FACTORS IMPACTING ON PRODUCTIVITY AND WORK LIFE BALANCE (WLB) DURING WORK FROM HOME (WFH) FOR IT PROFESSIONALS IN SRI LANKA

SANJEETH PERUMAL

199128E

Degree of Master of Business Administration in Information Technology

Department of Computer Science and Engineering

University of Moratuwa

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DECLARATION

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ABSTRACT

Organizational performance is heavily dependent on two interesting aspects, namely, Productivity and Work-Life Balance. Both such factors are generally opposing in nature. Productivity is a factor that is always anticipated to be maximized by organizations, and work-life balance is a factor that always triggers concerns for employees. Productivity is a metric that has been measured based on the output produced by employees while performing work. Work-life balance has been determined based on the level of management over professional life and personal life.

Although the Work From Home (WFH) concept originated and was practiced in various parts of the globe during different time periods, the pandemic made this mechanism a necessity for the survival and sustainability of organizations across the world. Especially in Sri Lanka, with the economic downturn that was expected with the possible decline in operations due to lockdown, the Work From Home mechanism basically provided a key to open the economy back and produced the energy that was lost in the pandemic.

IT Professionals in Sri Lanka from different domains of the IT industry practiced Work From Home in different dimensions. However, the WFH concept period during and after the pandemic provided flexibility for all possible IT Professionals in Sri Lanka. This allowed them to explore a full-fledged Work From Home mechanism. This has made them feel that WFH as the norm, and such professionals have become used to the WFH mechanism.

However, organizations started to bring their workforce back to office premises with the end of the pandemic, mainly due to a shortfall in productivity and a lack of control over the workforce. Employees who got used to Work From Home, where they managed work and life, started experiencing issues. They started raising concerns over reporting to work physically. This is the trigger point for this research study to identify the factors that are having an impact on the effectiveness of the Work From Home mechanism in terms of Productivity and Work Life Balance for IT Professionals in Sri Lanka. The outcome of this study would help organizations focus on critical factors

that could have an impact on Productivity and Work Life Balance during WFH for IT professionals in Sri Lanka.

This research study focuses on the identification of the factors that are having an impact on Productivity and Work-Life balance during Work From Home for IT Professionals in Sri Lanka. Factors for the study have been determined based on the literatures reviewed and discussions held with different experts. Quality of Sleep, Job Satisfaction, Time Management, Distraction, Workload and Stress, Social support and Interaction, Network connectivity and Resources are the factors identified that could have an impact on Productivity and Work Life Balance for IT Professionals in Sri Lanka during Work From Home.

The research study and data analysis have been performed based on the responses obtained from IT Professionals in various domains of the IT industry. The study has revealed the factual finding that all the factors have been associated with Productivity and Work Life Balance with a positive correlation. However, Productivity is significantly influenced by Job satisfaction, Time management, Distraction, Workload and Stress and Network connectivity and Resources. On the other hand, Work Life Balance is highly influenced by Quality of sleep, Social support and Interaction and Workload and Stress.

This research study brings out valuable results for all the organizations working in different IT domains to emphasize the factors in this study during WFH. This could be further explored by organizations and addressed accordingly to ensure the attainment of expectations from the workforce and also by attaining the overall objective of organizations.

Keywords: Work From Home, IT Professionals, Productivity, Work Life Balance, Quality of Sleep, Time Management, Distraction, Job Satisfaction, Workload and Stress, Social Support and Interaction, Network Connectivity and Resources

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LIST OF ABBREVIATIONS

WFH – Work From Home

WLB – Work Life Balance

PD – Productivity

QS – Quality of Sleep

SF – Job Satisfaction

SP – Social Support and Interaction

TM – Time Management

DT – Distraction

ST – Workload and Stress

RS – Network Connectivity and Resources

1. INTRODUCTION

1.1. Chapter Introduction

This is the first chapter of the research thesis. This includes an introduction to my research work, along with the background of the study, the identification of the problem, which is described in the problem statement, the objectives of this research work, the significance of this research work, and an outline of the thesis of this research work.

1.2. Background

"Change is Inevitable"

The world full of adventures and surprises always provides thrilling experiences to human beings and living beings in the world. Although such adventures and surprises encapsulate some undesired memories, such changes are always inevitable. It is not the world or nature that adapts to such changes. It is human beings and living beings that adapt to such changes, adopt, and modify themselves and their routines according to such changes. In such a context, one of the deadliest experiences that human beings have experienced during the third decade of the 21st century is the unexpected attack from a virus that brought the entire world to a frozen stage in just a few days of the calendar. The virus played around in the lives of many, either by ending their lives or changing their routines. During that time, one of the most common words that the world has experienced is lockdown. Subsequently, it has become one of the most irritating words for many human beings in the world. However, the lockdown and lack of movements of human beings basically have made the entire world paddle the brake for an unexpected, non-ending break, and the world just rotated around the sun and itself, just for the sake of rotating. It has not only made human beings standstill, but it has also put a halt to most of the industries, especially those that were the backbones of their respective countries. Sri Lanka was not an exception in such a context. The operations of almost all the key industries in the country have been paused without knowing the day of restart. This has resulted in a downturn in the country's economy. The impact was higher since the country was already facing economic issues due to a

man-made disaster that had not only resulted in the deaths of hundreds but also created an environment full of fear.

Although the subsequent results of virus attacks have paused most industries, many countries around the world have come up with different strategies and new mechanisms to operate, partly for the survival and sustainability of their countries. In this context, numerous industries introduced a common mechanism: working from home or remote work. Such industries have invested and developed different strategies to operationalize the work-from-home concept, which helped them achieve at least their breakeven to ensure sustainability in the long run. The IT industry was not an exception for adapting and introducing such mechanisms to ensure that their projects and routines are being carried out and also to make sure that employees in the IT industry are being provided with what they require and earn, as per necessity. Although some IT companies in the IT industry followed the working from home mechanism on an occasional basis, the opportunity that was created with the attack from the virus has enabled the organizations in the IT industry to innovate and also to adapt the working from home mechanism on a continuous basis, which in turn helped their organizations not only to manage overhead and other related costs but also to provide the luxury to their employees to manage their work and life in an effective and efficient manner.

Sri Lanka is also one of the countries that has a significant reliance on the IT industry for economic growth. As per the statistics for 2019, which were released and reported by the SLASSCOM (Sri Lanka Association for Software and Services Companies), the IT sector generated a revenue of $1.5 billion, which also has the potential to increase significantly within the next five years of time. This is one of the reasons why Sri Lanka has also adapted the working from home mechanism. Almost all the companies in the country, especially the IT companies, have implemented the working from home concept, not only for the benefit of the country's economy but also to ensure that employees of the company are managed and looked after appropriately. The concept was and is commendably successful in attaining the intended objectives and also ensuring the contribution to the economy of the country.

1.2.1. Motivation

Work From Home (will be referred as “WFH”) or Remote Working Mechanism, was the concept that ensured the existence, survival, and sustainability of many industries, especially the IT industry, all over the world (Christian Wiradendi, Ahmad Nurkhin, and Yudin Citriadin, August 2021). The WFH concept was extensively used by all the IT organizations and the organizations and sectors that required IT as their supporting function. The adaptation of WFH had guided and assisted all the organizations and employers to continue their operations without any interruptions (Lourdes Marie S. Tejero, Rosemary R. Seva, and Vivien Fe F. Fadrilan-Camacho, December 2021). In the early stages, although there were some bottlenecks, such as resource limitations, internet connectivity, IT infrastructure, etc. (Dodi Wirawan Irawanto, Khusnul Rofida Novianti, Kenny Roz, June 2021), they were subsequently addressed and provided with appropriate solutions.

The WFH mechanism assisted all organizations during and after the lockdown period. However, issues started to creep in from the perspective of employers and employees (Hayman, J., 2005). WFH in the post-pandemic period enabled the IT organizations and IT departments to operate successfully, as the fear around viruses has existed in and around the country. However, as the time moved and the virus vanished, organizations started to look into the possible ways to bring back normalcy due to different issues that the organizations and employers had encountered. On the other hand, employees who had enjoyed the luxury and independence of WFH over the last few years (Lourdes Marie S. Tejero, Rosemary R. Seva, and Vivien Fe F. Fadrilan-Camacho, December 2021) started to feel uncomfortable, as they had been used to such a mechanism for a considerable period of time. It is evident to say that there were positives and negatives identified from the perspective of both employers and employees (Muhammad Atif Sheikh, Attiya Ashiq, Muhammad Ramzan, Ali Hasan, September 2018) and (Lourdes Marie S. Tejero, Rosemary R. Seva, Vivien Fe F. Fadrilan-Camacho, December 2021).

Employers had the luxury of cutting costs related to overhead and infrastructure, but they started to have issues connecting with people, and the question of productivity had been raised (Ioan Lazăr, Codruţa Osoian, Patricia Ratiu, 2010). Employees had

considerably better independence and the freedom to work from their own home, which in the long run created issues such as stress, illness, and various psychological impacts as they were in the same location without any interaction with the external environment (Lourdes Marie S. Tejero, Rosemary R. Seva, and Vivien Fe F. Fadrilan-Camacho, December 2021).

This specific study was initiated with the motivation of identifying whether the WFH concept would enable productivity for organizations and work-life balance for their employees, taking into consideration all the above-stated positives and negatives. This study would also lead organizations to assess the effectiveness of the WFH concept, which would set the stage for decision-making in the management of organizations.

1.2.2. Research Scope

Work From Home was and is a trending topic, not only for the adaptation of IT and other industries, but also for research and analysis. The IT industry is generally filled with professionals, either qualified with degrees in IT domains or professionally qualified with IT domains. Information technology is one of the most evolving and emerging industries, not only in Sri Lanka but also around the world. This has led the IT professionals, who are considered to be either qualified in IT background with IT academic qualifications and/or professional IT qualifications or working in IT domains, to be more innovative and also to be more ready towards accepting new challenges and adapting to new changes. WFH is one of the concepts to which IT professionals had to adapt and then practice as part of their routines. However, with time, there were significant opportunities and challenges faced by IT professionals, both as employers and employees. Although there were different studies carried out within Sri Lanka, targeting different domains, there were no studies conducted extensively targeting the entire IT professional population. Further, although there were studies targeting either productivity or work-life balance separately, there were no studies addressing both productivity and work-life balance among IT professionals. This is basically the trigger that led me to conduct this study targeting the entire IT profession, addressing both productivity and work-life balance, to measure the effectiveness of the WFH mechanism within Sri Lanka. The outcome of this study could enable organizations to assess and ascertain the possible options for better

decision-making in managing personnel who worked in the WFH mechanism in the past.

1.3. Problem Statement and Research Question

WFH has evolved rapidly into one of the top priorities on the boardroom agenda. The management and the board have extensively discussed the importance, negatives, and necessity of WFH in strategic discussions. The reasons for such a significant increase in discussions over WFH are for the assessment of WFH from the perspective of both employees and organizations. The employees who are the backbone of the IT industry should be provided with adequate facilities and also given paramount importance in any decision-making. Employees who were used to WFH with the experience of a home environment had the luxury of enjoying and managing life better. However, there were some employees who were on the other side of the coin; they were experiencing stress, health issues, and a lack of interaction with colleagues. From the perspective of employers, although cost is addressed effectively, issues related to productivity exist. Therefore, it is essential for organizations to effectively assess the effectiveness of WFH in the aspects of productivity and work-life balance, considering both employees and organizations.

Research Questions:

1. *Whether the WFH mechanism is effective considering productivity and work-life balance?*
2. *What are the factors that are affecting the effectiveness of working from home, considering productivity and work-life balance?*

1.3.1. Research Objectives

This research work extensively addresses the factors that are affecting the effectiveness of WFH, with a focused consideration of productivity and work-life balance among the IT professionals in Sri Lanka, across different industries, sectors, designations, and at different levels. This study has been initially planned, initiated, and executed with the idea for organizations to determine the critical factors that could have an impact on productivity and work-life balance for IT professionals in Sri Lanka during WFH, which would accommodate the requirements of both organizations and

employees considering productivity and work-life balance with alignment towards the overall objectives of organizations.

Key Objectives of this study are:

- To identify the key factors that are affecting the effectiveness of WFH, with the consideration of Productivity and Work Life Balance.
- To identify the factors to be focused on, to maintain proper work life balance while ensuring productivity during Work From Home for IT professionals in Sri Lanka.

1.3.2. Research Significance

The focus of this research is on the factors affecting productivity and work-life balance during the WFH. The research also focuses on the assessment of the effectiveness of the WFH mechanism, taking into consideration Productivity and Work- Life balance. I have planned the research work not only to target a specific set of IT professionals but also to encompass all IT professionals in Sri Lanka across different sectors, designations, levels, and types of organizations.

According to the background of this study, this research work will implement an extensive study approach that advances through the identification of factors and related knowledge through a review of different literature and hypothesis testing. In the meantime, this research is targeted towards the entire IT profession with the identification of factors that are affecting the effectiveness of WFH, with the consideration of Productivity and work-life balance, which would be a correlational study by nature among the factors.

Discussions with individuals from various industries and sectors at different levels have helped me understand the concept of WFH and its benefits to organizations and employees. Based on this, the reviews of different literature have enabled and enhanced our knowledge of the factors that are having an impact on the effectiveness of WFH, with the consideration of Productivity and Work-life balance. The next step would be the development of a questionnaire with questions addressing identified factors, productivity, and work-life balance. Based on the responses obtained from the

IT professionals, analysis and interpretation of the data would be performed to test the hypothesis, which would be used to derive conclusions and recommendations.

1.3.3. Outline of the Thesis

This research work and this thesis contain five chapters, which are described below with details that will be discussed in each of these five chapters:

Chapter 1: This chapter is inclusive of the motivation and background of the study, along with the research scope, problem statement, research questions, research objectives, and significance of this research work.

Chapter 2: This chapter will provide an insight into the literature that has been associated with the research topic while focusing on WFH and the related factors that are having an impact on the effectiveness of WFH, taking into consideration productivity and work-life balance.

Chapter 3: This chapter exclusively demonstrates the research methodology that has been followed in order to present the research work. This chapter is inclusive of a detailed explanation of the theoretical framework, the definition of research variables, the relationship between variables selected for the study, the method used to develop the questionnaire instrument, the approach to conducting the survey and obtaining responses, and the and the development of hypotheses through which the testing has been planned to be performed in order to derive conclusions and make recommendations.

Chapter 4: This chapter is exclusively dedicated to conducting analysis in order to obtain the results and make observations based on statistical and other methods of data analysis presentation. Further, results and observations would be discussed in detail in this chapter, which would be used for conclusions and recommendations.

Chapter 5: This is the final chapter of the research work, in which conclusions will be drawn based on the analysis and interpretation of the data that are to be obtained from the responses to the questionnaire. Further, along with the recommendations, the limitations of this research work will be discussed, along with directions for future research that could be conducted by future fellow researchers.

