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The Implications of Long Working Hours on Employee Mental Health and Productivity in the Bahrain Banking Sector

A Thesis Submitted in Partial Fulfilment of the Requirements for the Master's Degree in
Human Resources Management

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Abstract

This study aims to investigate the relationship between long working hours, mental health, and productivity among bank employees in the Kingdom of Bahrain. A quantitative research methodology was used to investigate the relationships between variables.

The Goldberg (1970) - GHQ-12 model was chosen to measure the mental health of employees, as it is one of the most used models by researchers in this field. For employee productivity, the Menezes & Xavier (2018) model was used. In addition, several demographic factors were measured, such as age, gender, marital status, number of children, educational level, job rank, and years of experience.

The study sample consisted of bank employees in the Kingdom of Bahrain, and statistical analysis was performed at both descriptive and inferential levels to achieve the research objectives and test the hypotheses. The responses were also subjected to a Spearman test to examine the relationship between variables.

The results showed that there was no linear relationship between long working hours and mental health, or between long working hours and productivity. The findings were consistent with the results of many previous studies reviewed in Chapters Two and Four, where a non-linear relationship does not necessarily imply the absence of an indirect relationship due to the interaction of various influencing factors such as work-life balance, individual adaptability, and others.

The study also revealed a relationship between mental health and productivity, with women, in particular, suffering from poorer mental health compared to men.

Furthermore, the study highlighted the relationship between the demographic factor (years of experience) and productivity, where increased years of experience correlated with higher employee productivity.

The study concluded by providing recommendations to decision-makers and human resources professionals to implement initiatives and programs that enhance employees' mental health. Additionally, a set of recommendations was proposed for future studies focusing on the non-linear relationship between long working hours, mental health, and productivity.

ملخص البحث

تهدف هذه الدراسة البحث بين علاقة ساعات العمل الطويلة بالصحة النفسية والإنتاجية لموظفي البنوك في مملكة البحرين. تم استخدام منهجية البحث الكمي للبحث بين علاقة المتغيرات.

تم اختيار نموذج GHQ-12 (Goldberg, 1970) لقياس الصحة النفسية للموظفين لكونه من النماذج الشائع استخدامها بين الباحثين في نفس الموضوع، أما بالنسبة لإنتاجية الموظفين فتم استخدام نموذج (Menezes & Xavier, 2018) بالإضافة لذلك تم قياس العديد من العوامل الديموغرافية مثل: العمر، الجنس، الحالة الاجتماعية، عدد الأبناء، والمستوى التعليمي، والرتبة الوظيفية، وسنوات الخبرة.

تجلت عينة البحث بفئة موظفي البنوك في مملكة البحرين، وتم استخدام التحليل الاحصائي على مستويين الوصفي والاستدلالي لتحقيق أهداف البحث والتحقق من الفرضيات ، كما خضعت الاستجابات لاختبار (spearman) للبحث بين علاقة المتغيرات.

أظهرت النتائج عدم وجود علاقة خطية بين ساعات العمل الطويلة والصحة النفسية، وبين ساعات العمل الطويلة والإنتاجية ، وتفتت نتيجة البحث بنتائج العديد من الدراسات السابقة التي تم استعراضها في الفصل الثاني والرابع، حيث العلاقة الغير خطية لا تعني بالضرورة عدم وجود علاقة غير مباشرة لتداخل العديد من العوامل المؤثرة مثل: الموزانة بين العمل والحياة، قدرة الفرد الذاتية في التكيف وغيرها.

أظهرت الدراسة أيضاً وجود علاقة بين الصحة النفسية والإنتاجية، حيث تعاني النساء على وجه الخصوص من ضعف في الصحة النفسية مقارنة بالرجال.

كما أدلت الدراسة بوجود علاقة العامل الديموغرافي (سنوات الخبرة) بالإنتاجية فكلما زادت سنوات الخبرة زادت إنتاجية الموظفين.

اختتمت الدراسة بتقديم توصيات لصناع القرار والعاملين في الموارد البشرية لتنفيذ مبادرات وبرامج تعزز الصحة النفسية للموظفين، كما تم اقتراح مجموعة من التوصيات للدراسات المستقبلية الخاصة بدراسة العلاقة الغير خطية بين ساعات العمل الطويلة والصحة النفسية والإنتاجية.

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Chapter One: Introduction

1.1 Introduction

Bahrain shifted its concentration to the financial industry during the 1990s. The country is widely recognized for being the first in the Gulf region to develop the concept of oil diversification (Edbuser, 2020). The financial industry currently occupies a prominent role as a major contributor to the economy of the Kingdom of Bahrain (Naser, 2018). Based on the 2015 data, the financial sector contributes 17.18% to the gross national product (GDP) (eGovernment, 2023). The financial sector in Bahrain is widely acknowledged as a rapidly expanding and wealthy industry in the Middle East (Galdeano, et al., 2019).

The banking industry in Bahrain is distinguished by the coexistence of Islamic and conventional banks, which together represent around 85% of the total financial assets (Oxford, 2019).

Long working hours have emerged as a significant concern in the labor market in the world and especially in Bahrain in recent years. The rise of this phenomenon can be ascribed to heightened rivalry, globalization, and the pursuit of economic expansion (Rantanen, et al., 2022). Consequently, many employees in Bahrain frequently work longer hours, beyond the typical 40-hour workweek (Diop, et al., 2016).

Working hours in Bahrain are renowned for having some of the lengthiest working hours compared to many countries in the world (AlSaqer, 2008) Many countries have resorted to reducing working days to only four days (Albilad Newspaper, 2022). The excessive workload might result in physical and mental health problems, heightened stress levels, and reduced productivity (Wong, et al., 20219). Moreover, it can harm employees' personal lives as they grapple with the challenge of allocating

time for family, recreational pursuits, and self-care (Lou et al., 2022). Hence, it is imperative to examine the consequences of extended working hours in Bahrain and enforce strategies that foster a more salubrious equilibrium between work and personal life.

Examining the consequences of extended working hours on employee mental health and productivity is essential for comprehending the overall welfare and efficiency of the workforce. Prolonged working hours can result in heightened stress levels, burnout, and reduced job satisfaction, ultimately affecting productivity and employee retention rates (Obrenovic et al., 2022). Moreover, comprehending these consequences might assist governments and employers in devising methods to foster work-life equilibrium and establish a more salubrious work milieu.

The banking industry, as a significant contributor to the nation's economy, plays a crucial role in attracting foreign investments, fostering economic expansion, and generating employment prospects (Yadav et al., 2022). Moreover, the sector offers crucial financial services to both individuals and businesses, assisting them with their financial requirements and enabling economic transactions (Raihan, et al., 2023). Hence, Bahrain must give utmost importance to the advancement and stability of its banking industry to guarantee sustained economic well-being.

1.2 Research Problem

Work is required to keep up with life's necessities, and it is also effective for individuals because it gives life meaning. The majority of employees in developed nations work more than 48 hours per week, and many nations have begun to investigate the effects of long working hours on a variety of factors, including economic, environmental, health, and psychological factors, productivity, and job satisfaction (Choi et al., 2021).

The echo of this topic was clear in the Bahraini street after the experience of COVID-19, as most of the employees were working from home in a flexible manner where they had the freedom to complete tasks in the most appropriate way for them, but now, after returning to normal life, it may be difficult to return to long working hours. The majority of workers in the private sector are now working more than 40 hours per week, according to the literature review and studies, these hours are considered long working hours, which have a significant impact on the employee.

The banking sector promotes economic growth by providing individuals and businesses with access to credit, enabling them to make investments and expand their operations. The demands of the banking industry necessitate a high degree of accuracy and concentration, while the extended duration of working hours imposes significant stress on employees. Bank employees in the Kingdom of Bahrain are subjected to extended working hours, which poses a significant challenge to their well-being and work-life balance. Consequently, there is a resultant disturbance in both the production and satisfaction levels of employees.

This research examines the correlation between extended working hours, employee mental health, and productivity in the banking industry of

Bahrain. Hence, there is an urgent need to study this topic for several purposes.

1.3 Research Objectives

The research objective is as follows:

- 1- To measure the implications of long working hours on employee mental health and productivity.
- 2- To study the views of long-time bank employees on reducing working hours.
- 3- To explore the impact of the working hours on employee's mental health, work productivity, and job satisfaction.
- 4- To propose solutions to the problem of long working time to improve the mental health of employees and raise the rate of productivity and job satisfaction.
- 5- To focus on working hours and their impact on employees and provide insights to improve the Bahraini labor market.
- 6- To enrich the university library with the results of the study.

1.4 Research Questions and Hypotheses:

The main objective of this study is to answer the following research questions: What is the effect of long working hours on an employee's mental health, and productivity?

- 1- Are there any Demographic factors affecting employee mental health and productivity in the bank sector in Bahrain?
- 2- Is there a significant relationship between long working hours and an employee's mental health?
- 3- Is there a significant relationship between long working hours and employees' productivity?

