Environmental Research and Public Health. 2019;16(24):4980. Available at: https://doi.org/10.3390/ijerph16244980
- 64. Yoon Y. Working Hours and depressive symptoms: The role of Job Stress Factors, Annals of Occupational and Environmental Medicine; c2018, 130(1). Available at: https://doi.org/10.1186/s40557-018-0257-5.
- 65. Virtanen M. Long working hours and symptoms of anxiety and depression: A 5-year follow-up of the Whitehall II Study, Psychological Medicine. 2011;41(12):2485-2494. Available at: https://doi.org/10.1017/s0033291711000171.
- 66. Liu X. Effect of long working hours and insomnia on depressive symptoms among employees of Chinese internet companies, BMC Public Health; c2021, 21(1). Available at: https://doi.org/10.1186/s12889-021-11454-9.
- 67. Afonso P, Fonseca M, Pires JF. Impact of working hours on sleep and Mental Health, Occupational Medicine. 2017;67(5):377-382. Available at: https://doi.org/10.1093/occmed/kqx054
- Topp J. How a 4-day work week and remote work affect agile software development teams, Lecture Notes in Business Information Processing; c2022 p. 61-77. Available at: https://doi.org/10.1007/978-3-030-94238-0_4.
- Lee KH. Long working hours and emotional well-being in Korean manufacturing industry employees, Annals of Occupational and Environmental Medicine. 2013;25(1):38. Available at: https://doi.org/10.1186/2052-4374-25-38.