2. LITERATURE REVIEW

2.1. Chapter Introduction

The core of this chapter is a review of various pieces of literature to support this research. This chapter and the content of the chapter have also been used for the construction of a conceptual research framework through which the hypotheses and methodology have been derived. This chapter also includes an exploration of the introduction to the IT industry, the evolution of the IT industry in Sri Lanka, and the importance of the IT industry for Sri Lanka. Further, concepts related to work-from-home, work-life balance, and all the related factors that are having an impact on the effectiveness of work-from-home with consideration of Work-life balance and Productivity have been discussed in the chapter. This chapter basically guides the researcher in the development of the problem in order to support the formulation and analysis of the problem, considering the existing situations in the country in relation to Work From Home and its effectiveness, based on the various literatures highlighted in this chapter.

2.2. An Introduction to IT Industry

Information technology, which is referred to and made popular with the abbreviation IT, has become almost everything and anything in the world that is globalized and modernized. The result of globalization has made the entire world operate under a single umbrella, which is not even possible without the assistance of IT in all possible ways. As per the report released by the Computing Technology Industry Association (CompTIA), which is a leading voice and advocate for the global IT eco system, during November 2022, it is revealed that the organizations that have found difficulties and bottlenecks over the past years due to various reasons are finding ways to sustain, grow, and blossom with the technology and strategy that they have determined to survive in the difficult times.

The IT industry has become so vital in the modern world, as it has been identified as the true force to be reckoned with since IT has become the backbone of almost all the other industries around the globe. The IT industry, which has been established as one of the foundations for almost all the other industries, has become one of the dominant sectors and industries across the others, not only due to the size and spread of the industry but also with the rapid growth and rate of change within the industry, which has made the industry a vital player in developing businesses and economies. The report itself reveals the fact that, as per the statistics of the Bureau of Economic Analysis (BEA), with the United States of America as a consideration, overall GDP has grown by 18% between the first quarters of 2020 and 2022, respectively. However, the growth of sub-industries such as data processing, internet publishing, and other information services has grown by 47% during the same period. This simple illustration demonstrates the fact that the IT industry and extended digital activities, as core within many industries, have a more significant impact than other industries. Although the above figures and analyses differ from organization to organization and country to country, the common thing is that the IT industry has a massive direct and indirect impact on economic growth in almost all the countries around the globe.

Given the importance of the IT industry across the globe, the enhancement and improvement in the skills and capabilities of the employees in the IT industry also increase significantly across the world. The review by CompTIA reveals the fact that IT was expected to account for nearly 8.9 million jobs in the US during 2022, which is a significant number compared to other industries. On the other hand, understanding the importance of spending in the IT industry and IT sectors, the amount that has been spent by the organization on IT and related projects has significantly increased over the years. This has been illustrated by CompTIA, and with the estimates by Gartner, spending on IT has increased by 5.1% from 2022 to 2023 with the new innovations, strategies, and technologies.

Over the last few years, the IT industry has not only evolved significantly but also created new opportunities along with various challenges that are being faced to survive and be resilient. One of the major topics that have been discussed over the past few years, in terms of survival and existence, is the effectiveness of a remote working environment, especially while working from home. This mechanism possesses various risk factors, inclusive of cyber security risks, which pushed and triggered organizations to invest more in implementing appropriate and sufficient controls to tackle and survive the bottlenecks. This has also led organizations to include different IT strategies to absorb and retain a work force with skills and capabilities to achieve the overall objectives of the businesses and organizations in the IT industry and other industries for which IT supports an additional function across the globe.

2.3. Sri Lanka and IT Industry

Sri Lanka is well known for its location, as the country operates at the crossroads of important global trade routes. This offers easy access to other regional points and strategic time zones, which have become vital for countries around the globe. In addition to the aforementioned aspects, the Sri Lanka Export Development Board's article report identifies Sri Lanka as a hub for a growing workforce with strong skills and capabilities, as well as a commendable value system (SLASSCOM, PWC 2019/20).

Over the years, the country has made considerable progress in the developing human resources for the IT industry, with the highest-ranked social indicators within South Asia. In addition, Sri Lanka is also looking for diversifications and increasing the integration of the IT industry into the global economy with different and possible agreements.

The below couple of quotes clearly reveal the facts about the IT industry in Sri Lanka and the paramount importance of the global IT ecosystem:

"We are able to drive similar productivity and innovation as we would in Western countries, but at a lower price point in Sri Lanka, and that's an incredibly compelling proposition. In many other countries, we might get a lower price but not the same level of productivity and innovation, and the fact that we can get the combination of the two is very compelling". Darren Roos, CEO, IFS (2019)

"From electric super cars to powering one of the most active stock exchanges in the world, Sri Lankan businesses are at the forefront of technological innovation". - Island of Ingenuity

The IT industry in Sri Lanka could provide global organizations with a competitive advantage in running successful businesses. This has resulted in the IT industry in Sri Lanka being not only considered vital for its own economic growth but also vital for countries around the globe that are working around the clock for sustainability and growth.

2.3.1 The Evolvement of IT in Sri Lanka

Sri Lanka and its IT industry are on a journey that has become so far from the point of commencement and to the point of playing a vital role in the gross domestic product (GDP) of the country. The IT industry in Sri Lanka commenced with the introduction and commencement of the Computer Society of Sri Lanka in 1976, which was started purely for the development of the IT industry in Sri Lanka. Since this has been considered a milestone for the IT industry in Sri Lanka, another milestone for Sri Lanka and its IT industry is the introduction of the ICT policy during the 1980s', which then served for more than 20 years as the only cabinet-approved ICT policy for Sri Lanka.

The IT industry in Sri Lanka has been traditionally renown for business process outsourcing (BPO), knowledge process outsourcing (KPO), software development, and IT services. However, with the evolution of the IT industry in Sri Lanka, the services provided in the IT industry have immensely grown compared to other countries that are providing IT services. Sri Lanka holds a position among the top fifty outsourcing destinations. Export revenue has seen significant growth from 2007 to 2019, which is almost five times higher than in the past. Although the IT industry in Sri Lanka has a short span of history, which commenced around the millennium, the growth of the industry over the past years and within a short span of time has made the IT industry of Sri Lanka one of the most prioritized sectors for the economic development of the country. In addition to that, Sri Lanka has been determined as the off-shore development center, and JjointHub has several Fortune 500 companies across the globe that are operating round the clock. The evolution of the IT industry in Sri Lanka has been made evident with the establishment of IT parks, which provide multiple global IT services to multinational companies with operations in Sri Lanka.

"India and Sri Lanka are the two countries in South Asia that can rely on the most efficient infrastructure system. – World Economic Forum, 2018"

The above quotation clearly demonstrates the evolution of the IT industry in Sri Lanka from the point of commencement and its importance to all countries across the globe.

2.3.2 The Importance of IT Industry for Sri Lanka

Sri Lanka has been traditionally considered one of the countries that heavily depends on agriculture. The report, co-released by SLASSCOM and PWC, reveals an industry-wide GDP contribution of approximately 25.5%, while the service sector contributes 58.7%. The contribution of the IT industry to GDP is inclusive of both industry and services, as IT plays a vital role in both sectors in providing the output for the economic growth of the country.

"The digital economy will bring new possibilities and opportunities as it transforms businesses, industries, jobs and lifestyles. – Information and Communication Technology Agency (ICTA) of Sri Lanka"

The location, capabilities, and strengths of the workforce, along with continuously improving infrastructure, have strengthened Sri Lanka's opportunity in the evolution of the IT industry. Over the past years, Sri Lanka's IT industry has experienced commendable success, bolstered by the country's strong value system and its focus on innovation. Sri Lanka has also leveraged its resources to position itself as a vital and leading player in the IT market across the globe. The report, a collaboration between SLASSCOM and PWC, reveals that the IT, BPM, and freelancing categories within Sri Lanka's IT industry have generated revenues of 1,140 million, 345 million, and 15 million in US dollars, respectively. This is inclusive of the IT industry of Sri Lanka exporting products and services to various countries, such as the European Union, Australia, the United Kingdom, the United States of America, and so on. Since the commencement of the IT industry in Sri Lanka has emerged as a leading destination for providing higher-value services in software product engineering, financial services outsourcing, and niche solutions embedding emerging technologies. The report further establishes the fact that the IT industry is contributing 12% to the country's service-related foreign currency inflows while becoming the 4th largest exporter, with a contribution of 29% to service exports.

"As a result of its tumultuous past & recent catastrophic events, such as the Easter Sunday attacks, Sri Lanka & its people are naturally geared to operate from an 'expect the unexpected' mindset. This mindset is responsible for the resilience witnessed within the ICT/BPM sector, and many other sectors in the country, when responding to the COVID-19 crisis. - Export Development Board 2020"

Despite facing bottlenecks and challenges, the IT industry in Sri Lanka, along with other industries and sectors, has played a crucial role in developing strategies that incorporate IT to overcome potential operational barriers across various sectors, organizations, and services. The IT industry, for its own benefits and also for the benefits of sectors and industries across the country, played a vital role, especially in the establishment of a remote working environment and in facilitating work-from-home mechanisms to ensure operations would flow without any prevention. The above quotation clearly demonstrates the evolution of the IT industry in Sri Lanka from the point of commencement and its importance to all countries across the globe.

2.4. The Concept of Work From Home

2.4.1 An Introduction and The Evolvement of Work From Home

The concept of working from home was initially introduced in the 1970s as telework or telecommuting. This was then considered the new alternative approach to performing work from different locations other than the office premises, with the assistance of technology, which has in turn completely thrashed out the travel to the office premises (Dodi Wirawan Irawanto, Khusnul Rofida Novianti, Kenny Roz, June 2021). Work From Home is defined as a term, as claimed by Christian Wiradendi, Ahmad Nurkhin, and Yudin Citriadin in August 2021, referred to as work done from home, regardless of whether the individual performing the work is an employee of the organization or is self-employed.

Telecommuting has generally been the word used to describe when the employee performs the routines in his or her profession using any stationary or portable devices, which allows the employee to have the flexibility of using telecommunications to connect with their respective colleagues in real time. Telecommuting has become more common for people to do at least some of their regular work rather than visiting the office premises physically, which is generally referred to as teleworking or telecommuting (Ioan Lazăr, Codruţa Osoian, and Patricia Raţiu, 2010). The concept of telecommuting, working from home, and remote working has evolved continuously to ensure that the boundaries of performing work in professions are blurred with the boundaries between work and non-work environments. Working from home and related changes in the workplace have not been confirmed to western societies, as many as Asian countries have experienced similar trends over the past years, as organizations and businesses have responded to the trends in implementing flexible working arrangements, ensuring the benefits for the employees in managing work-life balance and also enhancing productivity for the organizations (Hayman, J., 2005).

2.4.2 Value of Work From Home Mechanism during Covid

The pandemic, which was never expected by any country, occurred at the end of 2019 and early 2020 and basically placed almost everyone in shock. The impact of the virus spread that affected all over the world created an economic downturn, which resulted in and required significant rejuvenation and redesigning in order to come out of the never-ending pandemic (Dodi Wirawan Irawanto, Khusnul Rofida Novianti, Kenny Roz, June 2021). One of the most common and observable changes that occurred to overcome this challenge during the pandemic was the adaptation and shift to the Work From Home and remote working concept, which assisted not only the IT industry but also almost all the industries that were obtaining assistance from IT to survive and sustain themselves during the crucial period of the operations. The World Health Organization then suggested the concept to ensure successful operations in as many sectors as possible. Even after the pandemic, most companies and businesses have adapted to the work-from-home concept, considering both the impact of the pandemic and its advantages.

Although the concept of working from home became widespread in the early 1990s with the demand by organizations for remote working settings, its popularity has evolved and has become a point of discussion during the pandemic since the concept has helped many organizations tackle their operations with effective resource utilization. The concept of working from home has not only enabled the organizations to operate effectively during periods of global shutdown, but it has also helped the employees and workforce of the organizations survive with the provision of remuneration during difficult times. Basically, work-from-home and remote working concepts have thrived the operations to be alive during the times when the entire globe has been covered with the dark clouds of the pandemic.

2.4.3 The Importance of Work From Home Mechanism for Sri Lanka

Sri Lanka is a country that has a significant dependency on the IT industry and other related industries, especially in terms of economic growth and GDP. The importance of operations without any disruptions is paramount for organizations and businesses in Sri Lanka to ensure their contribution toward economic growth and GDP.

As stated in the Annual Report 2020 of the Central Bank of Sri Lanka, the pandemic had an unprecedented impact on the workforce, where the impact was so significant over the deep-rooted work routines due to strict measures taken against the spread of the virus, which had a significant impact on the performance of work as compared to being in a normal working environment. The concept of working from home has been widely introduced across the country to address the issues that are being faced during the pandemic, although remote working concepts were adapted by different sectors and different occupations. The adaptation to working from home in many sectors, industries, and organizations in Sri Lanka has helped almost all the sectors survive during the challenging times where almost all the countries around the globe faced challenges in generating revenues from their respective forms of businesses. The work-from-home concept for Sri Lanka has been considered and popularized as one of the temporary measures for business continuity, which has been then redesigned and restructured for many businesses and operations with their routines. This has enabled the country as a whole and the entire set of industries, sectors, and organizations to redefine their policies and procedures to be in line with the remote working and Work From Home concepts.

2.4.4 Advantage of Work From Home Mechanism

The Central Bank of Sri Lanka has released the Annual Report of 2020, in which they claim that working from home is a concept that provides various advantages to both the workforce and organizations. Employees could have reduced commuting time and related expenses, along with flexibility in the working environment with fewer distractions and a better work-life balance. On the other hand, organizations and businesses could have a reduction in operational expenses along with improved productivity and satisfaction for employees with better turnover rates and retention rates. Work From Home is a concept that has also enabled and seamlessly increased the opportunity for the female workforce. Further, this concept, in terms of the eco system, has enabled a positive impact on the environment due to reduced carbon emissions and reduced traffic congestion.

Dodi Wirawan Irawanto, Khusnul Rofida Novianti, and Kenny Roz (June 2021) asserted in their research that the work-from-home concept affords the opportunity to care for family members, thereby increasing the demand for work-life balance. Further, it is also stated that the concept of working from home can enhance quality of life, employee happiness, work satisfaction, and an openness to creativity that will lead to innovation. In addition, working from home could also have benefits such as improved time-planning skills, the possibility to work during the most productive time and to access an organization's documents from home, the suitability of having a workplace at home, and the possibility to Work From Home during sickness and illness. Studies have also found that working from home could also have positive impacts on job performance, job satisfaction, stress reduction, and turnover rates. Further, there are studies that have explained that working from home concepts contribute significantly to positive work productivity and better work-life balance (Christian Wiradendi, Ahmad Nurkhin, and Yudin Citriadin, August 2021).

As per the previous studies, overall, the concept of working from home provides various advantages to employees and employers, including better work-life balance, improved productivity, ensured job satisfaction, and various other benefits that could assist them better while working from home.

2.4.5 The Negative Aspects and Challenges of Work From Home Mechanism

The working from home concept provides enhanced benefits from ground-level employees to senior management of any organization or business. However, as claimed in Christian Wiradendi, Ahmad Nurkhin, Yudin Citriadin, August 2021, and other several studies, it is also evident that working from home harms employee productivity and also has a greater impact on work-life balance, as most of the employees tend to work more than the working hours while working from home due to the increased workload given to manage during the working from home environment. There are studies showing that while working from home, there is a self-reported reduction in productivity by employees due to an increase in workload, childcare problems, social isolation, and a disturbed work-life balance. All these issues have resulted in employees having reduced employee productivity, which has encountered issues for both employees and employers.