- 4- Is there a significant relationship between an employee's mental health and productivity?
- 5- What is the optimal duration of working hours for enhancing employees' mental well-being and productivity?

Various theories were created to address these research inquiries.

H0: There is no significant relationship between employees.

H1: There is a significant relationship between long working hours and employee mental health.

H.2: There is a significant relationship between long working hours and employee productivity.

H.3: There is a significant relationship between employee mental health and productivity.

H4: There is a significant relationship between demographic factors and employee mental health and productivity.

1.5 Research Significance

The significance of this research lies in its potential to shed light on the detrimental effects of long working hours on employee mental health and productivity in the banking sector.

By understanding these impacts, policymakers and industry leaders can develop strategies and interventions to promote employee well-being and work-life balance, ultimately improving overall productivity and job satisfaction in the sector.

Additionally, this research can contribute to a comprehensive understanding of the underlying factors that contribute to long working

hours in the banking sector, allowing for targeted interventions to address these challenges effectively.

The impact of employee mental health on employee productivity is a crucial aspect to consider when studying long working hours in the banking sector. It is important to understand how the demanding work environment and long hours can affect the mental well-being of employees, as this can ultimately have an impact on their overall productivity and performance.

By recognizing the significance of this relationship, interventions, and support systems can be put in place to promote a healthier work-life balance and enhance employee well-being. Additionally, understanding the research significance of these factors

Ultimately, this study will make a valuable contribution to the existing body of literature by employing novel methodologies within the realm of the banking sector. Prior research has demonstrated a dearth of literature on the subject matter, encompassing three key components: extended periods of work, mental well-being, and productivity. This study is widely regarded as one of the pioneering efforts in providing insights into the banking sector. The existing body of literature on this subject is quite scarce, particularly in the Gulf Cooperation Council (GCC) region, and specifically in the Kingdom of Bahrain.

This study gains greater significance as it contributes to the existing literature by introducing a novel strategy, particularly relevant for corporations and industries, such as banks, that hold substantial economic influence at both national and global levels.

In addition, the advantages derived from this research will extend to:

- Retail Organizations in Bahrain.

- Researchers in HRM.
- Researchers in the health and psychological fields.
- CSR society.
- HRM, academics, and students.
- Market researcher and consulting.
- Researchers in economics and productivity.
- Government entities and regulatory frameworks.

1.6 List of Definitions of Terms:

The table below includes key terms used in the research:

Table 1.1: Definitions of terms

Term	Definition
Long Working Hours	Working hours exceed 40 hours per week or 8 hours per day (Bannai & Tamakoshi, 2014).
Mental Health	A state of optimal well-being is characterized by self-awareness, stress management, productive employment, and meaningful community contributions (World Health Organization, 2014).
Employee Productivity	It's a measure of employee's efficiency and effectiveness in achieving their work goals and objectives within a given time frame (Hanaysha, 2016).
Well-being	Well-being is the amalgamation of experiencing positive emotions like happiness

	and contentment, as well as developing one's potential, having control over one's life, having a sense of purpose, and experiencing positive relationships (Ruggeri, et al., 2020).
Work-Life Balance	Allocate equal time and importance to both personal and professional pursuits (Brough, et al., 2020).
Mental Disorders	Mental disorders, also known as mental illnesses, are conditions that affect cognitive, emotional, mood, and behavioral functions, affecting daily life and affecting social connections. (Bingham & Banner 2014).
Work Burnout	Burnout is a condition marked by emotional tiredness, depersonalization, and a sense of not achieving personal goals in the workplace (Bakker, et al., 2014).
Toxic Work Environment	is an environment characterized by the pervasive presence of unpleasant, confrontational, or bullying conduct that is deeply ingrained in the organizational culture (Rasool, et al., 2021).

1.7 List of Abbreviations

Table 1.2: Acronyms

Abbreviations	Definition
SPSS	Statistical package of social science
FLSA	Fair Labor Standards Act
GCC	Gulf Cooperation Council
WHO	World Health Organization
HRM	Human Resources Management
CSR	Corporate Social Responsibility

1.8 Research Structure

The study has been structured according to the academic requirements of the University of Bahrain for thesis standards. Therefore, this work has been organized into five chapters.

Chapter One serves as the introductory section of the study. It provides a concise overview of the study's purpose and objectives, the problem being addressed, the questions that need to be answered to make appropriate recommendations, the importance of the study, and the definition of keywords.

Chapter two comprehensively analyzes the existing literature and research to identify gaps and comprehend the necessary variables for

constructing its framework. Consequently, the literature review has depicted the correlation between the factors.

Chapter three outlines the study methodologies used to attain the research goals. This chapter further details the population, research sample, necessary methodologies, and data collection and analysis instruments.

In Chapter Four, the acquired data analysis phases are discussed, focusing on examining the correlations between the variables through hypothesis testing. The SPSS software was utilized to derive the conclusive outcome from the gathered data. The conclusion of the findings has been deliberated at the end of the chapter.

Chapter five encompasses the research conclusion, recommendations, management implications, limitations, and future research.

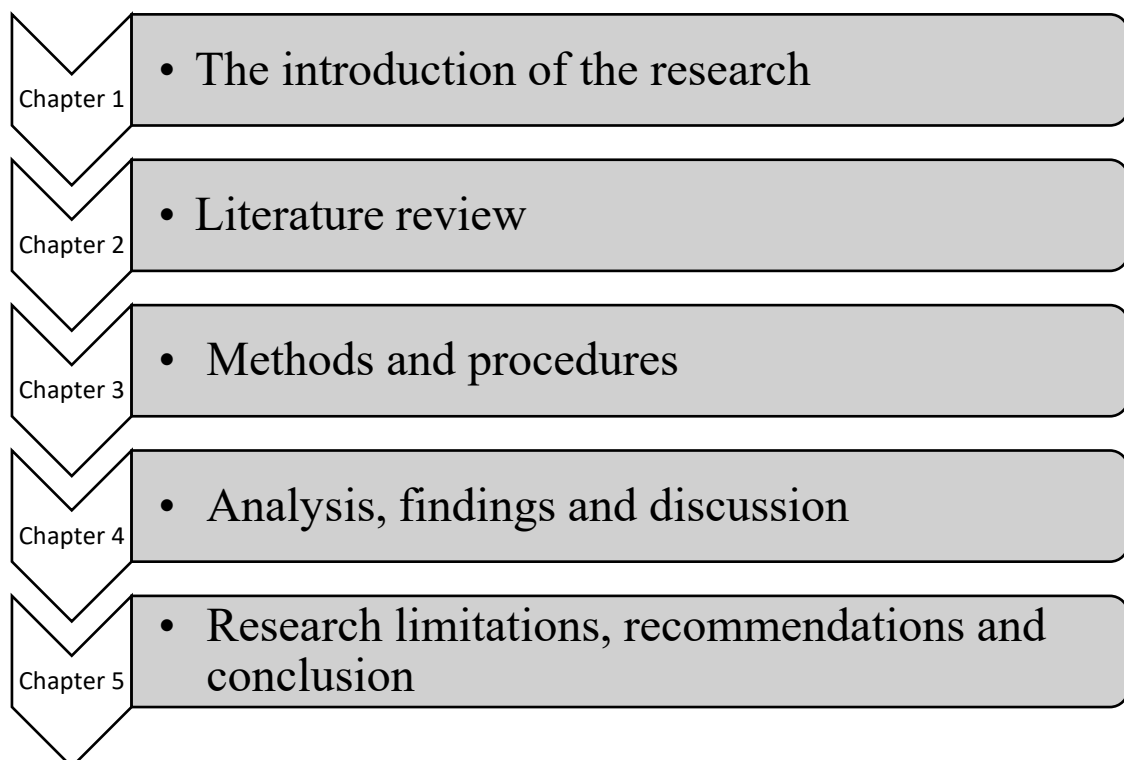


Figure 1.1: Research Structure

1.9 Conclusion

This chapter provides a summary of the study problem, research questions, aims, hypothesis, importance, and several related terminologies and concepts. The upcoming chapter will focus on conducting a literature study. This will provide a comprehensive grasp of the variables utilized and their interrelationships as observed in previous studies.

Chapter Two: Literature Review

2.1 Introduction

In conjunction with the rapid technological developments and globalization that the world is experiencing now, maintaining or raising organizational performance has become an important matter as the challenges have increased. Organizations must take great care of their resources and work to make good use of them to obtain outputs that are parallel to their goals. Employees are considered one of the aspects that influence the overall performance of any organization or industry, whatever its size.

One of the basic resources for organizations is Human Resources (HR). The level of employee productivity is now considered an important element for organizations to reach their goals and raise organizational performance. Increasingly, organizations are investing in human resources as a method to raise their competitiveness (Kareem & Hussein, 2019). Likewise, the banking sector's overall performance depends largely on the efficiency of its human capital (Hawalдар, et al., 2016).