Further, continuous Work From Home has also resulted in psychological problems such as stress, fear, and frustration among employees, as drafted and claimed in Christian Wiradendi, Ahmad Nurkhin, and Yudin Citriadin (August 2021), as per different health reports of employees who worked in a continuous remote working environment. There are studies that were reviewed in which they claimed that working from home would have negative sides in managing time, balancing work and family-related matters, handling workload and work-related conflicts, and issues related to health problems, such as sleeping problems and illnesses related to stress and psychological issues (Muhammad Atif Sheikh, Attiya Ashiq, Muhammad Ramzan, Ali Hasan, September 2018) and (Lourdes Marie S. Tejero, Rosemary R. Seva, Vivien Fe F. Fadrilan-Camacho, December 2021).

2.4.6 The Relevance of Work From Home Mechanism for IT Professionals

Work From Home or Remote Working is generally referred to as working from out of office premises, either from home or any other appropriate location, using appropriate and sufficient technologies and adequate portable devices. Regardless of the industry, working from home requires the support of the IT industry in order to ensure a smooth transition to the working environment and also provide all possible network devices for providing uninterrupted services using IT services.

A remote working environment could be applicable for any industry or sector, or even for the IT industry itself, in any situation, in providing adequate and uninterrupted services that are required to be provided by IT. IT professionals are qualified with IT programs, and IT professionals who are working in IT sectors would anyways be required to Work From Home, not only during the pandemic but also during many situations in their career. Unlike some other occupations in IT professions, there are certain IT professions and occupations that require continuous remote working, where IT professionals may need to work remotely with team members in other countries.

Although this may look like a relatively new concept for some of the IT professions and occupations, this concept has been widely used in some occupations across the globe. The relevance of working from home and remote working is significantly higher for IT professionals, as IT professionals have the capacity and ability to adapt to the Work From Home or remote working concept more easily and without less technical issues, in comparison to other sectors and industries with little technical knowledge.

2.4.7 Work From Home and Productivity

Productivity of employees who are working for employers is defined to be, as claimed by Christian Wiradendi, Ahmad Nurkhin, and Yudin Citriadin (August 2021), the result of a series of behaviors that are performed by employees in work situations that determine the viability and profitability of the organization. The productivity of employees directly has an impact on the success of organizations and businesses, whereas it would also result in negative impacts for employees when evaluating their performance. There are a number of previous studies claiming that the productivity of employees is significantly higher in a remote working environment.

However, there are also studies that reveal the fact that when employees Work From Home, their productivity is affected due to various factors such as workload, work stress, lack of time management, and so on. Therefore, it is vital for employers and employees to determine whether there are any factors that are having an impact on productivity while working from home and take appropriate measures on a timely basis to address the same, which would assist them in creating a competitive advantage and letting them manage the resources effectively and efficiently for sustainable growth.

2.4.8 Work From Home and Work Life Balance

Work-life balance is defined as the quality relationship between paid work and unpaid responsibilities, which remain critical for success in the competitive business environment (Ioan Lazăr, Codruţa Osoian, Patricia Raţiu, 2010). Working from home would facilitate the employees in handling family-related matters, and important matters that are to be attended could be attended as the environment is the home surroundings (Dodi Wirawan Irawanto, Khusnul Rofida Novianti, Kenny Roz, June 2021). Further, working from home would assist employees in managing time between work and life while they could be somewhere in a familiar environment, which would provide them with the required flexibility (Christian Wiradendi, Ahmad Nurkhin, and Yudin Citriadin, August 2021).

However, it is also noted that working from home would lead to a lack of time management, especially in managing time between work and life, which may create work-family conflicts, which will then result in various other issues, including stress and psychological issues (Hayman, J., 2005). Further, it is also identified that work-life balance would be significantly affected as continuous working from home could create social isolation, which could lead to stress in managing work-life conflicts and then result in serious effects on work-life balance while working from home (Christian Wiradendi, Ahmad Nurkhin, and Yudin Citriadin, August 2021).

2.5. The Existing Situation in WFH for IT Professionals in Sri Lanka

Sri Lanka is a country that has extensively adapted the work-from-home concept, especially during the pandemic, in order to ensure its survival and existence in the market. The concept of working from home has been adapted, and the shift from a normal working environment to a remote working environment has happened not only for IT professionals but also for all the other possible industries and sectors to ensure the survival and existence through which the contribution to the national economy has been assured. IT professionals played a vital role in such a shift since the IT industry is already inclusive of such capabilities and technology skills, which enable them to invade the concept very easily and rapidly.

However, all the industries and sectors in Sri Lanka have started to open up and resumed operations back in the office premises slowly and steadily, putting an end to the pandemic both locally and globally. This has created both positives and negatives among the employees, as some employees who are basically in a fed-up mental situation are all willing to go back to the office, interact with society, and move on with their colleagues and others. On the other hand, there are also other sets of employees who are now used to working in a concept or remote working environment and who are very well aware of how to manage work-life balance while ensuring productivity during the work-from-home mechanism. They are slightly in disagreement and also feel uncomfortable being back in office premises.

This has resulted in conflicting situations between the workforce and organizations or businesses, where the workforce expects to continue to Work From Home while the management expects the workforce to be back in the office. This has now led to disagreements among two parties. It is therefore vital for organizations to redesign the strategy and structure of work allocations and work structure, as a lack of control over this may lead to an increased level of absenteeism and an increased level of labor turnover due to a lack of job satisfaction and conflicts.

Therefore, this study has been extensively designed to identify the factors that are having an impact on the effectiveness of working from home in the aspects of productivity and work-life balance for IT professionals in Sri Lanka, based on the factors that have been determined from literature and similar studies.

2.6. Working Definitions of Variables

2.6.1. Work From Home

Work From Home is defined as work that has been performed from home, regardless of whether the individual performing the work is an employee of any organization or is self-employed (Christian Wiradendi, Ahmad Nurkhin, and Yudin Citriadin, August 2021). Telecommuting is the general term used in the past in order to explain when an employee uses possible devices to perform their office work outside the office, which may be at home or any appropriate place, as per the requirement. This is generally referred to as remote working, since work has been performed remotely with appropriate controls through an appropriate medium. The Work From Home scheme has revolutionized the way we do our work to achieve the same outcomes that are comparable, if not better, than the previous arrangements (Lourdes Marie S. Tejero, Rosemary R. Seva, and Vivien Fe F. Fadrilan-Camacho, December 2021).

2.6.2. Productivity

Productivity of employees who are working for employers is defined as, as claimed by Christian Wiradendi, Ahmad Nurkhin, and Yudin Citriadin (August 2021), the result of a series of behaviors that are performed by employees in work situations that determine the viability and profitability of the organization. Further, work productivity is also a vital method for senior management to clarify and assess performance goals and standards and to motivate employees to ensure the sustainability of the organization. In general terms, regardless of whether the organization is manufacturing or service-oriented, productivity is the measure and indicator for the organization that enable them to determine whether the organization is performing better or not.

2.6.3. Work Life Balance

An individual, who is involving in performing work, must have the capability and ability to allocate the time in their routines, in the order in which the individual is able provide balancing time to work and also family lives respectively, which is referred to as the Work Life Balance (Muhammad Atif Sheikh, Attiya Ashiq, Muhammad Ramzan, Ali Hasan, September 2018). Another claim over the definition of Work Life Balance is, (Ioan Lazăr, Codruţa Osoian, Patricia Raţiu, 2010), the quality relationship between paid work and unpaid responsibilities, which remain critical for the success in the competitive business environment.

2.6.4. Quality of Sleep

This variable generally defines the appropriateness and sufficiency of daily sleep, which results in the quality of sleep that each individual has during any specific selected day. The quality factor in sleep is both important to work effectively and efficiently in the routine work and also to balance the daily life routines. The difficulty noted during work-related constraints has been related to the inability to detach not only from work but also from life responsibilities (Lourdes Marie S. Tejero, Rosemary R. Seva, and Vivien Fe F. Fadrilan-Camacho, December 2021). As claimed by Kathy L. Nelson, Jean E. Davis, and Cynthia F. Corbett (2021), sleep quality is defined as an individual's self-satisfaction with all aspects of the sleep experience, which includes the attributes, namely, sleep efficiency, sleep latency, sleep duration, and wake after sleep onset.

2.6.5. Social Support and Interaction

Social support is defined as the support provided by the subordinates, superiors, and management of the organization for which the employees are working, as well as the support that they obtain from their family, society, and other personal life-related aspects. As claimed in Lorraine Marie S. Tejero, Rosemary R. Seva, and Vivien Fe F. Fadrilan-Camacho (December 2021), social support provided by family members and superiors, however, dampens the effects of stress and promotes the quality of work life. Employees that receive adequate support also showed high levels of productivity, as the social support of superiors and subordinates will help reduce or at least minimize stress and strain among the workforce while also cushioning the effect of work-life balance. The social support that is being provided by the people surrounded by the professionals assists them to interact with the people and hang around them, which will in turn ensure that work and life balance have been maintained while maintaining productivity at a higher level.

2.6.6. Job Satisfaction

Job satisfaction is defined as a measurement that is used for both a global construct and a multi-dimensional one as a perceived correlation between what one wants from one's work and what one perceives it to offer (Dodi Wirawan Irawanto, Khusnul Rofida Novianti, Kenny Roz, June 2021). Job satisfaction has been explained as a person's emotional state when something pleasant and beneficial has occurred as a result of their job appraisal or work experience. The fulfillment that the workforce feels as a result of the features that aid and facilitate the achievement of their work's values. The satisfaction over the job that an individual is performing is directly linked to the conflicts that such an individual faces in the work environment, because the level of conflicts and lack of clarity in the job that such an individual is performing would have a greater impact not only on the job satisfaction but also on the work-life balance and productivity of the professional.

2.6.7. Time Management

Time is a factor around the world that is believed to be something that cannot be changed, and it is also a factor that cannot be brought forward to change the things that happened in the past. Therefore, it is crucial for individuals in all fields to effectively manage their time and make better use of it. Managing time is a vital factor for professionals, as they need to balance not only work-related routines but also family-related routines. The lack of management or improper management of time could result in individuals leading not only to a lack of productivity but also to a lack of management of family life routines. Continuous overtime at work, coupled with additional stress and pressure in the working environment, can cause professionals to neglect their family-related routines. This, in turn, can negatively impact their work-life balance, ultimately affecting their productivity. Generally, the systematic process of organizing and planning the time for managing activities that are relevant to the work environment and family environment, which are described as responsibilities for the family, Further, it is also described as the coordination of tasks and activities to maximize the effectiveness of the effort put in by professionals. Therefore, effective and efficient time management can help professionals reduce unrelated stress and prioritize their time according to their needs, enabling them to achieve goals in both their work and family environments without any issues.

2.6.8. Distraction

Distraction has been considered an additional aspect that does not allow employees working from home to concentrate on their professional duties (Dodi Wirawan Irawanto, Khusnul Rofida Novianti, Kenny Roz, June 2021). Generally, it is said to be the diversions or agitations in the mind that would not allow one to focus on any specific tasks that are being carried out. The working from home mechanism has lots of possibilities for distraction, as the work that is to be performed in the working environment is being performed in the family environment, where the people and things around and within the family environment are around while delivering professional work. On the other hand, it is also believed that performing professional work with less pressure from the working environment and delivering something from the very usual family environment would also minimize the level of stress and external pressure.

2.6.9. Workload and Stress

Workload and stress are two common and generally heard words among professionals around the world, not only in the country but also globally. Stress due to workload has been explained as a phenomenon experienced by a person when what is expected does not become a reality, and this condition generates additional pressure in the life of the professional. As claimed by different scholars and researchers, the source of work stress that occurs in professionals could be due to factors like environmental factors, organizational factors, and individual factors. Stress could also be caused at work due to the impact of family life, which would create pressure in the professional's work environment. Although, in terms of employees', based on previous research works, work-related stress levels have not been caused while working from home, as employees claim that working at home will reduce the stress, since they do not have a daily commute, they could easily get out of distractions, and they do have the flexibility to manage and handle matters related to work and family by apportioning and allocating appropriate time for both matters (Christian Wiradendi, Ahmad Nurkhin, Yudin Citriadin, August 2021). However, several other studies also reveal the fact that work-related stress and fatigue directly have an impact on the productivity and work-life balance of professionals.

2.6.10. Network Connectivity and Resources

Network connectivity is defined as the process of extensively connecting various parts of digital and embedded systems with the utilization of appropriate devices such as routers, switches, and gateways (Peter Barry and Patrick Crowley, 2012). Especially in terms of working from home, connectivity over the internet network with appropriate controls through appropriate mediums is vital for any organization and professional, as a lack of connectivity would not only create additional pressure but also could create unwanted stress, which could then result in a lack of productivity and may also intrude on work-life balance through stress. The connectivity to the network of the company with a proper medium would ensure that IT professionals have a sense of being within the working environment, which would ensure their productivity by ensuring proper time management and a lack of focus over distractions. Further, as stated above, working from home would lead to a lack of social support and interaction, which would also lead to IT professionals not having enough and appropriate access to resources that are required for them to ensure learning and knowledge/skill enhancement. The negative aspects of access to resources could have a direct impact on productivity, as the tasks assigned to IT professionals may not be completed on time due to a lack of knowledge, which would in turn cause work-related conflicts and stress.

3. RESEARCH METHODOLOGY

3.1. Chapter Introduction

This is the third chapter of the research thesis, which presents the conceptual research framework, the formulation of hypotheses, the relationships among the independent and dependent variables selected for study, the description of the type of research and research problem, operating definitions for each of the variables selected for the research work, the method used in instrument development, the method used for the selection of population and sample, and the method followed for data collection.

The research methodology basically brings the knowledge gained through reviews of literature to the area of research. This section also incorporates what was found to be factors affecting productivity and work-life balance while working from home for IT professionals in Sri Lanka.

3.2. Research Problem and Research Method

This research study has been conducted using the deductive approach as a quantitative method, through which the study over factors impacting on productivity and work-life balance (WLB) during Work From Home (WFH) for IT professionals in Sri Lanka has been tested to determine the critical factors over WLB and productivity during WFH. A quantitative research approach has been selected for this research work, as the analysis of the factors has been planned to be performed based on the responses derived from the questionnaire instruments shared with respondents.

The problem studied in this research study is the effectiveness of IT professionals during the work-from-home mechanism in the aspects of productivity and work-life balance. The effectiveness, with consideration of productivity and work-life balance, has been analyzed using the quantitative method in relation to factors identified that are having an impact on productivity and work-life balance. The research study is expected to conclude with the identification of factors that are having an impact on productivity and work-life balance based on the hypotheses to be tested. Further, recommendations are expected to be made to assist corporations and respective managements in decision-making and effective management of employees.

3.3. Conceptual Research Framework

The major objective of this research work is to identify the factors that are having an impact on effectiveness in the aspects of productivity and work-life balance (WLB) during Work From Home (WFH) for IT professionals in Sri Lanka. Further, the study will also focus on investigating the positive impact of such factors on productivity and work-life balance while working from home.

The conceptual research framework has been developed to accomplish the objective of the research work. The conceptual research framework basically identifies the relationship between the factors determined through the research work and analysis. The conceptual research framework explicitly explains the relationship among the dependent variables, productivity and work-life balance, and the independent variables, quality of sleep, social support and interaction, job satisfaction, time management, distraction, workload and stress, network connectivity, and resources. Based on which critical factors are to be determined that are having an impact on the effectiveness of IT professionals in Sri Lanka while working from home.

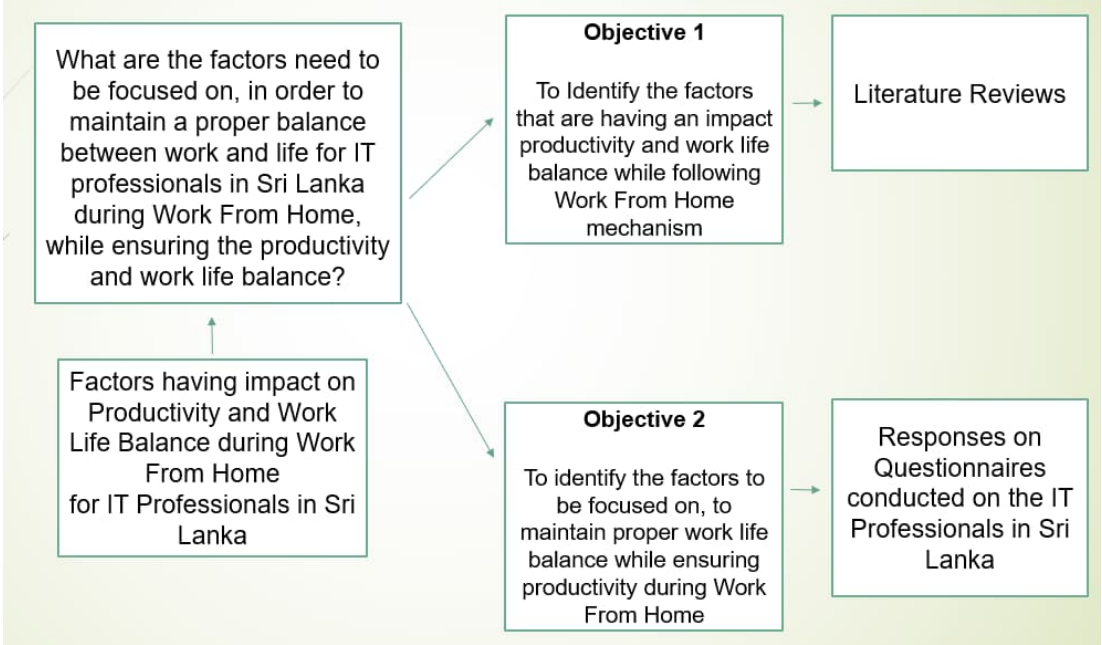

Figure 1 - Mapping Diagram

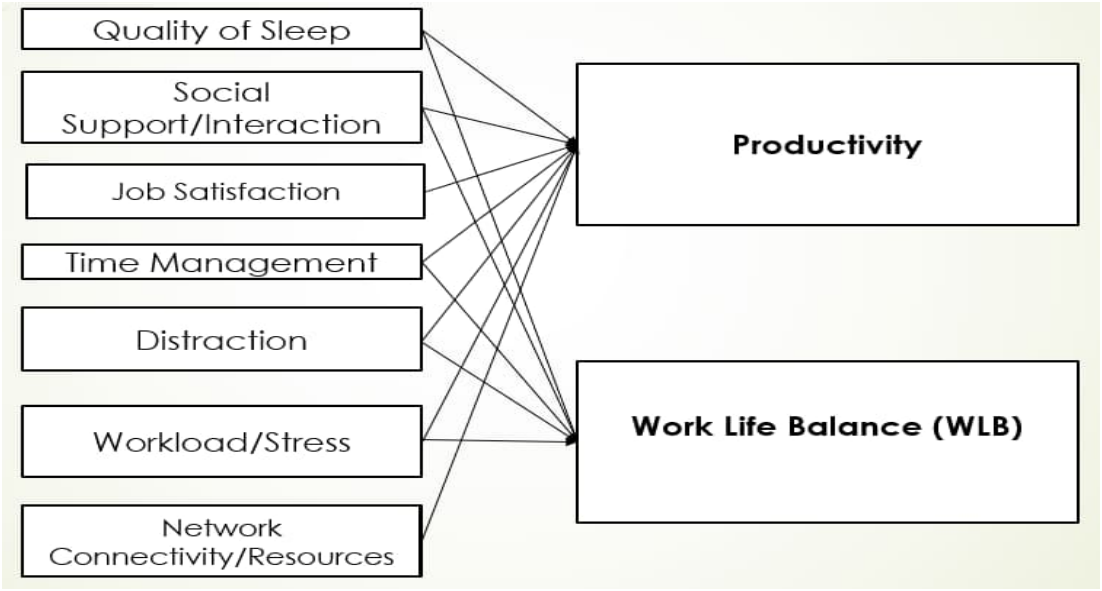

Figure 2 - Conceptual Framework

The above mapping diagram and conceptual research framework explicitly demonstrate the purpose and method of research work. Reviews across various literatures significantly influence the conceptual research framework. The research study will be conducted based on the responses from the respondents targeted for the study. Further, the conceptual research framework will be validated based on the evaluation and analysis of the data obtained. Furthermore, the output of the validation will be used to derive a conclusion that is in line with the accomplishments and objectives of the research work.

3.4. Relationship of Variables

It is vital to understand and explain the relationship between the variables, which are critical in conducting the research. As this research work is explained to be quantitative, independent variables and dependent variables have been determined to conduct the research, based on which the impact of the dependent variables is determined in relation to the independent variables identified for the study. As demonstrated in the conceptual research framework, this study is inclusive of two dependent variables that are related to the different independent variables, which are explained below.

Type of Variable	Variable	Definition
Dependent Variables	Productivity	Effectiveness during Work From Home has been tested with two dependent variables considering the aspects of employers and employees.
	Work Life Balance	
Independent Variables	Quality of Sleep	Productivity and Work Life Balance, both the dependent variables, have been tested, considering the identifying the factors that are having impact over both productivity and work life balance, or at least over one of the dependent variables.
	Social Support/Interaction	
	Job Satisfaction	
	Time Management	
	Distraction	
	Workload/Stress	
	Network Connectivity/ Resources	

Table 1 - Introduction to Variables

The above-stated dependent and independent variables that are to be used for the testing of the problem statement have been identified through the review of different literatures that have been reviewed for the research work, based on the discussion with the IT personnel in the industry and with own experience during the Work From Home.

3.5. Hypothesis Development

The conclusion and recommendations, based on the objective of this research work, are solely dependent on the relationship identified through the analysis between two dependent variables among the other independent variables. Therefore, it is vital to generate hypotheses in order to theorize the conceptual framework and test hypotheses to identify whether the assumptions made through either null or alternate hypotheses are valid, which would also lead to the conclusions and recommendations of the study.

Hypothesis Formulation

H_0: Null Hypothesis

H_A: Alternate Hypothesis

Productivity

$H_0$1: There is no significant impact of Quality of Sleep over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A1: There is a significant impact of Quality of Sleep over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

$H_0$2: There is no significant impact of Social Support/Interaction over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A2: There is a significant impact of Social Support/Interaction over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

$H_0$3: There is no significant impact of Job Satisfaction over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A3: There is a significant impact of Job Satisfaction over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

$H_0$4: There is no significant impact of Time Management over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A4: There is a significant impact of Time Management over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

$H_0$5: There is no significant impact of Distraction over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A5: There is a significant impact of Distraction over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

H_06: There is no significant impact of Workload/Stress over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A6: There is a significant impact of Workload/Stress over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

H_07: There is no significant impact of Network Connectivity/Resources over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A7: There is a significant impact of Network Connectivity/Resources over Productivity of IT Professionals in Sri Lanka during Work From Home (WFH)

Work Life Balance (WLB)

H_08: There is no significant impact of Quality of Sleep over Work Life Balance (WLB) of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A8: There is a significant impact of Quality of Sleep over Work Life Balance (WLB) of IT Professionals in Sri Lanka during Work From Home (WFH)

H_09: There is no significant impact of Social Support/Interaction over Work Life Balance (WLB) of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A9: There is a significant impact of Social Support/Interaction over Work Life Balance (WLB) of IT Professionals in Sri Lanka during Work From Home (WFH)

H_010: There is no significant impact of Time Management over Work Life Balance (WLB) of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A10: There is a significant impact of Time Management over Work Life Balance (WLB) of IT Professionals in Sri Lanka during Work From Home (WFH)

H_011: There is no significant impact of Distraction over Work Life Balance (WLB) of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A11: There is a significant impact of Distraction over Work Life Balance (WLB) of IT Professionals in Sri Lanka during Work From Home (WFH)

H_012: There is no significant impact of Workload/Stress over Work Life Balance (WLB) of IT Professionals in Sri Lanka during Work From Home (WFH)

H_A12: There is a significant impact of Workload/Stress over Work Life Balance (WLB) of IT Professionals in Sri Lanka during Work From Home (WFH)

3.6. Questionnaire Instrument Development

The above definitions precisely demonstrate the detailed explanation for each of the independent and dependent variables used in this research work. Further, the definition and description of each variable specifically demonstrate the importance of such variables in this research work. The assessment of the relationship among the independent and dependent variables is to be performed based on the responses that are to be obtained from the respondents. The questionnaire instrument that is developed captures variables in different questions in order to perform the assessment and achieve the research objectives. The below table clearly illustrates the summary of the questions used to measure each of the variables and the impact of such independent variables over the selected two dependent variables, which would lead to assessing the effectiveness of working from home for IT professionals in Sri Lanka.

Variables	Type of Variable	Dimensions	Scale	Number of Questions
Quality of Sleep	Independent	Productivity and Work Life Balance	Five Point Likert Scale	Three (Section 2)
Social Support/Interaction	Independent	Productivity and Work Life Balance	Five Point Likert Scale	Four (Section 2)
Job Satisfaction	Independent	Productivity	Five Point Likert Scale	Three (Section 3)
Time Management	Independent	Productivity and Work Life Balance	Five Point Likert Scale	Four (Section 4)
Distraction	Independent	Productivity and Work Life Balance	Five Point Likert Scale	Three (Section 4)
Workload/Stress	Independent	Productivity and Work Life Balance	Five Point Likert Scale	Five (Section 5)
Network Connectivity/ Resources	Independent	Productivity	Five Point Likert Scale	Three (Section 6)
Productivity	Dependent	Not Applicable	Five Point Likert Scale	Four (Section 7)
Work Life Balance	Dependent	Not Applicable	Five Point Likert Scale	Four (Section 7)

Table 2 - Variables in Questionnaire

The questionnaire instrument (Appendix A) does consist of different sections, where Section 01 includes demographic questions to perform the analysis of the responses based on the demography. The successive sections are inclusive of questions related to quality of sleep and job satisfaction, social support and interaction, time

management and distraction, workload and stress, network connectivity and resources, productivity, and work-life balance. The demographic section is inclusive of questions covering gender, age group, marital status, occupation, designation, salary range, education level, employment type, frequency of WFH now and then, and experience as IT professionals. Basically, all these questions and demographic aspects have been incorporated to ensure better analysis, conclusions, and recommendations.

3.7. Population, Sample Selection and Method of Data Collection

The research work has been designed to conduct analytical research. Further, descriptive techniques are planned to be used to derive the conclusion and recommendation. There were different techniques used in order to obtain primary and secondary data for testing and analysis.

The collection of secondary data has been commenced with a review of the literature of similar nature, and factors that are generally associated with productivity and work-life balance have been identified, while only selecting the relevant factors that are required for this study in relation to WFH, IT professionals, work-life balance, and productivity in order to introduce the conceptual framework for the research. Further, there were discussions held with some IT professionals in Sri Lanka, on a random basis, to understand the primary factors and aspects that they have regarding the research topic. The supervisors for this research work, subject matter specialists and research specialists, have shaped the questionnaire instrument based on the designed framework, incorporating ideas and aspects from their discussions. The questionnaire instrument that is developed will then be circulated to IT professionals, based on the sample selection stated below, in order to obtain the responses, which are to be used for data analysis and the derivation of conclusions and recommendations.

The population selected for the research work is IT professionals in Sri Lanka, which has been growing since the commencement of the industry in the country. As per the report on “Sri Lanka IT BPM Industry: State of the Industry 2019/20” by collaborative work PWC and SLASSCOM, there were 113,000 employees in the IT industry, which has grown to the worth of US$ 1.2 billion earning in 2021 with a workforce of over 120,000, as per the article report from Sri Lanka Export Development Board (SLASSCOM, PWC, 2019/20). Therefore, based on the population identified across

different workforces in the IT industry in different service offerings, sample was selected to be 385, across all service offerings to ensure that all the possible IT professions are covered for the research work to obtain and analyze their perspective on the problem statement.

3.8. Method Adopted for the study

This research work has been commenced with the discussions and understanding over the work that the IT professionals do and the idea for the research has been developed since most of the companies in the existing environment are in confusion whether to provide working from home or not, for professionals, especially in IT sector. WFH has been practiced in the IT industry with the evolvement during and after the pandemic period, where the practice of remote working and working out of office environment have been practiced ensuring social distancing. However, as the world brough back the normalcy, most of the employers and organizations who were familiar to normal working conditions, tend to bring back the employees to office environment. This change created conflicts over some workforce, where some other really wanted to be back at office.

Based on the identification of the above problem, this research study commenced with the review over different literatures, through which various factors have been identified that are having impact over productivity and work-life balance during Work From Home mechanism for IT professionals. This is used as the basis for the development of questionnaire instrument. The questionnaire instrument is then circulated for responses among all the categories of IT professionals across different IT sectors among employees in lowest to highest levels in an organization. The questionnaire instrument has been made available for respondents through online medium, and once the date received, as per the expected samples, data analysis has been performed to derive at conclusion and recommendations, based on the descriptive statistic and analysis based on different demographic categories. The data has been analyzed to derive the conclusion with the validation of hypotheses testing. Further, the analysis performed is also used to validate the conceptual framework that has been formulated based on the understanding obtained through discussions and review of versatile literatures.

4. DATA ANALYSIS

4.1. Chapter Introduction

This chapter has been driven through the previous three chapters, based on which the next chapter has to be developed in order to derive conclusions and recommendations. This chapter provides the analysis of the data that has been obtained through the responses to the questionnaire instrument. The analysis has been segregated into descriptive and inferential statistical analysis, along with analysis of regression, reliability, factor, and correlation between variables, to support the conclusions to be derived from the data analysis.

4.2. Descriptive Statistical Analysis

The descriptive analysis of the data responses obtained from the respondents would provide the details needed to understand the nature and behavior of the overall data obtained for the research work. The behavior of the data responses has been used to derive conclusions with the validation of hypotheses defined in the previous chapter.