This chapter addresses long working hours, employee mental health, and employee productivity; specifically, definitions, the background, purpose, factors, challenges, and consequences resulting from poor mental health and productivity of employees. The content of this chapter was enriched by referring to the previous literature and labor laws of many countries to present the main variables in detail and to search carefully for the relationship between them.

2.2 Working Hours

The issue of the working hour constitutes a complex debate. The work systems themselves in the same country may differ according to the case. There is part-time work, standard-hour work, and non-standard work

schedules such as weekend work, night work, and shift work (Messenger, 2011). Evans, Lippoldt, and Marianna (2001) divided working hours into four types with five different definitions. The first is the working hours in productive activities, whether paid or unpaid. He believes that this definition is very important for macroeconomic analysis. The second definition is the definition of usual working hours, as these hours are not affected by other factors. Such as overtime, short working hours, illnesses, or vacations. This definition is considered the most widely used internationally. Thirdly, it pertains to countries where the working week and working hours are regulated by law. Fourth, working hours are the standard work week or working hours. Fifth, the number of working hours agreed upon in the individual work contract, or called contractual working hours, such as overtime hours, which are calculated as the difference between the usual working hours minus the contracted hour.

Working hours have become the focus of attention for researchers in the field of work and employment, and the concept of working hours differs between the employer and the employee. The employer thinks of working hours as allocated to workplace safety, productivity, and business competitiveness (Wong, et al., (2019).

While the employee's working hours have direct implications for their job satisfaction, income, life quality, and career development (Cao & Rubin, 2014). Wages are often linked to working hours as a quantitative relationship, while the employer should be open and flexible. Typical work depends on flexibility in working hours (Idris, 2014). During employment, the wage determined by the employer is offered, and flexible working hours are provided for the employee to complete the work. Long working hours do not necessarily reflect high productivity (Pencavel, 2015). The number of working hours in most countries was an average of 48 hours

during the week in 1930. In 1935, the working hours changed to 40 hours during the week; now, working hours are widely applicable in countries around the world (Messenger et al., 2007).

2.2.1 Standard Working Hours

A standard workweek is one that consists of fixed working hours per day for a fixed number of days (Messenger, 2018). At the turn of the century, the average workweek consisted of 60 hours stretched across six days. By 1960, a five-day workweek of 37 to 40 hours had become the "standard" (Cao & Rubin, 2014). This standard remains prevalent. It has been established by custom or collective bargaining and is reinforced by laws mandating premium pay for time worked beyond the standard (Sunter & Morissette, 1994).

This reduction in working hours had many reasons: The economic and social crisis of the Great Depression led to the reduction of working hours to combat unemployment (Maddison, 2001). As the Second World War was ending in 1944, the ILO held its annual conference in Philadelphia and adopted the Declaration of Philadelphia, which boldly asserted that "all human beings, regardless of race, creed, or gender, have the right to pursue both their material well-being and their spiritual development in conditions of freedom and dignity, economic security, and equal opportunity" (Messenger, 2018).

During most of the first six decades of the twentieth century, the sharp decline in working hours was driven by increased productivity and real profits rather than legislative changes. After the advancement of technology, workers produced the same amount in less time, so employers and employees enjoyed increased productivity, profits, and wages. With this productivity growth, it was in the interest of employers to meet the

demands of workers and unions for employees to have more leisure time (Sunter & Morissette, 1994).

The Fair Labor Standards Act (FLSA) established a legal system that unifies and regulates the working day so that working hours do not exceed 40 hours per week and employers are required to pay wages for overtime hours when workers are required to work for more than 40 hours per week. Many believe that this systemic structure contributed to the organization of many economic sectors (Cao & Rubin, 2014). Messenger et al. (2007) explained in their book some of the reasons that show the difference between working hours in the world: global discussions, a lack of information and studies about working time, and the division of labor between developing and industrialized countries in terms of work. Many countries encourage the overtime system and informal employment. Therefore, in industrialized countries, long working hours are often dealt with according to gender, as long working hours are reserved for men and not for women (Weimann, 2021).

With the developments that the world is facing now, especially regarding technological development, a day doesn't pass without demands to reduce working hours to less than forty hours, especially in developed countries such as China and some industrialized countries as well (Jolivet & Lee, 2004). Two surveys done by the Organization for Economic Cooperation and Development (OECD) and the Korean Ministry of Employment (2010) showed that employees in Korea are working 48 hours a week. Korea is considered the country with the longest working hours in the world (Jeong et al., 2013).

The labor laws and regulations of each country, which include work contracts, breaks, annual leaves, payment of overtime, maximum working hours, and safety policies, govern working hours for the six Arab Gulf

countries (Damir-Geilsdorf & Pelican, 2019). The labor law includes both the government and private sectors. While the private sector is a part of the government and is subject to strict laws depending on the town, it also depends on the flexibility to meet the needs of businesses and organizations (Biygautane, Al Yahya, 2014). Many work systems are followed in the GCC, such as night work, shift work, and flexible work. For standard working hours, the forty-hour-a-week system is used for most of the Arab Gulf countries.

According to the Bahrain Labor Law (2012), article 51 states that employees in the public and government sectors work for a maximum of eight hours a day or 48 hours a week, and it is not permissible to increase it except in some cases stipulated in the labor law. Recently, the Council of Ministers decided to increase "flexible working" hours to 3 hours in government agencies, except for the health and education sectors.

In Saudi Arabia, specifically the government sector, the working hours for most organizations are approximately 40 hours per week, while the working hours in the private sector are 50 hours per week (Hertog, 2012). Likewise, for the private sector in Kuwait, in some organizations, it reaches 75 hours during the week. Speaking of the State of Qatar and based on the labor law, 1962 article (3): for adult workers, normal working hours may not exceed eight hours per day and forty-eight hours per week; this article includes the private and government sectors (State of Qatar labor law, 1962). As for Oman, labor law also governs working hours. According to Article 60 of the Omani labor law, the worker may not work for more than nine hours per day, with a maximum of 45 working hours per week. The labor law also governs working hours in Oman, and Article 60 of the Omani labor law states that a worker may only work a maximum of 45 hours per week and no more than nine hours per day. This is for the

government sector as well as the private sector, according to Article 80: the worker may not work for more than eight hours per day, with a maximum of 48 hours per week (Oman Labour Law, (2003)).

Regarding the UAE, the labor system is also governed by the labor law, which was recently introduced in December 2021 and was officially applied in January 2022. The labor law of the UAE regulates the private and government sectors. The UAE labor law for the private sector states that employees should work for 8 hours a day or 48 hours during the week. As for the governmental sector, the change in it has become significant compared to the previous labor law, and compared to the labor laws for the rest of the Arab Gulf countries, the working days were reduced to four and a half days per week, 8 hours per day, except for Friday, 4 and a half hours, for a total of 28 and a half hours per week (the United Arab Emirates labor law, 2021).

After reviewing the labor Codes of the GCC countries, it has been noticed that all Gulf States reduce working hours during the holy month of Ramadan to alleviate the burden on their workforce.

The literature on working hours often links the length of working hours to the economic level of the country. After presenting a collection of statistics and analyses, Giattino, Ortiz-Ospina, and Roser (2020) answered the question that has formed a wide controversy in the work literature. Recently, which countries have the employees who work the longest working hours—rich or poor countries? Swaziland has been compared to Cambodia, where the total revenues are twenty times greater. It turns out that poor countries work longer hours than rich countries.

It is difficult to make a comparison of the length of work between countries due to the rapid and different developments in working time

policies and systems because, in some countries, working hours are calculated annually instead of weekly, and some countries have taken the initiative to reduce working time through additional rest days or reductions in working hours. What complicates this thread in calculating long working hours is part-time work (Tijdens & Dragstra, 2007).

2.2.2 Short Working Hours

Recently, researchers have paid attention to the literature on working hours, specifically short working hours, after experiencing flexible work and working from home during the Corona pandemic (Parrique, 2019). As many organizations, companies, and banks tended to work remotely to avoid contact and limit the spread of the epidemic,

Rapid technological development allows organizations to implement a system of short working hours ("less than 40 hours") during the week because the use of technology contributes to the speed and accuracy of completing tasks for employees (Skidelsky, 2019). Technology has greatly facilitated the virtual work of employees (Wang et al., 2021). According to a recent worldwide poll by the technology company Ricoh, 57% of office workers in Ireland think that a four-day workweek is likely to become the norm shortly as technology improves workplace efficiency (RicoH Europe, 2019). In this sense, scholars are looking more at the benefits of short working hours and investigating the possibility of reducing working hours (Wiedmann et al., 2020).

The short working hour's system benefits the employee and organization in many aspects: Several ways exist where working less can enhance the quality of life. First, long workdays are to blame for a lack of work-life balance (Wöhrmann et al., 2021). Additionally, long work hours are bad for employees' health and well-being because they increase stress

and the risk of accidents at work (Coote et al., 2021). Considering this, working less is probably the best way to thwart these temptations and regain a healthy balance between work and life (Gunderson, 2019). The opposite of being under time pressure, "time affluence" has been proven to reduce anxiety, enhance social interactions, and increase time spent engaging in physical activity (Petrie et al., 2022). Working in a short-hours system can increase the amount of time spent with friends, family, and leisure pursuits (Kelliher et al., 2019).

Working for less time reduces costs because, by reducing the use of resources in the organization, the rate of fatigue and effort of employees will be lower, and thus employees will not have to take sick leave (Gilmore, 2019). Also, the short working hours motivate employees to continue working in the organization, and it is an excellent way to attract talented employees as well. In a study conducted by Idris (2014), it was found that one of the best methods for retaining talented employees in banks is flexible work and shorter working hours.

Many countries have begun to study the possibility of reducing working hours. As for the Arab Gulf countries, the first country to implement a system of reducing working hours to less than 40 hours is the United Arab Emirates. The federal government sector in the UAE adopts a working system consisting of four and a half working days (United Arab Emirates Labor Law, 2021).

2.2.3 Long Working Hours

Many factors affect the determination of working hours, such as globalization, modern technology, business structure, demographic change, and epidemics spreading around the world (Anttila et al., 2021). Despite the different working hours in countries around the world according to different systems, the important question remains: what are the appropriate working hours? And what are the criteria for determining long working hours? According to Figart & Golden (2013), the increase in the number of workers in the world gives a clear indication of overwork.

Long working hours ratings vary from town to town depending on the standard working hours. A study in the UK defined long working hours as working between 55 and 60 hours a week, and another study defined it as working 45 hours or more (Jeong et al., 2013). Morgan McKinley (2019) surveyed 1,500 employees in the United Kingdom who work in many sectors to indicate the number of working hours that employees work. It was found that employees who work in financial services and banks work more than 43 hours per week, and they also work 10 additional hours or more without pay.

In the past, the reason for the demands for reducing work was productivity, health, and safety, but even today, long working hours are a concern, but the focus remains on the worker's ability to reconcile the requirements of family and work (Cao & Rubin, 2014).

Long working hours not only affect the individual but also his family, especially married employees and those with children (Campbell, 2002). Long working hours have several problems, and the most prominent of them are retention and recruitment (Böheim & Taylor, 2004).

One of the most stressful factors for bank employees is working long hours because the nature of their work requires accuracy, and working long hours causes them to get tired from too much concentration. Moreover, bank employees find it difficult to balance work and home, work and leisure time, and time with family and friends (Khan et al., 2022).

2.3 Employees' Mental Health

There isn't a single, universally accepted definition of mental health because the culture that defines it affects it (Galderisi Heinz et al., 2017). Mental health is a state of well-being in which people realize their capabilities to deal with the pressures of daily life and productively deal with them for the individual and society (Government of Canada, 2006; World Health Organization, 2004). Manwell et al. (2015) reviewed a set of definitions of mental health with different terminology to explore the similar elements that are closely related to mental health. They found six elements: control, autonomy, physical health, sense of self, social health, and agency. Keyes (2014) explains a set of components of mental health such as psychological well-being, emotional well-being, and social well-being.

Psychological well-being means that the individual is satisfied with his personality, can manage his daily affairs, and has good relations with others. As for emotional well-being, it means feeling happy and satisfied. (Social well-being) includes several elements such as: (social contribution) Contributing to the work of society (and social integration), the individual's feeling that he is part of society (and social perception), considering society as a more suitable place for all (and social cohesion), and how society works are logical and appropriate. Fusar-Poli et al. (2020) defined good mental health as "a state of well-being that allows individuals to cope with the normal stresses of life and function productively." Mental health is an

individual's ability to self-manage and cope. Mental health and mental well-being are two important things for a happy and fulfilling life, and it is important to understand what they mean and spread awareness about mental health because it greatly affects the individual and society (Roberts & Yoon, 2022).

Thirunavurakasu (2013) explained the difference between mental health and mental illness through two basic dimensions. The first dimension is the negative impact of a person's health condition on himself. The second dimension is the negative impact of a person's health condition on himself and others. When the negative impact on oneself and others is small, it is called mental health. If this effect falls below a medium or high level, it is considered mentally unhealthy (mental illness). It includes several unwanted habits that affect the person and others, such as alcohol addiction, drug abuse, and self-harm.

Many reasons lead to poor mental health, including health, physical, social, and economic reasons such as heredity, health problems related to the body, difficult living conditions, poverty, family conditions, and working conditions (Horwitz, 2010). Mental and physical health are the results of dealing with several individual, environmental, and social factors like Personal stress level, family medical history, exposure to trauma, personal life circumstances, social and health support, and coping capacity (Joshi & Ralavaniya, 2021).

Horwitz (2010) argues that those who work in a positive, stimulating environment that encourages creativity and independence enjoy psychological well-being, while those who work in a boring and routine environment that does not give them independence at work suffer from a lack of mental health. Many employees who suffer from mental health problems do not disclose this to their manager, and the reason is fear of

harming their jobs or being them off, which increases their mental health disorders (Oakman et al., 2018). Human resources practices should focus on the employee's health and well-being because they are two important things. Many studies prove that poor mental health among employees leads to poor performance at work, especially in innovation (Amponsah-Tawiah et al., 2020).

2.3.1 Consequences of Poor Mental Health

Bad health may refer to bad mental health; unfortunately, many people in the world suffer from psychological strikes due to several reasons and influences (Prince et al., 2007). Numerous studies describe numerous instances of bank employees who experienced repeated heart attacks, which can be fatal in some cases. Selby-Green (2018) found that bankers are more prone to heart attacks at the age of 20–30 years old, and it was noticed that the most common heart conditions are among young bankers. There is a strong relationship between physical health and mental health, and one of the biggest influences is physical activity (Ohrnberger et al., 2017).

Sparks et al. (2015) assumed that many employees who work for long and extended periods suffer from fatigue and physical exhaustion. Moreover, they are more prone to poor mental health and poor lifestyles like drinking alcohol and smoking heavily. Added to that, the nature of banking work may have negative effects on the banker, especially because it requires sitting for long periods in an unstable position, poor vision from staring for a long time at computer screens, stress problems resulting from fatigue, depression, headaches, fatigue, dizziness, insomnia, anxiety, and nervousness, and bad habits resulting from the nature of banking work such as unhealthy eating habits, smoking, and drinking alcohol (Eberendu et al., 2018). A lot of literature confirms the idea that occupational stress

contributes significantly to the incidence of physical and psychological diseases, and this is reflected in the social, emotional, and professional status of the employee, which thus leads to poor performance at work, continuous absenteeism, violence in the workplace, and employee turnover (Dalgaard et al., 2017).

2.4 Employee Productivity

The success of any organization is measured by its productivity. Productivity is the result of joint efforts between employees and management (Zakaria, Farea, & Al-Today, 2017).

Employee productivity is defined as the worker's ability to improve his work outputs by increasing the product or service or increasing the quality of the product or service he provides or develops (Nappi, de Campos Ribeiro, & Cochard, 2020). Employee productivity, commonly referred to as workforce productivity, is measured based on the competencies of an individual worker or group of employees. Labor productivity is tightly correlated with an individual's labor. In the context of philosophy, work productivity can be defined as an attitude that continuously seeks to improve one's quality of life (Hanaysha, 2016). While productivity in economic terms is a comparison of outputs to inputs, the outputs must have additional value and superior processing methods to be productive. An employee's output over a given period can be used to measure productivity (Kalogiannidis, 2021).

Employee productivity refers to the measure of an employee's efficiency and effectiveness in completing tasks and achieving goals within a given timeframe (Gubler et al., 2018). It encompasses the ability to produce high-quality work, meet deadlines, and contribute to the overall success of an organization (Basahal et al., 2022). The importance of

employee productivity for organizations cannot be overstated (Quinn, 2018). A highly productive workforce not only ensures smooth operations but also drives innovation, profitability, and competitive advantage (Kenny, 2019). It directly impacts the bottom line by increasing output, reducing costs, and maximizing resource utilization (Hanaysha, 2016).

Numerous previous and current labor studies show that employees do their best and work effectively and efficiently if the work environment is appropriate in terms of dealing with colleagues and management on the principle of respect and flexibility at work (Kenny, 2019). In addition, Almatrooshi Singh and Farouk (2016) did a study to identify the factors that affect employee productivity and found that leadership competency in terms of cognitive, social, and emotional aspects plays a major role in influencing employee productivity.