Overall, as the expectation was to obtain responses from IT professionals, responses have been provided by 311 respondents from various disciplines of IT professions and also from various designations that would be demonstrated in the below analysis. There were very few respondents, either not qualified as an IT professional or not employed as an IT professional, who provided responses to the questionnaire. One of the interesting identifications based on the data responses is that there are IT professionals who are qualified in IT who are not working as IT professionals, and there are people who are not qualified in IT who are working as IT professionals.

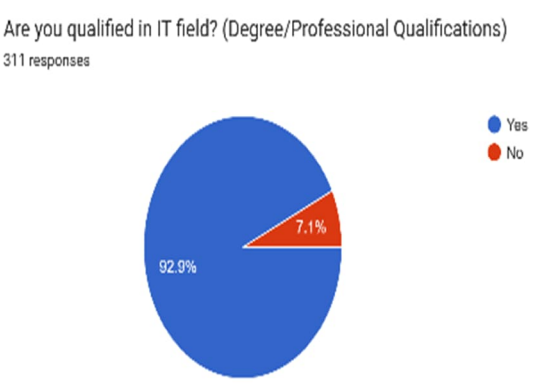

Figure 3 - % of IT Qualified People

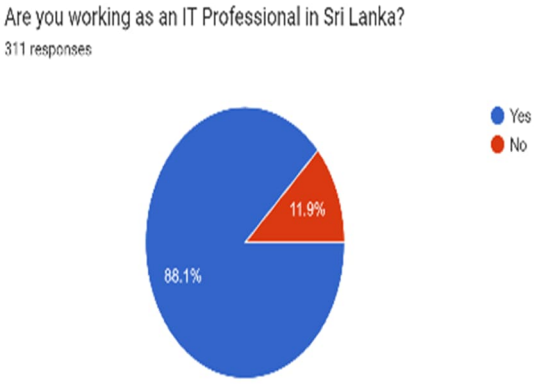

Figure 4 - % of IT Professionals

The above two diagrams clearly reveal the segregation among the respondents in terms of IT professionals and IT-qualified personnel. All the responses have been considered for the study as respondents who are either qualified in the IT field or working in the IT domain as IT professionals. Based on the responses, it is noted that, out of 311 respondents, 92.9% have been qualified in IT and 88.1% have been working and employed as IT professionals. It is evident that although a significantly lesser number of responses are from IT, a significant portion of the respondents are IT professionals, which demonstrates the validity of the data obtained for the research and also supports the research study in deriving appropriate and valid conclusions and recommendations.

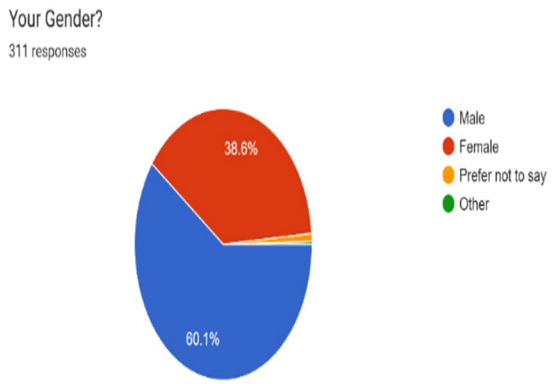

Figure 5 - % of Gender Distribution

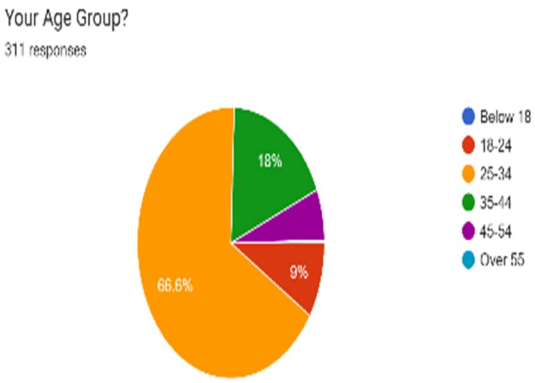

Figure 6 - % of Age Distribution

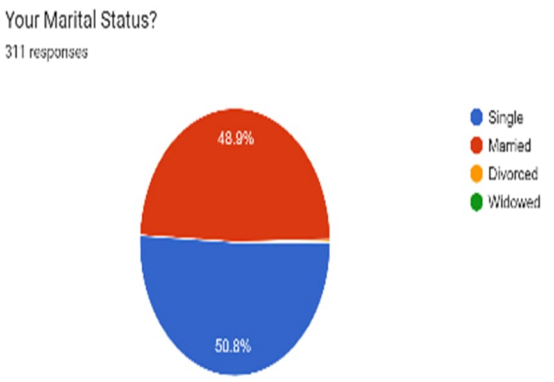

Figure 7 - % of Marital Status

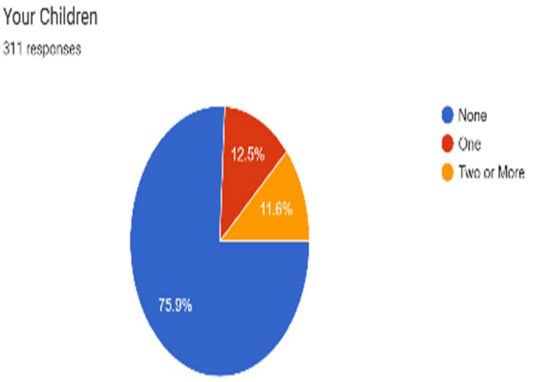

Figure 8 - % of IT Professionals having children

The above demographic diagrams of the respondents who contributed to the research work show that a wide range of demographic factors contributed to the responses, enabling the author to conduct an analysis from all potential angles to confirm the validity of the research objectives. The diagram over gender reveals that around 61% of the respondents are males and around 39% of the respondents are females. The diagram over age group shows the fact that responses have been obtained from IT professionals who are in the age group of 25–34 years, which is nearly 70% of the total, whereas other age ranges also consist of a significant number of respondents. Data over marital status reveals the fact that data has been obtained almost equally from the married and unmarried population, whereas 75% of the respondents do not have children, which shows the fact that although half of the respondents are IT professionals who have married, a significant portion of the married couple does not have children as well.

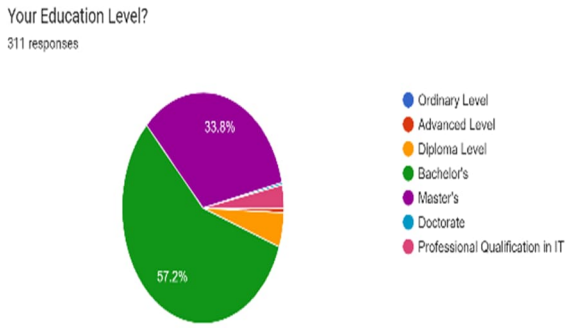

Figure 9 - % of Educational Level

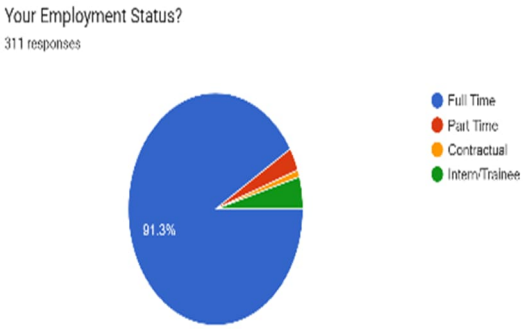

Figure 10 - % of Employment Status

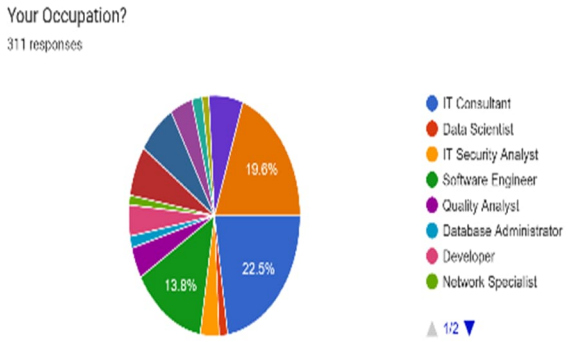

Figure 11 - % of Occupation of IT Professionals

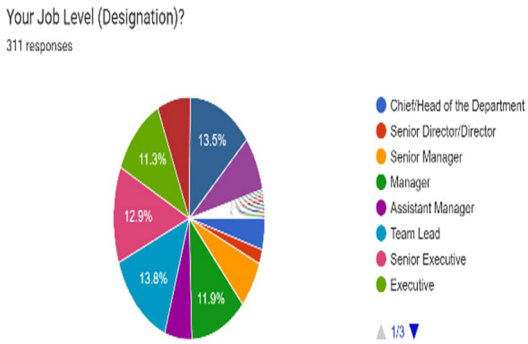

Figure 12 - % of Designation of IT Professionals

The above graphical representation of respondents' level of education, employment status, occupation, and designation demonstrate that a wide range of categories contributed to the research work's validity. The diagram over the education level of respondents shows that around 60% have completed bachelor's level, and around 4% of the respondents have been qualified by professional IT bodies, which shows the variety of IT professionals scoped in for the research work. The diagram on employment status reveals that around 90+% of the respondents have been employed as full-time workers, while only a few have been working part-time and in contractual employment. The two diagrams above over occupations and designations clearly portray the fact that there is a wide range of coverage over IT professionals without covering only a specific area of work in the IT profession. This is highlighted as a major success factor where coverage of different occupations and IT professionals from different designations would provide the result of the study to attain the overall objective of the study since the coverage is expected to be IT professionals in all sectors.

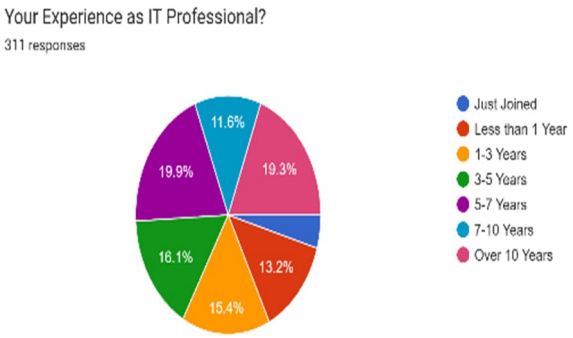

Figure 13 - % of Experience of IT Professionals

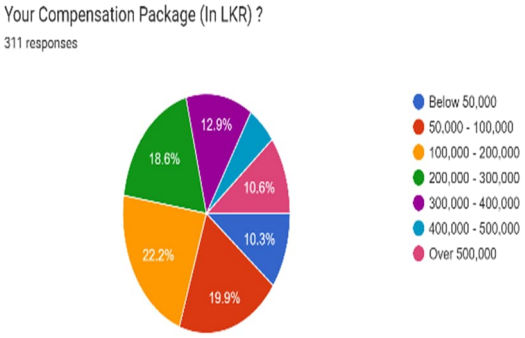

Figure 14 - % of Compensation of IT Professionals

Further, the above diagrams on experience and compensation package also display the reality that the responses have been obtained from IT professionals with different levels of experience and also with different levels of compensation packages, which would eliminate the bias in the study, as it is believed that more experienced IT professionals and IT professionals with higher compensation packages may opt to perform Work From Home. However, as the data for this research work has been obtained from IT professionals with various levels of experience and different levels of compensation packages, the analysis of the data from this research would provide a clear picture to attain the overall objective of the study.

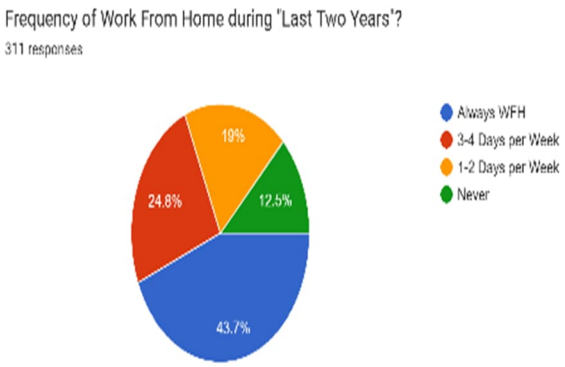

Figure 15 - % of Frequency of WFH Last Two Years

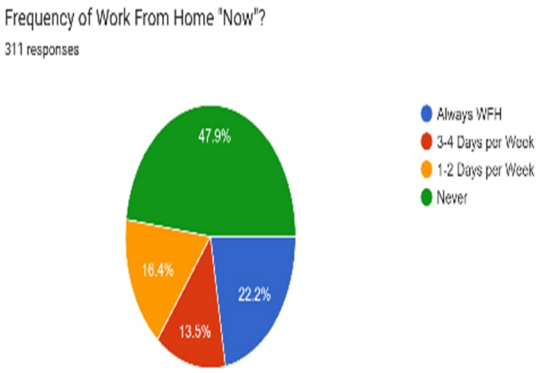

Figure 16 - % of Frequency of WFH Now

The above two diagrams, which are directly linked to the major concept of the study, demonstrate the statistic that respondents have mostly performed WFH during the last two years. All the responses have been considered for the study, as respondents either worked in the WFH mechanism during the last two years or are currently working in the WFH mechanism. The way of working has changed during the current situation where nearly 50% of the respondents are working on premises, as they have responded, indicating that they never WFH now. The problem statement for this study originated from the current situation of organizations in the country. As such, the sudden change in the WFH concept has resulted in conflicts among the workforce and organizations. The establishment of effectiveness while working from home has become significantly difficult for both employees and organizations. The above data shows that this study has been driven by the objective of the research work, and the intended objective is going to be met, as the respondents themselves have performed WFH significantly in the past, and now they have been converted back to work on premises.

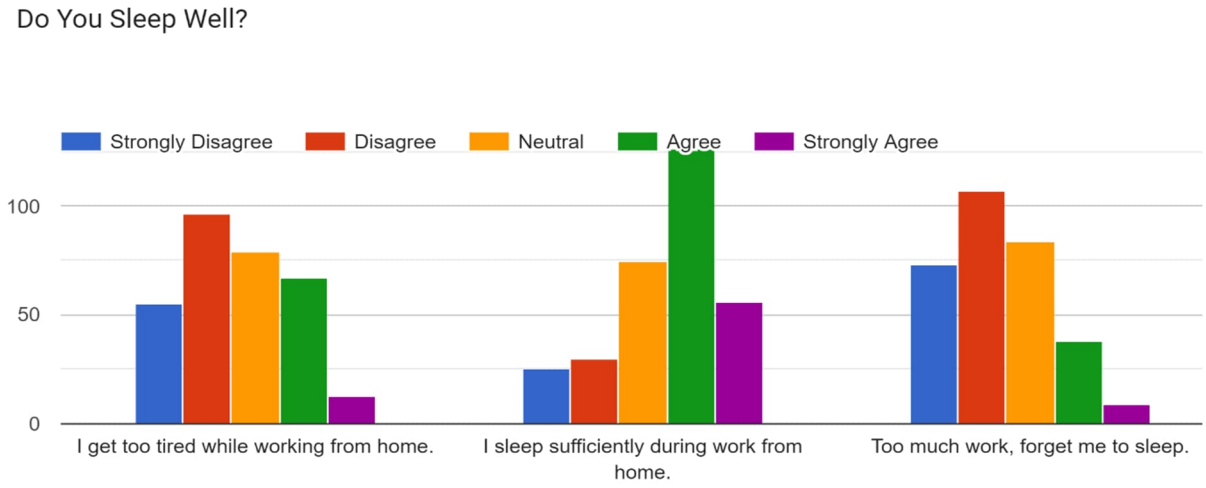

Figure 17 – Responses over Quality of Sleep of IT Professionals during Work From Home

The above diagram is the representation of responses obtained for the analysis of the quality of sleep factor, which is an independent variable. This is linked to both the dependent variables of the research work. The responses display the fact that around 50% of respondents disagree with the comment on getting tired while working from home, whereas only 80 out of 311 respondents either agree or strongly agree with getting tired while working from home. Further, around 182 of 311 respondents have responded, saying that they sleep sufficiently while working from home, and 180 out of 311 respondents have stated that they disagree with the comment, saying that too much work causes them to forget to sleep. However, for each of the questions, neutral responses lie around 70–80, which shows that a significant portion of the respondents either agree or disagree over the factor of quality of sleep while working from home.