Several studies were conducted to explore the most important factors that affect employee productivity. Chan & Kaka (2007) assumed that two main factors may impact employee productivity: work content factors, which are related to work management, and environmental factors. They pointed out that the effective administrative measures taken by organizations contribute significantly to raising the productivity of employees, such as good decision-making and the effective involvement of employees in that. Moreover, focusing on the morale of employees by motivating them and creating an environment conducive to work, Enshassi et al. (2007) mentioned some of the significant factors that impact an employee's productivity, such as limited resources, lack of supervision, unclear instruction, work time, motivation, health and safety, the psychological aspect of the employee, the high level of absenteeism, and late payment of employee salaries.

In an accurate and detailed article, Goetzel et al. (2002) add another factor to the list of factors that greatly affect the productivity of employees: the mental health of the employee. In the article, they call for managers to consider the mental health of the employees because it is a major cause of productivity and that neglecting it results in a great loss for the organization because of the employee's mental health, such as frequent absence, smoking, drinking alcohol, sudden death, etc.

In a study prepared by Ehsan & Ali (2019), it was concluded that there is a positive relationship between employee productivity and working hours, as not only wages and resources are the only influences, but working long and stressful hours also affect employee productivity.

Among the factors that affect the productivity of the company are some external influences, such as the financial crisis of 1997–1998. The crisis significantly affected banks' productivity (Banker, Chang, & Lee, 2010). The employee's low productivity is influenced by a variety of factors, some of which are brought on by the workers themselves and others by the company or workplace. In the following, these factors will be reviewed.

2.5 Factors Impacting Employee Mental Health and Productivity

The most common issues in the 21st century that harm the mental health of workers in the workplace are job security, working hours, and managerial style (Sparks et al., 2001). Poor mental health can have a significant impact on an employee's productivity, leading to absenteeism and decreased motivation (Bubonya et al., 2022). Additionally, factors such as workplace stress, poor work-life balance, and a lack of support from

management can also contribute to low productivity (Diamantidis& Chatzoglou, 2019).

According to Harvey et al. (2017), there is a strong relationship between common mental disorders (CMDs) and work, such as anxiety and depression, and their causes are: unbalanced job design, feelings of lack of value, disrespect from managers and colleagues, work pressure, multitasking, imbalance and reward, and a lack of fairness. Eberendu et al. (2018) added more causes to CMDs: very high goals, dealing with colleagues, and a lack of administrative support work. Job shifts, violence, alteration, office politics, downsizing, poor working conditions, office politics, difficult targets, lack of support and coaching, monitoring the employees, more than one boss, a low salary, and sexual harassment are considered job stressors (Sohail & Rehman, 2015).

2.5.1 Individual Factors

Personal factors have a significant impact on the productivity and performance of employees (Lis et al., 2022). These factors can include individual characteristics, such as personality, presenteeism, absenteeism, ability to balance between work and life, and level of motivation. Furthermore, the performance of individuals can be influenced by various personal attributes, including age, length of employment, and marital status (Sari & Ali, 2022). By understanding and addressing these factors, employers can create a more supportive and effective workplace that promotes employee engagement and success (Abdelwahed et al., 2023).

2.5.1.1 Employee personality

Employee personality is one of the factors affecting psychological health and productivity. Based on studies, personality has an impact on how much and what kind of stressors people are exposed to (Zondo, 2020).

Personality is defined as a stable set of traits and tendencies that create distinctions and parallels between people's thoughts, emotions, and actions (Maddi, 1996). A person's personality can be thought of as a fundamental behavioural and emotional description of how they typically feel and behave, as well as the kinds of physiological and behavioural responses they experience (Roberts & Yoon, 2022). When it comes to workplace circumstances, personality types have various effects on employees (Nguyen et al., 2022).

There are five essential personality traits: extroversion, Conscientiousness, Neuroticism, and Openness to experience (Bucher et al., 2019). which includes agreeableness (i.e., a person's orientation towards being courteous, cooperative, and tolerant), conscientiousness (i.e., an individual's tendency to focus on being careful, organized, thorough, and achievement-oriented), and neuroticism (i.e., one's propensity to be stressed, nervous, anxious, and insecure) (Islam, 2017). openness to new encounters (i.e., one's propensity to embrace new ideas or accept newness) and extraversion (a person's propensity to be active, social, talkative, and engaging) (Agyei et al., 2020).

Role ambiguity, role conflict, work overload, and time pressure in the workplace may have an impact on personality traits, which could affect job performance. Role ambiguity is frequently associated with worker productivity (Gridwichei et al., 2020). Furthermore, People react differently to duress. Some cope with tension much better than others and experience fewer negative consequences (Malik, 2011).

2.5.1.2 Work-Life Balance

The factors that affect employee productivity do not include those resulting from the organization alone; even personal factors affect

productivity as well (Rafsanjani, et al., 2019). For married employees, there is often a conflict in the balance between family and work. Employees who work for a long time and are under great pressure do not find enough time to take care of their families and communicate effectively with them daily, which creates family problems and psychological problems as well because the employee feels responsible for his failure to communicate with his family and meet their needs. These negative feelings felt by the employee greatly affect his productivity at work (Thirumakkal, 2015). One of the studies focused on studying the impact of some factors on the productivity of bank employees in Nigeria, and the factors that were studied were the imbalance between work and family, work pressure, and role conflicts. The study concluded that all these factors significantly affect employee productivity (Ngozi & Chinelo, 2020). The balance between work and life is important for employees. If the employee is unable to balance between the two, there will be negative reactions such as increased absenteeism rates, employee turnover, stress, poor work performance, and job dissatisfaction (Egbuta et al., 2019).

2.5.1.3 Presenteeism and Absenteeism

Many studies show the extent of productivity by examining the rates of attendance and absence of employees. A questionnaire of 120 employees working in a multinational Sri Lankan company shows that the rate of absenteeism is very high, and the participating employees explained the reasons for absenteeism, including health conditions or accompanying a patient. It was also found that the total loss in productivity is 10.43 per day every year. With an equivalent of 3.95% of the employees' capacity and the equivalent of 54,421 US dollars, the health conditions of the employees led to poor productivity and caused a large financial loss (Fernando, Caputi, & Ashbury, 2017). Major depressive disorder is considered one of the most

widespread diseases in all parts of the world and has negative effects on social and economic levels. According to Fernando, Caputi, and Ashbury (2017), depression-related occupational impairment has significant economic repercussions, with 60% of the loss coming from absenteeism or decreased productivity at work while the employee is present. There is no clear solution to eliminate this problem, but human resources specialists can activate the system of financial incentives and rewards to increase employee motivation with the preparation of programs that contribute to creating a work environment that cares about mental health (Koopmanschap, Burdorf, & Lötters, 2013).

2.5.1.4 Work Motivation

Most academicians define motivation as a factor that impacts a person's capacity to perform a specific action convincingly or effectively (Lorincová et al., 2019).

Motivation is an essential element for raising employee performance and company productivity (Siddiqui, 2019). Motivation is regarded as an important factor in organizational growth, and every employer is obligated to implement the most effective motivational strategy to achieve sustainable growth. Several studies have been conducted to determine the connection between employee motivation and organizational performance (Kalogiannidis, 2021). A vast majority of academics agree that employee motivation has a substantial impact on both employee and organizational performance (Uka & Prendi, 2021).

When the employees are effectively motivated, it will increase their productivity. On the contrary, the absence of the stimulus component at work will lead to a decrease in productivity (Andriani et al., 2018). Motivating employees by applying intrinsic and extrinsic rewards can be

used to help the employee achieve the set goals. Motivation includes many things such as rewards, incentives, and allowances that employees receive because of the mental and physical effort that has been placed in the bank, and many organizations seek human resource practices to balance between monetary and non-monetary benefits. The reward system is not limited to financial rewards but rather provides some food. If the company's cafeteria is free for employees, reducing working hours, providing health care insurance, etc., the incentives and rewards system policy must be effective and organized, as the absence of a quality rewards system will explain the poor performance of employees in the institution (Gachengo & Wekesa, 2017).

2.5.1.5 Psychological Factors (Job Burnout)

Organizational progress and recovery are dependent on their productivity. Numerous factors influence the organization's productivity; by identifying these factors, deterrence can be avoided (Mirkamali et al., 2018). Many studies have reported that psychological factors greatly affect the productivity of employees, including job stress and burnout.

Maslach & Jackson (1981) confirm that job burnout is composed of three psychological elements, such as emotional exhaustion and a decrease in the level of individual work because of the pressure resulting from the worker's job, so the employee becomes severely depressed and affects the company's output. Wahyono et al. (2020) mentioned a group of factors as well, such as feelings of frustration, excessive interest in work, the health of the employee, and the end of work efficiency, and confirmed that any employee who has many tasks that exceed his capacity will cause him great stress and tension, which leads to a decrease in the employee's productivity, and in the long run, the company will suffer from weakness in productivity as a whole.

Sani & Maharani (2013) interpret job burnout as a psychological syndrome consisting of several components, such as depression due to low personal achievement and emotional exhaustion. One of the factors that exacerbates job burnout is the employee's dependence on being the main source of family income (Thirumakkal, 2015).