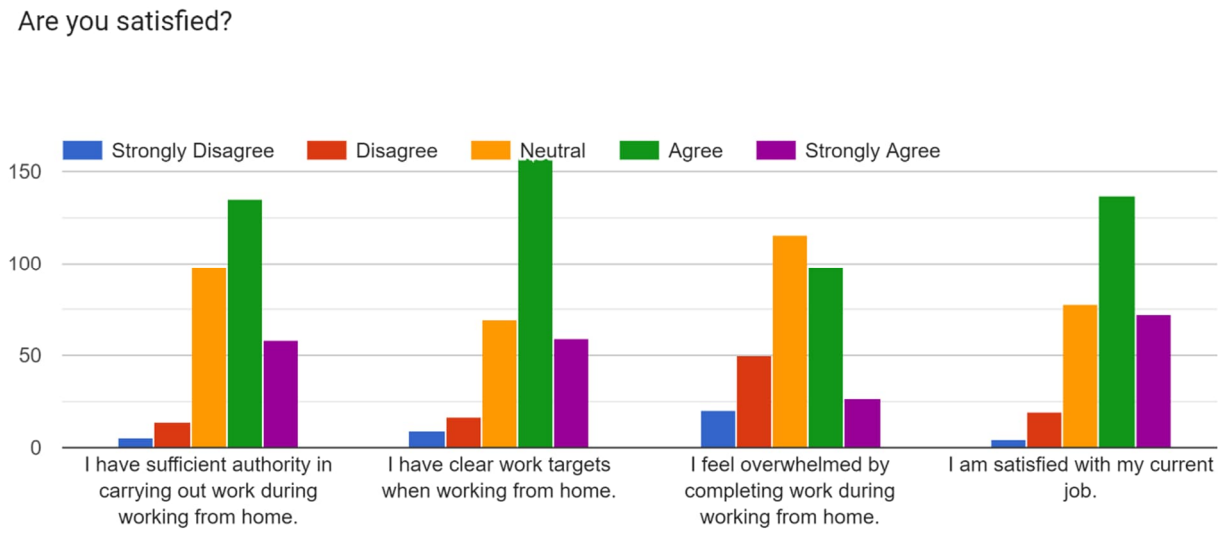

Figure 18 – Responses over Job Satisfaction of IT Professionals during Work From Home

The diagram above over the testing of satisfaction over the job during working from home clearly indicates that, in almost all the questions, green and purple bars are way higher than the other extreme, which displays the fact that a major part of the respondents were satisfied with the job during working from home. Although there are some neutral responses, diagrams indicate that the disagreeing opinions are comparatively smaller in number for almost all the questions in measuring satisfaction on the job.

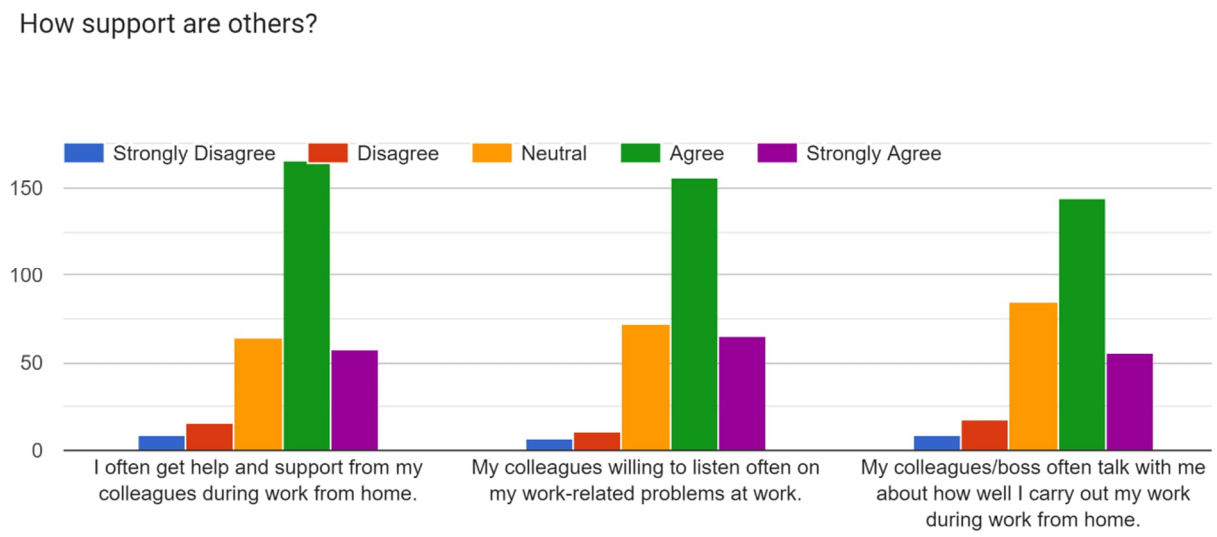

Figure 19 – Responses over Social Support and Interaction of IT Professionals during Work From Home

The presentation of the above diagrams portrays the indication of the responses obtained for the questions to measure the support and how collaborative the work colleagues and superiors were while working from home for IT professionals. 222 out of 311 respondents stated that they often get support from their colleagues; 221 out of 311 respondents stated that their colleagues are always willing to listen to them during Work From Home over the problems; and 199 out of 311 respondents stated they either agree or strongly agree with saying that their boss, superiors or colleagues talk with them to understand their wellness during their routines in working from home .

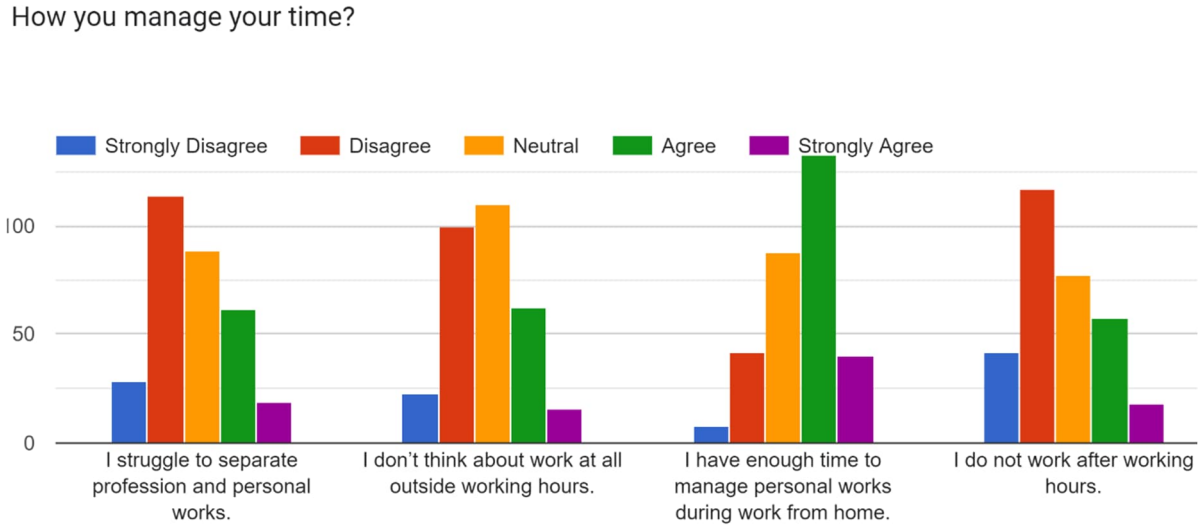

Figure 20 – Responses over Time Management of IT Professionals during Work From Home

The above graphical representation demonstrates the responses obtained from the assessment of time management. As shown in the diagram, the management over time during working from home seems to be more on the negative side, although 173 out of 311 respondents have stated that they have enough time to manage personal work during Work From Home. Only 80 out of 311 respondents have said they are struggling to separate their profession and personal work, whereas only 75 of 311 respondents have stated that they do not work after working hours. This clearly indicates the fact that although they manage personal and office work better with enough time while working from home, they have to work after normal working hours, which may end up on the negative side from an overall and long-term perspective while working from home.

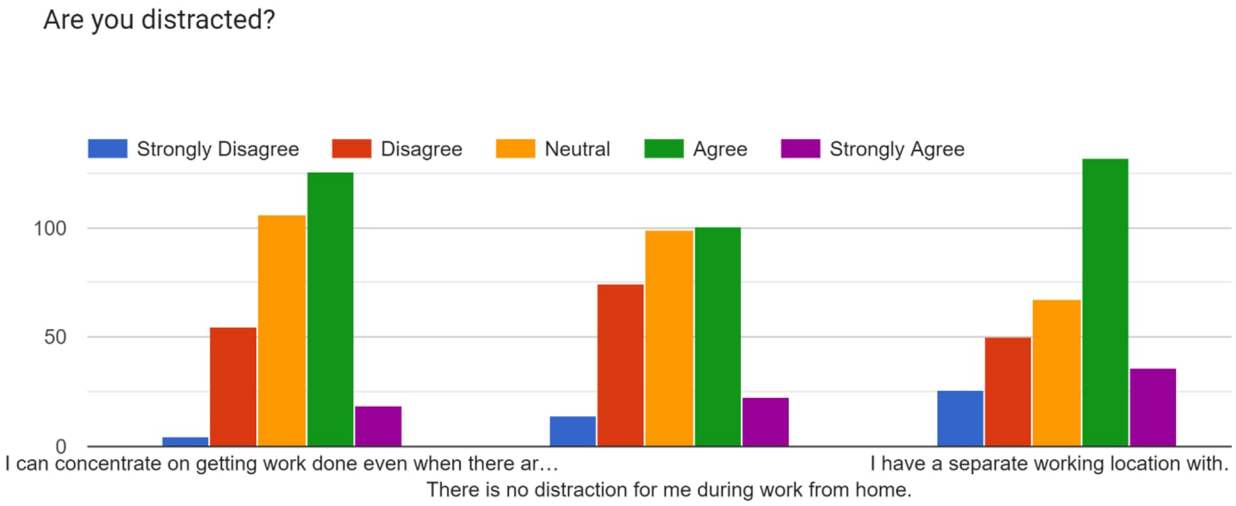

Figure 21 – Responses over Distraction of IT Professionals during Work From Home

The above three graphs reveal that although 145 of 311 respondents stated that they can concentrate on work while working from home, nearly one-third of the respondents stated that they are on neutral. Similarly, around 100 respondents in the IT field have responded neutrally, saying that there is no distraction while working from home. However, as per the statistics, it is noted that only nearly 50% of the IT professionals who have responded have a separate working location at home while working from home, which may be the reason why the neutral responses are nearly one-third for the other two questions.

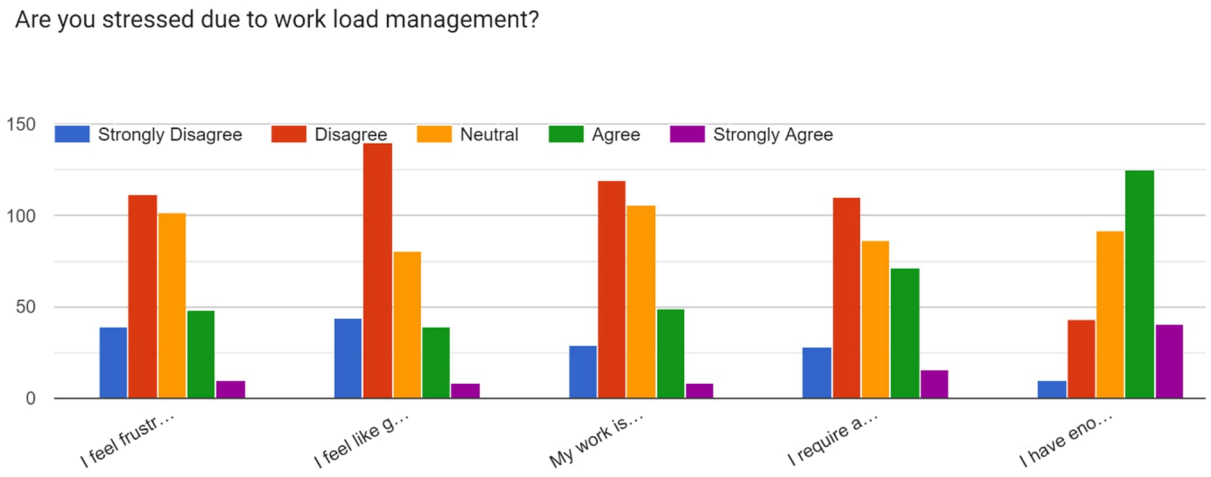

Figure 22 – Responses over Workload and Stress Management of IT Professionals during Work From Home

This is a factor in the research work that has been analyzed with five different questions, as stress and workload management are the factors that could have a direct impact on productivity and work-life balance, especially when working from home. As indicated in the diagram, only 58 IT professionals have said that they feel frustrated during Work From Home, 47 have said that they feel like giving up the job during Work From Home, 57 have said that their work has been unevenly distributed, 87 have said that they require additional time to complete their allocated work, and around 166, which is more than 50% of the respondents, have said that they have enough time to relax during the Work From Home mechanism. Although all the above shows positive responses over stress and workload management, for all the questions, neutral options have been selected by each 100 respondents, which shows that the responses for stress and workload from IT professionals are evenly distributed for both extremes.

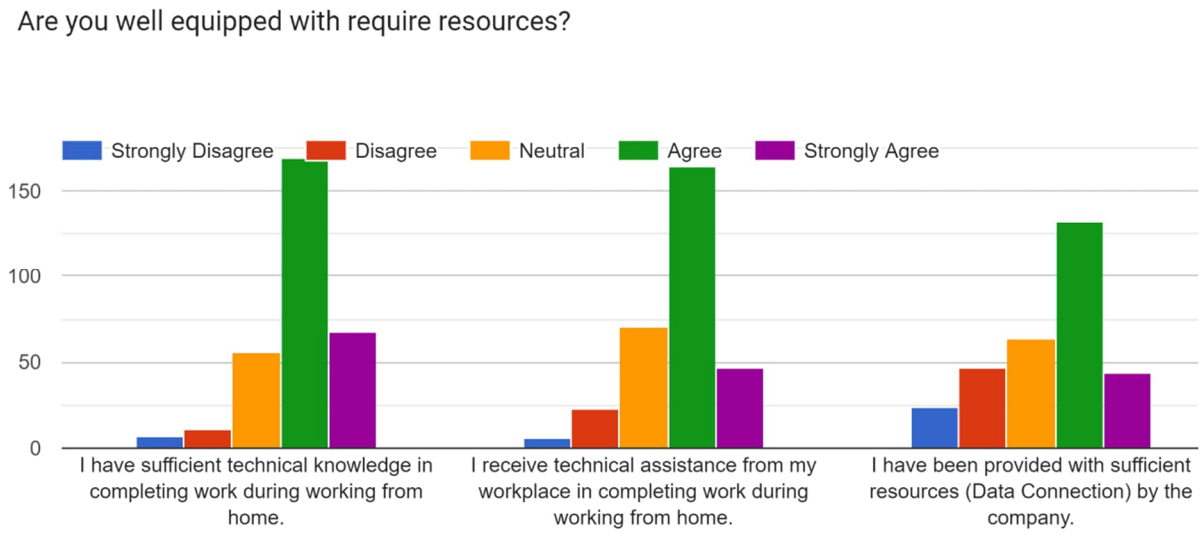

Figure 23 – Responses over Network Connectivity and Resources of IT Professionals during Work From Home

The factor related to resources and required equipment during Work From Home have been included in the analysis in order to determine whether aspects related to equipment and resources have an impact on the productivity of IT professionals during Work From Home. The significant rise of green and purple bars in the diagram clearly demonstrate that IT professionals have been well equipped with the required resources to perform their Work From Home, as a lack of the same would have a significant impact on productivity.

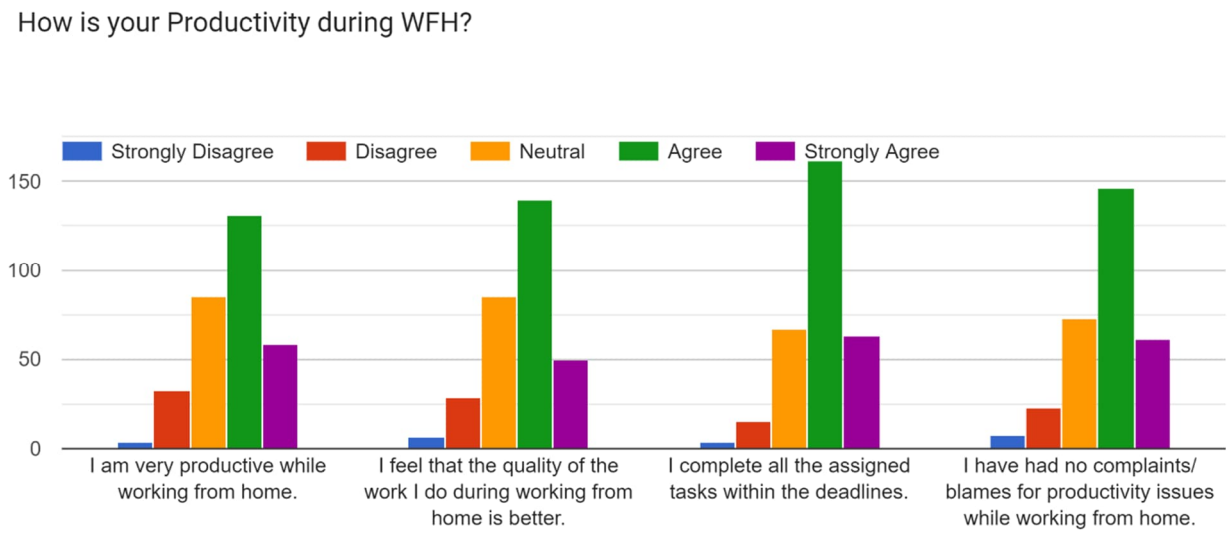

Figure 24 – Responses over Productivity of IT Professionals during Work From Home

Productivity is one of the dependent variables included in the research work, which has been intended to be analyzed based on the responses to the above four questions. 180–220 responses for each of the above questions indicate that more than 50%–60% of the IT professionals who have responded seem to be more productive during work from mechanism. Although there are a slight number of neutral responses, opinions over disagreement are significantly less, which shows that the productivity of IT professionals is favorable when working from home.

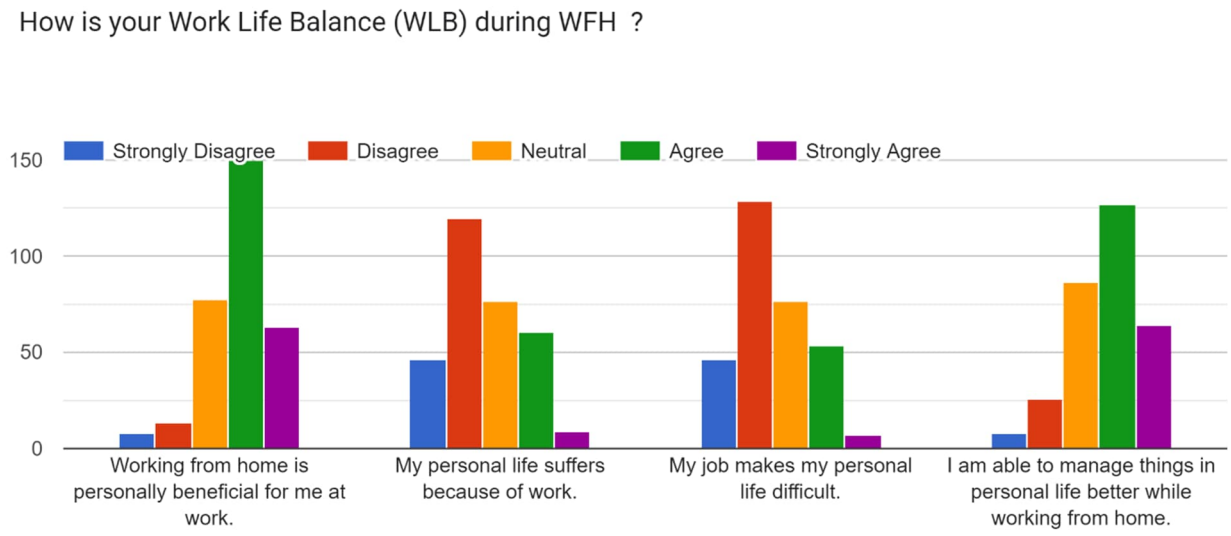

Figure 25 – Responses over Work Life Balance of IT Professionals during Work From Home

Work-life balance is the other dependent variable used to measure the objective of the research work. Responses for the first and last questions show agreement over WFH and its benefits and the ability to manage personal life while working from home, as the rise of green and purple bars for such questions is significant. On the other hand, responses to second and third questions portray that suffering and difficulties in personal life due to professional work are significantly lesser, as disagreement over such questions is significantly higher, since brown and blue bars are comparatively higher for second and third questions.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
QS	311	100.0%	0	0.0%	311	100.0%
SF	311	100.0%	0	0.0%	311	100.0%
SP	311	100.0%	0	0.0%	311	100.0%
TM	311	100.0%	0	0.0%	311	100.0%
DT	311	100.0%	0	0.0%	311	100.0%
ST	311	100.0%	0	0.0%	311	100.0%
RS	311	100.0%	0	0.0%	311	100.0%
PD	311	100.0%	0	0.0%	311	100.0%
WLB	311	100.0%	0	0.0%	311	100.0%

Table 3 – Case Processing Summary of data responses

The above table clearly indicates that there have been no missing data in the samples selected for testing, as responses to all the questions and all the factors have been collected without any missing data.

Tests of Normality

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
QS	.093	311	.000	.974	311	.000
SF	.114	311	.000	.963	311	.000
SP	.197	311	.000	.916	311	.000
TM	.140	311	.000	.972	311	.000
DT	.104	311	.000	.975	311	.000
ST	.083	311	.000	.983	311	.001
RS	.170	311	.000	.936	311	.000
PD	.145	311	.000	.953	311	.000
WLB	.114	311	.000	.958	311	.000

Table 4 – Tests of Normality over data responses

The above table indicates the test of normality based on the Kolmogorov-Smirnova statistic. As all these responses have been obtained from questionnaires and their respective questions, as per the general norm, questionnaire responses do not fall into the normal distribution. The test results above also indicate the same, since the p value is less than 0.05 for almost all the variables and factors used in the research, including both independent and dependent variables. The decision has been made that there is no normal distribution based on the significance level of the test results, based on which null hypotheses have been rejected, and it has been concluded that the data selected for the study do not follow the normal distribution.

Variable	Mean	Median	Variance	Std. Dev	Skewness	Kurtosis
QS	3.5027	3.6667	0.628	0.7923	-0.225	0.002
SF	3.6262	3.7500	0.401	0.6333	-0.317	1.263
SP	3.7760	4.0000	0.625	0.7908	-0.751	1.342
TM	3.0531	3.0000	0.449	0.6702	-0.198	0.873
DT	3.2637	3.3333	0.627	0.7919	-0.171	-0.256
ST	3.3949	3.4000	0.555	0.7452	-0.064	0.104
RS	3.6731	4.0000	0.586	0.7657	-0.675	1.046
PD	3.7211	4.0000	0.606	0.7787	-0.432	0.341
WLB	3.6013	3.5000	0.499	0.7067	0.027	0.281

Table 5 – Descriptive Statistics over data responses

The above table is a representation of the exploration done on the data obtained for the analysis. The mean parameter obtained for each of the variables in the table above indicates the responses for each of the variables on an average level. PD, RS, WLB, SP, SF, and QS are all falling almost towards the end of the highly favorable response, whereas TM and DT are falling near the neutral response, which indicates that time management and distraction are two comparatively affected aspects during WFH. The values returned for median are also in line with the mean values, where all the values are nearly toward the highly favorable end except TM and DT. The values obtained for skewness, which are almost negative values, demonstrate the fact that data and responses to questions are towards the right end with highly favorable responses. The metrics obtained for variance and standard deviation clearly reveal the fact that there

is not much variation in the variation of data around the mean for all the variables used for the study.

4.3. Reliability Test and Factor Analysis

A reliability test has been referred to as the study of the internal consistency of a measurement instrument that is used to analyze and increase the validity and reliability of results obtained for each parameter, for which an exploratory study has been conducted on the quantitative data.

The Cronbach's alpha coefficient is the most recommended method and metric adopted in the research studies to assess reliability. The Cronbach's alpha reliability coefficient ranges between 0 and 1, and a coefficient value of more than 0.7 is generally considered acceptable and provides reasonable reliability over the variables.

Variable	**Number of Items used to Measure**	**Cronbach's Alpha Coefficient Value**
QS	3	0.722
SF	4	0.705
SP	3	0.852
TM	4	0.742
DT	3	0.778
ST	5	0.807
RS	3	0.704
PD	4	0.871
WLB	4	0.784

Table 6 – Reliability Test for Variables

Cronbach's Alpha	**Cronbach's Alpha based on Standardized Items**	**Number of Items used to Measure**
0.905	0.909	33

Table 7 – Overall Reliability Test

The above tables clearly indicate that all the coefficient values obtained for each of the independent and dependent variables are greater than 0.7, which shows that all the variables selected for study passed the reliability test. In addition to each reliable test for variables, the reliability test for all the variables and all 33 questions produced a result of 0.905, which is so close to 1, which indicates that all the variables have passed the reliability test.

It should be noted that alpha values almost near 0.8 are probably a reasonable result, where a high value for Cronbach's alpha indicates good internal consistency of the items in the scale.

Variable	**Variable Type**	**Cronbach's Alpha**	**KMO Factor**
Overall	Not Applicable	0.905	0.880
QS	Independent – 1	0.722	0.703
SF	Independent – 2	0.705	0.721
SP	Independent – 3	0.852	0.730
TM	Independent – 4	0.742	0.717
DT	Independent – 5	0.778	0.711
ST	Independent – 6	0.807	0.789
RS	Independent – 7	0.704	0.698
PD	Dependent – 1	0.871	0.772
WLB	Dependent – 2	0.784	0.697

Table 8 – Factor Analysis for Variables

Factor analysis is a method used to determine the dimensionality of a scale. The factor loading of each of the items is almost near or greater than 0.7, which demonstrates an acceptable level of correlation and convergence between the two items. The Kaiser-Meyer-Olkin (KMO) measure of sample adequacy, which shows a value greater than 0.6, provides greater internal consistency and adequate convergence between two concepts.

4.4. Inferential Statistical Analysis

A study and analysis with inferential statistics and related output generated with correlation matrices are used to analyze the inter-item correlation, which was carried out for each and every variable to determine the correlation among each of the variables.

Inter-Item Correlation Matrix

	QS1	QS2	QS3
QS1	1.000	.174	.461
QS2	.174	1.000	.174
QS3	.461	.174	1.000

Inter-Item Correlation Matrix

	SF1	SF2	SF3	SF4
SF1	1.000	.610	.086	.397
SF2	.610	1.000	.210	.336
SF3	.086	.210	1.000	.089
SF4	.397	.336	.089	1.000

Inter-Item Correlation Matrix

	SP1	SP2	SP3
SP1	1.000	.691	.639
SP2	.691	1.000	.648
SP3	.639	.648	1.000

Inter-Item Correlation Matrix

	TM1	TM2	TM3	TM4
TM1	1.000	-.031	.339	.052
TM2	-.031	1.000	.227	.539
TM3	.339	.227	1.000	.257
TM4	.052	.539	.257	1.000

Inter-Item Correlation Matrix

	DT1	DT2	DT3
DT1	1.000	.408	.284
DT2	.408	1.000	.545
DT3	.284	.545	1.000

Inter-Item Correlation Matrix

	ST1	ST2	ST3	ST4	ST5
ST1	1.000	.702	.553	.535	.351
ST2	.702	1.000	.582	.490	.201
ST3	.553	.582	1.000	.527	.311
ST4	.535	.490	.527	1.000	.323
ST5	.351	.201	.311	.323	1.000

Inter-Item Correlation Matrix

	RS1	RS2	RS3
RS1	1.000	.601	.289
RS2	.601	1.000	.505
RS3	.289	.505	1.000

Inter-Item Correlation Matrix

	PD1	PD2	PD3	PD4
PD1	1.000	.780	.596	.632
PD2	.780	1.000	.574	.547
PD3	.596	.574	1.000	.641
PD4	.632	.547	.641	1.000

Inter-Item Correlation Matrix

	WLB1	WLB2	WLB3	WLB4
WLB1	1.000	.227	.236	.598
WLB2	.227	1.000	.742	.145
WLB3	.236	.742	1.000	.158
WLB4	.598	.145	.158	1.000

Table 9 – Inter-item Correlation Matrix

All the above tables with inter-item correlation demonstrate the fact that each of the variables correlates with the other, which shows the strength of the combination among the variables selected for the study. Although QS2 is weakly correlated with the other two variables, QS1 and QS3 are correlated better in between. With the exception of SF3, all other variables in SF exhibit stronger correlations with each other. Variables attached to SP and DT are strongly correlated with each other, whereas except for TM2, all the other variables in TM have also been correlated with each other in better strength. However, variables attached to PD, WLB, ST, and RS are strongly correlated with each other, which demonstrates the better relationship among each variable in the analysis.