In 2019, the World Health Organization (WHO) reclassified fatigue as work-related and identified burnout as a syndrome resulting from unmanaged workplace stress. Burnout is characterized by energy depletion, increased mental distance, and diminished professional effectiveness, limiting its application to other areas of life (Leito et al., 2021).

Burnout is a significant issue for financial sector employees (Dias & Angélico, 2018). Numerous employees claim to be exhausted and desire to quit their employment because of their superiors' and clients' increased pressure and workload (Lubbadeh, 2021). In addition, they believe they are not adequately compensated for the hard labor they put in to provide the best assistance possible to their clients (Khalid et al., 2020).

2.5.2 Organizational Factors

The work environment consists of the social and physical circumstances in which you perform your duties. These factors can influence employee happiness, relationships with colleagues, collaborative effort, productivity, and health. Therefore, an employee's productivity is more closely related to how much work they produce in each period. Research done by Afif et al. (2023) was aimed at investigating the factors that impact banker productivity and performance in Indonesian Islamic banking. The researchers found that the most common factors are leadership practices, work environment, and job satisfaction.

2.5.2.1 Tasks and Responsibilities

The work situation and the nature of work differ from one job to another in terms of performing the tasks assigned to the employee some require physical effort, some mental effort, and some both. Also, the tasks that the employee performs differ according to the sector and specialization; for example, the functional tasks of workers in the health sector differ from those of workers in the industrial sector, the education sector, the banking sector, and others. With the link between work and mental health, the factors that negatively affect mental health may differ from one sector to another (Parr, 2007).

The mental health disorders of employees began to increase in many different sectors, but bank employees are more vulnerable to psychological disorders because of work-related stress (Giorgi et al., 2017). In recent years, the economy has changed because of the global economic crisis, which is considered one of the biggest changes in how banks were organized and greatly affected the lives of employees (Pellinen, 2022).

Banks have gone through many changes related to restructuring and organization, technological development, and the need to keep pace with new working conditions, which constitute a great burden on bank employees and result in a lack of mental health (Kaur & Kumar, 2017).

Bankers play a range of roles during their work. They provide a variety of services to clients and seek to cooperate with them to achieve the objectives of the bank by providing clients with investment funds, insurance, and others (Giorgi, et al., 2020). Banks always strive to achieve their goals in the context of excessive competition between international and national banks through diversification of services, surcharges on customers, and selling insurance policies, and these matters fall largely on

the daily tasks of employees that affect them greatly (Bozdo & Kripa, 2015). Reducing the number of employees and increasing tasks and work for existing employees (Adrian & Ashcraft, 2016). The International Labour Organization explained a set of disturbing problems for workers in the banking sector: long working hours, issues related to the work environment, excessive work requirements, and difficulty dealing with customers (Giga & Hoel, 2003).

The banking sector is considered one of the most challenging sectors due to mass layoffs, outsourcing, job insecurity, digitization, and increased competition due to the entry of many private banks, so the employee often finds himself challenged with all these things in addition to the many and delicate tasks, especially as they are related to money (Mannocci et al., 2018). The reality of working in some banks seems very harsh, and the worker finds himself having to adapt to long working hours, sleep deprivation, dealing with an enormous amount of stress, and sometimes being forced to work on weekends or work unpaid overtime (Pellinen, 2022). In previous economic crises, the banking sector was always a part of the problem, but during the COVID-19 pandemic, the banking sector was part of the solution, and there was an urgent need to keep pace with change, develop electronic services, and offer a range of new services to satisfy customers and meet their needs. It is a huge burden on the work of employees, as they are forced to keep up with these rapid changes and work under pressure (Marcu, 2021).

The modern workplace has been greatly affected by the technological revolution (Boyer-Davis, 2019). Technology has become an important and common thing in the banking sector, so employees must be highly qualified for that change, and this matter not only affects them as bank employees but also affects their health, which increases work-related diseases because

of increased stress and pressure (Tafi et al., 2022). Although technology at work facilitates tasks and gets them done quickly, many employees do not feel comfortable (Rajput, Gupta, & Kesharwani, 2011).

Technological pressures, or the so-called technical stress, often have negative consequences for commercial banks, and by involving 400 employees in the banking sector in the research, it was found that information and communication technology creates a great psychological burden for employees, and they feel exhausted, anxious, and pessimistic due to the rapid development and the pressure of keeping up with it. Furthermore, It was found that technical stress negatively affects employee performance and productivity (Owusu-Ansah, Azasoo, & Adu, 2016).

The increasing use of technology has led to numerous conflicts between work and family, excessive workload, multitasking, and the creation of knowledge gaps due to task re-engineering, which affects employee performance (Okolo, 2018). Working conditions constitute a great burden for workers in high-pressure jobs, and working conditions are closely related to the mental health of employees. Women are considered more vulnerable to negative influence, and among the working conditions that affect mental health are lack of appreciation, work schedules, work intensity, and the physical environment (Belloni, Carrino, & Meschi, 2022).

2.5.2.2 Work Environment

The working environment constitutes one of the most important aspects influencing the level of satisfaction and motivation of its employees (Basalamah et al., 2022). According to Strong et al. (1999), social, organizational, and physical elements drive tasks and activities,

which in turn affect worker performance. Employee productivity is heavily influenced by the setting in which they work (Hafeez et al., 2019).

The term "sick building syndrome" refers to the unfavourable psychological state that an employee encounters because of his presence at work and which is a result of the social, physical, and psychological environment (Licina & Yildirim, 2021).

According to studies, sick building syndrome is a globally increasing health issue among office employees. It can result in a significant decrease in productivity, an increase in absenteeism, and a rise in employee turnover (Dhungana & Chalise, 2020). The work environment consists of two major components: the physical environment and the social environment. Neglecting one of these components creates a "toxic work environment" (Burris et al., 2019).

2.5.2.2.1 Physical Work Environment

This is the environment where the job is being conducted, and it deals with the physical or tangible (Chukwuma, 2022). It comprises elements such as workplace design, machinery, temperature, ventilation, and lighting. Space and noise levels are also included (Rugulies, 2019). It has been demonstrated that elements of the workplace, such as heat, noise, and lighting, have a direct and indirect impact on several psychological processes (Johnson et al., 2020). For instance, noise may reduce one's ability to do specific types of cognitive work (Malik et al., 2020).

The type and quality of the illumination system at the workplace enhance the working experience of employees, resulting in higher levels of output (Chukwuma, 2022). Research done by Sarode et al. (2014) demonstrates that lighting, commotion, colour, and the atmosphere affect employee productivity (Chandrasekar, 2011).

Many organizations limit employee productivity enhancement to skill development. The sort of work environment employees are exposed to influences the success of businesses. Akinyele (2010) stated that the workplace environment is responsible for 80% of productivity issues.

Managers cannot directly influence the mental conditions of their employees, but they can foster a productive work environment (Elaho et al., 2022). It is simpler to influence the performance of production equipment than that of employees, who require physical and psychological factors to affect their performance (Dappa & Onuoha, 2020).

Samson (2014) found that a psychosocial work environment was crucial to enhancing the performance of bank employees. Also, he recommended that the bank's leadership team continue to use improved work environments to boost its employees' effectiveness and productivity.

2.5.2.2.2 Social Environment

The social environment in the workplace refers to the interactions and relationships between employees and the organization's overall culture and atmosphere (Bianchi & Biffignandi, 2020). This encompasses various elements, including the dynamics of customer interactions, collaborations with colleagues and co-workers, as well as the influence of managers and their leadership approaches, and company values that shape the way people interact with each other and affect their job satisfaction and performance (Pheko et al., 2017).

- ***Dealing with the customer:*** One of the great responsibilities that bank employees bear is dealing directly with customers and the need to focus while working (Giorgi et al., 2019). Bank employees face great challenges in dealing with customers of different categories and ages, as they tolerate inappropriate words from them or face

another challenge in the lack of customer response to them, which puts great pressure on employees (Manjunatha & Renukamurthy, 2017). Long working hours, poor relationships with colleagues, poor support at work, and a lack of control and independence at work are among the causes of employee burnout syndrome (Salvagioni et al., 2017).

- ***Co-workers' relationship:*** The relationship between workers is an essential aspect of the workplace, as tasks are completed in teams and each worker complements the other (Haar et al., 2019). A positive relationship between co-workers influences the psychology of employees and their performance, and vice versa for a negative relationship (Yuxin & Farooq, 2019). A bad co-worker relationship refers to a negative dynamic between two or more colleagues in the workplace (Mishra & Mishra, 2019). This can manifest in various ways, such as poor communication, lack of trust, conflicts, violence, bullying, and even sabotage (Lee et al., 2022). These types of relationships can be detrimental to both individual and team performance as well as overall job satisfaction (Anasi, 2020). environment. Ramadhani (2014) argues that one of the most important factors that influence employee productivity and job satisfaction in banks is bad relationships with co-workers and supervisors. Abugre & Acquaaah (2022) added that bad relationships with co-workers are the main reason for job turnover.
- ***Managers and Leadership style:*** Leadership styles affect the performance and productivity of employees to a large extent (Rahimi et al. 2016).

Effective administrative ability and good management of managers with employees and their records contribute effectively to raising the efficiency

and productivity of the employee (Ghosh, Huang, & Sun, 2020). One of the reasons for the poor productivity may be that the management lacks a clear strategy for achieving the bank's goals (Gachengo & Wekesa, 2017).

Leadership is very important in organizing the work tasks of the organization, and it also has a major role in raising or lowering the productivity of employees and the organization. Rehman et al. (2018) classify leadership into two main types:

1. ***Autocratic leadership style:*** this is a style of leadership in which the authority is very clear, giving less attention to the employees and not caring for their well-being, thinking that this method increases the productivity of the employees (Zakaria et al. 2017). Those who follow this type of leadership are responsible for issuing and making decisions without involving employees (Jenica, 2016). This method is characterized by employee dissatisfaction and a low level of employee loyalty and regularity (Abba et al. 2016).
2. ***Democratic leadership style:*** this leadership style focuses on involving employees more in organizational matters of the company, such as solving problems and contributing to setting goals (Chandra, 201, 6). This method is also characterized by flexibility and considering employees' comments, and accordingly, this method not only makes employees feel responsible for their work but rather makes them feel connected and satisfied (Mekpor & Baah, 2017).

It was concluded that autocratic leadership that pays less attention to the employees is effective in the short term, while democratic leadership is effective for a long time and affects the productivity of the employees in a positive way (Rehman et al.,2018). It was also found that leadership that encourages the involvement of employees in decision-making and the

establishment of friendly relations with them improves their productivity (Riaz, Akram, & Ijaz, 2016).

The relationship between a worker's psychological health and his productivity at work makes the social environment extremely significant (Taheri et al., 2020). Recent studies have shown that a poor social environment is one of the causes of employee attrition (Duan et al., 2019). An employee who works in an environment devoid of appreciation, respect, and effective communication would prefer to find another position (Howard et al., 2020).

A toxic workplace environment hurts employees' productivity (Kurniawan et al., 2020). Toxic work environments are characterized by narcissistic behavior, abusive leadership, threatening behavior, harassment, humiliation, and intimidation (Rasool et al., 2019). Toxic workplaces are susceptible to high absenteeism, melancholy, job burnout, and psychological health issues, leading to a loss of organizational effectiveness and reputation (Rasool et al., 2021).

2.5.3 Employee and Organizational Engagement

Employee participation is an important factor in success and increasing sales. Employee participation plays an important role in business because it aims to achieve the interests of the company (Al-Dalahmeh et al., 2018). Employees are proud of the company that shares with them their achievements and development. This means that employee participation has a strong relationship with the bank's performance (Alsaad & Almaamari, 2020). Dajani & Zaki (2015) confirmed in their research that there is a strong relationship between employee involvement and productivity.

Organizational engagement plays an important role in enhancing employee mental health. Saks (2006) likened the association with organizational engagement to a psychological state that brings vitality, energy, and a love of work. The people associated with the organization's management always show a willingness to work with all sincerity, achieve high performance, and provide appropriate service to customers (Ahmed et al., 2017). Employees associated with the organization are also psychologically linked to it; the more they feel comfortable with the organization's environment and the good management and systems that permeate it, the more productive they are (Galdeano et al., 2019). Supervisors, colleagues, and customers contribute critically to the mental health of employees (Oakman et al., 2018).

2.6 Long Working Hours and Employee Mental Health

A cross-sectional survey was done to address the correlation between long working hours, job burnout, and physical activity. 1560 full-time workers collected it. The survey indicated that long working hours were significantly correlated with burnout among workers under 50 and physically inactive workers. Furthermore, long working hours are correlated with burnout among workers who work more than 40 hours a week. (Hu et al., 2016).

According to a report by the Finance Sector Union (FSU), 93% of National Australia Bank (NAB) employees work overtime without receiving any payment. More key findings from the survey included that: 93% worked more than 38 hours a week; 63.3% of them stated that workload had impacted their physical and mental health; 87% of them assumed that they were suffering from stress and anxiety; and 52% of the participants said that long working hours and extra working hours had impacted their social and personal relationships (Pellinen, 2022).

Secondary research included a range of historical, health, and social studies related to long working hours. The author found that long working hours are associated with poor mental health reactions such as fatigue and stress, unhealthy behaviors such as smoking, and other health diseases such as cardiovascular diseases (Johnson & Lipscomb, 2006).

A meta-analysis from 1997 to 2018 included 243 published records from electronic databases, in which the effects of long working hours on the general health and occupational health of workers were measured through five conditions, which are mental health, physiological health, related health, unspecified health, and health behaviors, as it was found that long working hours negatively affect health for workers (Wong et al.,2019).

A study in China revealed a strong and significant correlation between extended working hours and the incidence of mental illness. The impact is especially pronounced among women, white-collar workers, and employees of micro-enterprises. The findings indicate the necessity of enforcing rules and overseeing corporate compliance to enhance mental health, emphasizing the significance of addressing the initial value and reverse causality concerns in the literature (Ma, X,2023).

A study conducted by Bannai & Tamakoshi, (2014), aimed to investigate the association between long working hours and health, considering that the number of long working hours starts from 40 hours or more during the week, by identifying the previous literature, it was found that there is a strong relationship between long working hours and health through infection with many diseases such as sudden death, high blood pressure, heart disease, anxiety, depression, sleep disturbance.

Many previous studies focused on examining the relationship between mental health and long working hours by focusing on some variables, such

as the gender and age of the employee. In a study conducted by Park et al. (2020), to study the relationship between long working hours and the mental health of young adults in Korea, data was collected through a questionnaire for a group of 3332 young people, whose ages ranged between 20 and 35 years, and stress, suicidal thoughts, and depression were analyzed through various logistic regressions based on the number of working hours. It was divided into 4 categories (41–50), (51–60), and more, and the results were compared with those of those who work for less than 31–40 hours per week. It was found that 60% of young employees have worked long hours, and as a result, these workers have been shown to suffer from a high level of stress, depression, and suicidal ideation.

Another Korean study proved that working for a period longer than the legal maximum exposes workers to the risk of depression, and it was concluded that females and low-income workers are more likely to have low mental health resulting from long working hours. In this study, the researchers relied on using a questionnaire to collect information for employees in South Korea, and symptoms of depression were assessed using a patient health questionnaire (PHQ-9), and working hours were divided in this way: (35–39), (40), (52–41), (53–68), 60, and more (Choi et al., 2021).

Among the studies in the literature on long working hours, one of the studies done by Artazcoz et al. (2009) focused on identifying family and occupational characteristics associated with long working hours and studying the differences between the sexes. The sample was a group of employees who were interviewed and who work for wages, and their ages ranged between 16 and 64 years. Working hours are divided into 3 categories: 30–40, 50–41, and 51–60. The results of the study showed that the factors associated with working hours differ according to gender. For

men, working long hours 51 to 60 hours per week—was associated with poor mental health, and many of them suffer from the following: high blood pressure, job dissatisfaction, smoking, and a lack of physical activity in their free time. As for women, they suffered from smoking and lack of sleep. The researchers (Artazcoz et al., 2009) explain that men generally work as breadwinners for the family, which makes them feel financial stress and need to work overtime or accept work for long hours for fear of losing their job.

Bartoll & Ramos (2020) conducted a study aimed at discovering the relationship between long working hours, employee health, and job satisfaction by using longitudinal data of the Catalan economy and by adopting three categories of working hours in a week. Short working hours: less than 20 hours; long working hours: 41 to 47; very long working hours: more than 48 hours. As it was found that women and men who work long hours have a decrease in job satisfaction and health, researchers explain the reason for the decrease in job satisfaction as a result of the presence of health risks due to long working hours, and the authors advise organizations to adopt flexible working hours that can reduce stress and health diseases, thus Increasing job satisfaction.

In the Kingdom of Saudi Arabia, a cross-sectional study was conducted to study the effect of long working hours on depression and anxiety among physicians. An electronic questionnaire was used to collect the data. 258 physicians participated in the questionnaire. The SPSS program was used to analyze the data, and the Chi-square was used. For correlation testing, logistic regression was used. Ordinarily, the researchers found that physicians who work long hours—more than 60 hours—are at increased risk of anxiety, depression, and sleep disturbances (Bondagji et al., 2022).

In a recent study by Ma (2023) that used longitudinal analysis to examine the impact of long work hours on mental health, researchers discovered that women, particularly those who work in small businesses, have nearly double the risk of developing mental illness as men.