Pearson's Correlation Analysis

Variable	Pearson Correlation (PD)	Sig. (2-tailed)	N
QS	0.326	.000	311
SF	0.497	.000	311
SP	0.381	.000	311
TM	0.359	.000	311
DT	0.458	.000	311
ST	0.416	.000	311
RS	0.497	.000	311

Table 10 – Pearson's Correlation Analysis for Productivity against other Variables

Variable	Pearson Correlation (WLB)	Sig. (2-tailed)	N
QS	0.563	.000	311
SP	0.370	.000	311
TM	0.433	.000	311
DT	0.261	.000	311
ST	0.688	.000	311

Table 11 – Pearson's Correlation Analysis for Work Life Balance against other Variables

The Pearson Correlation Coefficient is the analysis that evaluates the strength and direction of the relationship that may exist between two variables measured on at least an interval scale. In this research scenario, correlation analysis has been performed on independent variables and two dependent variables separately.

The summarized table above represents the Pearson's correlation coefficient for each of the independent variables against both dependent variables at 2-tailed significance. Although the coefficient values demonstrate that all the variables are strongly correlated, the values suggest that they are moderately correlated with dependent variables.

4.5. Regression Analysis

Regression analysis would provide a picture of how the data regressed against the dependent variables and the relationship between the independent and dependent variables.

The regression analysis has been performed twice with each dependent variable in order to understand the relationship between the two independent variables.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682[a]	.465	.453	.57592

a. Predictors: (Constant), RS, QS, DT, SP, TM, SF, ST

Table 12 – Model Summary of Regression Analysis of Productivity

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	87.488	7	12.498	37.681	.000[b]
	Residual	100.502	303	.332		
	Total	187.990	310			

a. Dependent Variable: PD

b. Predictors: (Constant), RS, QS, DT, SP, TM, SF, ST

Table 13 – ANOVA Test Results of Productivity

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.152	.248		-.611	.542
	QS	.040	.053	.040	.749	.455
	SF	.291	.064	.237	4.569	.000
	SP	.042	.049	.042	.841	.401
	TM	.138	.058	.118	2.384	.018
	DT	.199	.047	.202	4.227	.000
	ST	.181	.056	.173	3.208	.001
	RS	.229	.052	.225	4.372	.000

a. Dependent Variable: PD

Table 14 – Beta and t-values of Regression Analysis of Productivity

Variable	**Significance Level**	**Results at 5% significance level**
QS	.455>0.05	Do not Reject $H_0$1
SF	.000<0.05	Reject $H_0$2
SP	.401>0.05	Do not Reject $H_0$3
TM	.018<0.05	Reject $H_0$4
DT	.000<0.05	Reject $H_0$5
ST	.001<0.05	Reject $H_0$6
RS	.000<0.05	Reject $H_0$7

Table 15 – Hypotheses Testing for Productivity

The above table shows the comparison between the standard significance and the significance level obtained for each of the independent variables against the PD, along with the beta and t-values. Based on the comparison of significance level studies, we should note that null hypotheses related to QS and SP factors have to be decided not to reject, whereas null hypotheses of SF, TM, DT, ST, and RS have to be rejected against the PD.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.741[a]	.549	.542	.47846

a. Predictors: (Constant), ST, DT, SP, TM, QS

Table 16 – Model Summary of Regression Analysis of Work Life Balance

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	84.988	5	16.998	74.251	.000[b]
	Residual	69.821	305	.229		
	Total	154.809	310			

a. Dependent Variable: WLB

b. Predictors: (Constant), ST, DT, SP, TM, QS

Table 17 – ANOVA Test Results of Work Life Balance

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.521	.185		2.818	.005
	QS	.177	.044	.198	4.054	.000
	SP	.131	.037	.147	3.532	.000
	TM	.093	.048	.088	1.944	.053
	DT	.036	.037	.041	.975	.330
	ST	.460	.047	.486	9.872	.000

a. Dependent Variable: WLB

Table 18 – Beta and t-values of Regression Analysis of Work Life Balance

Variable	Significance Level	Results at 5% significance level
QS	.000<0.05	Reject $H_0$8
SP	.000<0.05	Reject H_0 9
TM	.053>0.05	Do not Reject $H_0$10
DT	.330>0.05	Do not Reject $H_0$11
ST	.000<0.05	Reject $H_0$12

Table 19 – Hypotheses Testing of Work Life Balance

The above table shows the comparison between the standard significance and the significance level obtained for each of the independent variables against the WLB, along with the beta and t-values. Based on the comparison of significance level studies, we should note that null hypotheses related to TM and DT factors have to be decided not to reject, whereas null hypotheses of QS, SP, and ST have to be rejected, against the WLB.

4.6. Discussion of Results

The analysis clearly demonstrated the fact that, just based on the responses from each of the 311 respondents, almost all the factors have been rated above neutral for all the questions, at an average where almost all the respondents have stated in favor of the questions, except for a few selected questions.

The analysis of Pearson's correlation coefficient suggested that, although all the variables are not strongly correlated with PD and WLB, all such variables are moderately correlated with both PD and WLB. SF and RS have been comparatively better correlated with PD, whereas ST has been comparatively better correlated with WLB.

The analysis of regression among independent and dependent variables revealed the fact that many independent variables directly influence PD and WLB, respectively. Based on the output of the analysis, it has been demonstrated surprisingly that Quality of Sleep, Social Support and Interaction have no direct influence over Productivity, whereas all the other factors Job Satisfaction, Time Management, Distraction, Workload and Stress, Network Connectivity and Resources have a direct influence over the Productivity of IT professionals working from home. Further, it is also noted that Time management and Distraction have no direct influence over Work Life Balance, whereas Quality of Sleep, Social Support and Interaction, Workload and Stress have direct influence over the Work Life Balance of IT professionals during the Work From Home mechanism.

Based on the statistics, Job Satisfaction, Network Connectivity and Resources have been significantly influencing Productivity, whereas Workload and Stress, and Quality of Sleep have been identified as significantly influencing Work Life Balance for IT professionals while working from home.

5. RECOMMENDATIONS AND CONCLUSION

5.1. Chapter Introduction

This chapter of the study demonstrates the findings of the research, where factors are having an impact on the effectiveness of Work From Home for IT professionals in terms of Productivity and Work Life Balance. Further, this chapter is inclusive of conclusions derived based on the analysis of the research area, along with recommendations and guidance given for future work.

5.2. Research Objectives and Conclusions

The major objective of this research study is to identify the critical factors that are having an impact on Productivity and Work Life Balance during WFH for IT professionals in Sri Lanka, which would address the requirements of both organizations and employees, with the consideration of factors determined.

Based on the research study and data analysis in the above chapter, it is well noted that all the factors selected for the research work, namely, Quality of Sleep, Job Satisfaction, Time Management, Distraction, Social Support and Interaction, Workload and Stress, and Network Connectivity and Resources, all have moderate correlations with both Productivity and Work Life Balance, which shows that all such factors are somehow associated with Productivity and Work Life Balance.

Further, as per the results derived from data analysis, it is identified and noted that, although all the factors have been associated with Productivity and Work Life Balance, Productivity has been highlighted to be highly influenced by Job Satisfaction, Time Management, Distraction, Workload and Stress, and Network Connectivity and Resource factors, whereas Work Life Balance has been highly influenced by factors such as Quality of Sleep, Social Support and Interaction, and Workload and Stress.

This portrays the factual evidence of the factors that are having an impact on Productivity and Work Life Balance for IT professionals during the work-from-home mechanism. This analysis provides the results and the conclusion in relation to the objective of this study, in which the identification of the critical factors that are having an impact on Productivity and Work Life Balance during WFH for IT professionals in Sri Lanka have been determined.

Further, the outcome of this study would provide guidance to organizations on which factors are to be significantly focused on, to ensure Productivity for organizations and Work Life Balance for employees, over all the IT professionals across different domains in Sri Lanka during Work From Home to attain the overall objectives of the organization.

5.3. Recommendations

The basic recommendation for the senior management of organizations is to identify the factors highlighted in the conclusion which are having impact over Productivity and Work Life Balance and focus towards the same and make sure aspects related to such factors have been addressed. Further, it is also vital for the management to take action plans to ensure that such factors have been addressed adequately and appropriately ensuring overall Productivity of the work is attained while also ensuring Work Life Balance of employees has been managed in an appropriate manner.

Further, the senior management must also take necessary actions and segregated plans to address each of the factors while keeping an eye on the other factors as well. Because some of the other factors could also become vital for the employers and employees, in the long term in addressing the achievement of Productivity and Work Life Balance.

Overall, it is recommended for both government and private organizations where IT professionals work in different domains, to implement appropriate mechanism to focus on each identified factor for both Productivity and Work Life Balance separately, which could help organizations to manage Productivity and IT professionals to manage Work Life Balance, during Work From Home mechanism effectively.

5.4. Guidance for Future Research Work

This research study aims to include all IT professionals in order to determine the factors that influence the effectiveness, in terms of Productivity and Work Life Balance, of IT professionals working from home in Sri Lanka. As the depth and spread of IT professionals are significantly wide, this may not produce the intended results with the number of samples selected for the study. Therefore, it is recommended for future researchers to target niche groups with specific industry/IT groups or specific designated IT professionals, through which the depth of data would provide more reasonable results to satisfy the objective. On the other hand, if all the categories of IT professionals are to be covered, it is recommended to try and go for more samples without the limitation of being within one specific country; hence, cover the entire globe to ensure the maximum possible samples for the study to arrive at more reasonable results.

Further, future studies could be conducted more specifically targeting each of the IT domains in Sri Lanka to ensure solutions and recommendations could be attained specifically, considering both productivity and work-life balance. The study could also be extended to other domains than IT professionals, such as finance, HR, marketing, etc. Furthermore, a similar study could be conducted targeting cross-country respondents to compare and validate the responses of employers and employees from different regions. In addition, future studies could also be conducted as a case study for a specific company in an industry, targeting the effectiveness of both Productivity and Work Life Balance during WFH for cross-functional employees, to analyze the responses from employees from different domains in a company.

In future studies, measures of Productivity and Work Life Balance could be determined based on the responses from employers and employees, respectively, as in

this study, all the responses have been obtained from IT professionals. In addition, as this study does not include the precise location of respondents, further studies could be conducted with the inclusion of precise locations, which could help to derive more precise conclusions and recommendations based on locations.

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APPENDIX A: QUESTIONNAIRE INSTRUMENT

Factors Affecting Productivity and Work Life Balance (WLB) during Work From Home (WFH) for IT Professionals in Sri Lanka

Dear Participants,

I am conducting this survey as part of the final research project for the MBA in Information Technology at the University of Moratuwa. This survey is being carried out purely for academic purposes and your responses to all questions will be kept strictly confidential. Rest assured that the anonymity of your responses will be protected.

The main purpose of this research is to investigate the factors that are having impact on productivity and work life balance during Work From Home for IT Professionals in Sri Lanka across different demographic groups.

The survey questions are broken into the following sections. The expected survey completion time is less than 10 Minutes.

- Demographic Questionnaire
- Assessing over factors impacting over Work From Home
- Assessing the productivity during Work From Home
- Assessing the Work Life Balance during Work From Home

Please answer all questions considering your own experience and how you feel about the questions/statement as your honest responses are very important to the success of this survey. Please also note that your participation in this survey is completely voluntary, however would help to provide results to analyse impact in the society due to WFH.

Thank you in advance for your time and effort and willingness to contribute to this study.

1. Are you qualified in IT field? (Degree/Professional Qualifications)
    - Yes
    - No
2. Are you working as an IT Professional in Sri Lanka?
    - Yes
    - No
3. Your Gender?
    - Male
    - Female
    - Prefer not to say
    - Other
4. Your Age Group?
    - Below 18
    - 18-24
    - 25-34
    - 35-44
    - 45-54
    - Over 55
5. Your Marital Status?
    - Single
    - Married
    - Divorced
    - Widowed
6. Your Children?
    - None
    - One
    - Two or more
7. Your Education Level?
    - Ordinary Level
    - Advanced Level

- Diploma Level
- Bachelor’s
- Master’s
- Doctorate
- Professional Qualification in IT

8. Are you Employer or Employee?
    - Employer
    - Employee
9. Your Employment Status?
    - Full Time
    - Part Time
    - Contractual
    - Intern or Trainee
10. Your Occupation?
    - IT Consultant
    - Data Scientist
    - IT Security Analyst
    - Software Engineer
    - Quality Analyst
    - Database Administrator
    - Developer
    - Network Specialist
    - Project Manager
    - Business Analyst
    - Customer Support
    - IT Delivery
    - IT Lecturer/Professor
    - IT Governance
    - Other, Specify
11. Your Job Level (Designation)?
    - Chief/Head of Department

- Senior Director/Director
- Senior Manager
- Manager
- Assistant Manager
- Team Lead
- Senior Executive
- Executive
- Senior Associates
- Associates
- Trainees/Interns
- Other

12. Frequency of Work From Home during last two years?
    - Always WFH
    - 3-4 days a week
    - 1-2 days a week
    - Never
13. Frequency of Work From Home now?
    - Always WFH
    - 3-4 days a week
    - 1-2 days a week
    - Never
14. Your Experience as IT Professional?
    - Just Joined
    - Less than 1 year
    - 1-3 years
    - 3-5 years
    - 5-7 years
    - 7-10 years
    - Over 10 years
15. Your Compensation Package?
    - Below 50k

- 50k-100k
- 100k-200k
- 200k-300k
- 300k-400k
- 400k-500k
- Over 500k

Quality of Sleep	16. I get too tired while working from home. 17. I sleep sufficiently during Work From Home. 18. Too much work, forget me to sleep
Social Support/Interaction	19. I often get help and support from my colleagues during Work From Home. 20. My colleagues willing to listen often on my work-related problems at work. 21. My colleagues/boss often talk with me about how well I carry out my work during Work From Home.
Job Satisfaction	22. I have sufficient authority in carrying out work during working from home. 23. I have clear work targets when working from home. 24. I feel overwhelmed by completing work during working from home. 25. I am satisfied with my current job.
Time Management	26. I struggle to separate profession and personal works. 27. I don't think about work at all outside working hours. 28. I have enough time to manage personal works during Work From Home. 29. I do not work after working hours.

Distraction	30. I can concentrate on getting work done even when there are distractions from family members during working from home. 31. There is no distraction for me during Work From Home. 32. I have a separate working location with no disturbance at home.
Workload/Stress	33. I feel frustrated, tense and irritable with my Work From Home job. 34. I feel like giving up on work during working from home. 35. My work is unevenly distributed. 36. I require additional time than work hours to complete works allocated to me. 37. I have enough time to relax during Work From Home.
Network Connectivity/Resources	38. I have sufficient technical knowledge in completing work during working from home. 39. I receive technical assistance from my workplace in completing work during working from home. 40. I have been provided with sufficient resources (Data Connection) by the company.
Productivity	41. I am very productive while working from home. 42. I feel that the quality of the work I do during working from home is better. 43. I finish all the assigned tasks within the deadlines. 44. I have had no complaints/blames for productivity issues while working from home.

Work Life Balance	45. Working from home is personally beneficial for me at work. 46. My personal life suffers because of work. 47. My job makes my personal life difficult. 48. I am able to manage things in personal life better while working from home.

Thank you for your valuable Contribution for my Research Work.

Much Appreciated....!!!