Working hours affect not only mental health but also physical health, and from this standpoint, Afonso, Fonseca, and Pires (2017) worked to study the effect of long working hours on employees' sleep quality. The participants were classified into two groups: the first group for those who work long hours, and the second group for those who work for a few hours. To assess anxiety and depression, they used the Hospital Anxiety and Depression Scale (HADS). Furthermore, to determine the employee's sleep quality, they used the Pittsburgh Sleep Quality Index (PSQI). The result showed that there is a positive correlation between long working hours, depression, and low sleep quality; employees who work long hours are at risk of depression and poor sleep quality by 53%.

2.7 Mental Health and Employee Productivity

Studies have given a wide range of attention to issues related to mental health in the workplace due to the recognition that employee mental health is linked to productivity (Dobson et al., 2018).

One of the studies conducted by Parker et al. (2009) tested the hypothesis that confirms that employees who suffer from mental or physical health conditions are less productive at work than the rest of the employees, so a set of self-reported health status and productivity were collected from 1723 employees working in a national institution. A set of analyses included linear analysis of variance, multivariate linear regression analysis, and logistic regression. The conclusion of the research shows that employees who suffer from physical and psychological health problems

are significantly less productive in all measures of productivity compared to employees who suffer from mental health problems only or only physical ones.

In a study conducted by Hilton, Scuffham, Vecchio, and Whiteford (2010), it was found that Australia suffered a loss of 5.9 billion Australian dollars in employees' productivity due to the employees' lack of mental health. This study was conducted on a sample of 60,556 employees who answered the health and work performance questionnaire of the World Health Organization. Moreover, the questionnaire contains the six Kessler scales. These results were not specific to Australia only; one of the studies conducted in Singapore reached similar results, where the researchers confirmed that psychological disorders have great consequences for employees as they contribute significantly to reducing their productivity. To reach these results, the researchers relied on mental health research data in Singapore, and to measure productivity, they relied entirely on diagnostic interviews (Chong et al., 2013).

In one of the longitudinal studies that targeted American families, it was found that there is a strong positive relationship between productivity and mental health. On the individual level, poor mental health leads to a decrease in productivity of approximately 4 minutes per workday (Huo et al., 2022).

In a detailed analytical study of the previous literature, which focused on researching the relationship between productivity and mental health and was represented in 38 studies, the researchers reached similar results despite the different research methodologies, as all these studies confirm the existence of a positive relationship between mental health and productivity, with a focus on the fact that low productivity is caused by poor mental health (Oliveira et al., 2023).

A Santini et al. (2022) study was conducted to explain the causes of poor productivity using data from 1959 employees between the ages of 16 and 64. The Warwick-Edinburgh mental well-being scale was used, and the study concluded that the poor productivity of employees is largely due to the percentage of employee absence due to physical and psychological illness, but most of it was due to mental illness.

Organizations and countries suffer huge financial losses because of poor productivity due to the poor mental health of their employees. In the United States of America, poor productivity resulting from mental health costs employers between 33 billion and 42 billion pounds annually (Stevenson, 2017). Moreover, the Productivity Investigation Commission on Mental Health issued a detailed report in 2020 showing that the economic cost of mental illness in Australia exceeded \$200 billion annually (Whiteford, 2022).

Occupational stress is one of the biggest health risks at work due to many physical and psychological diseases (Thirumakkal, 2015). As a result, employees tend to relieve this pressure through unhealthy behaviours such as smoking, drug abuse, and drinking alcohol. In many studies, occupational stress has been linked to a lack of productivity due to frequent absenteeism and an increase in Accident rates within the workplace (Bharathi & Gupta, 2017). In this regard, we can clarify the matter by referring to Yerkes Dowson's law, which explains the empirical relationship between pressure and performance and was developed by a group of scientists in 1908. It imposes the law that employee performance increases with physiological and mental stimulation, but only to a certain extent. The law also assumes that if it increases, the arousal rate is very high, so the performance decreases, and it seems common in previous

studies to link this curve to the shape of a bell, which increases and then decreases with the increase in the arousal rate (Teigen, 1994; see Figure 2).

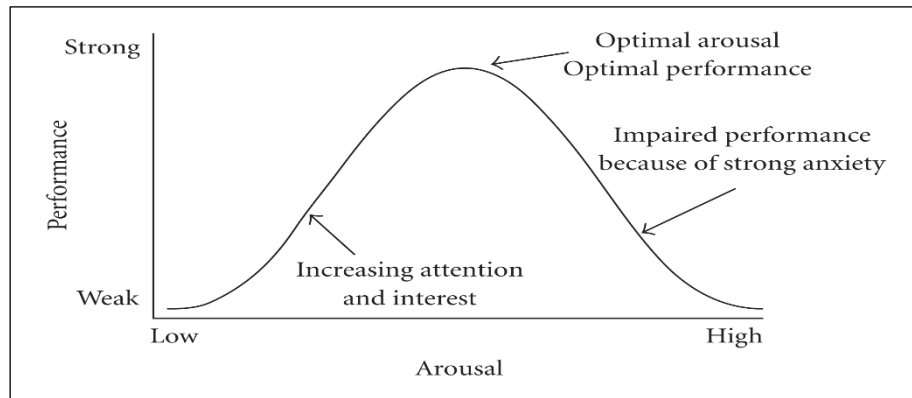


Figure 2.3: Illustration of a Yarks' law curve, source: Diamond, Campbell, Park, Halonen & Zoladz, (2007).

2.8 Conclusion

The banking sector is one of the branches of the global market that has been facing increasing problems and pressures recently, and this can have many negative effects on the physical and mental health of employees (Mungania et al., 2016). Working as a banker requires mental and physical effort, as the profession of finance greatly affects the employee's health. Psychological distress has become a major and common problem for business managers, and the reason is that the increasing number of employees suffering from mental health problems means that the company will incur many costs due to frequent absenteeism, turnover, and decreased productivity (Mathieu, 2012).

A lot of research confirms that the relationship between work and mental health is non-linear because it differs due to the individual's condition (Cooper et al., Fried, 1997). Mental health is low for people who suffer from unemployment or a lack of work because it is related to self-esteem, status, and economic security. Mental health is high for those who

work in a system. Specific hours, and in the third case, it is low if the individual works long hours, as work pressures prevail over the positive situation (Frijters et al., 2009). Banks used to compensate for many things with money, but it is very difficult to compensate for the health of employees, so banks must pay attention to this aspect because the profession is considered delicate and very demanding (Pellinen, 2022). To avoid the exorbitant costs resulting from the mental health problems of employees and a lack of productivity, officials in organizations must take the necessary measures to enhance the mental health of employees and build an effective environment that supports mental health in the workplace (Dobson et al., 2018).

Chapter 3: Methods and Procedures

3.1 Introduction

Chapter 3 outlines the methodological approaches employed in this research to accomplish the research objectives. This section is to determine the Research Framework, research Hypotheses, population and sample, Instrumentation, and Data collection/procedures utilized to fulfill the objectives of this research.

The primary aim of this research is to measure the implications of long working hours for employee mental health and productivity. By conducting hypothesis testing to address the research inquiries.

3.2 Research Problem

Long working hours have recently become a prominent topic in various sectors in many nations, which may substantially influence workers, especially in sensitive work that demands precision, such as working in banks.

Working in a bank is a challenging job that requires concentration and precision. Working long, continuous hours harms people psychologically and productivity-wise

There is an urgent need to study the impact of lengthy working hours because the Kingdom of Bahrain is one of the top countries in the banking business.

The focus is on the psychological well-being and productivity of employees to enhance the banking sector's development and productivity, all while assuring the psychological well-being of employees.

3.3 Research Design

This research aims to examine the influence of long working hours on employee mental health and productivity in the banking sector in Bahrain. Thus, the following research design was conducted to meet the objective of this research.

3.3.1 Research Approaches

Descriptive and inferential statistics will be employed to examine the correlation among the variables: long working hours, employee mental health and work productivity. We shall utilize a quantitative methodology, the most appropriate means to examine a substantial populace. A regression test will be utilized to determine the significance of the correlations among the variables. The demographic factors: age, gender, marital status, number of kids, job position years of experience, work status, and educational attainment.

3.3.2 Research Data

3.3.2.1 Secondary data

The primary objective of doing research is to collect data that can be reliably and validly tested. The accurate collection of data has a beneficial impact on the outcome of the research. This study will utilize two forms of data: secondary data and primary data, to address the research inquiries.

3.2.2.2 Primary Data

Primary research refers to the outcomes obtained by the utilization of research instruments. The core data for this research was collected utilizing a quantitative approach, namely using a survey instrument, to achieve the research aims.

3.4 Research Framework (Theoretical Framework)

Upon examining the literature review, the theoretical framework is elucidated and prepared for empirical testing. The theoretical framework posits Long Working Hours as a dependent variable, with Employee Mental Health and Employee Productivity as independent variables. In addition to analyzing several demographic characteristics to support the model (Age, Gender, Marital Status, Number of Children, Job Position, Educational Level) and examining their correlation with variables.

3.4.1 Research Model

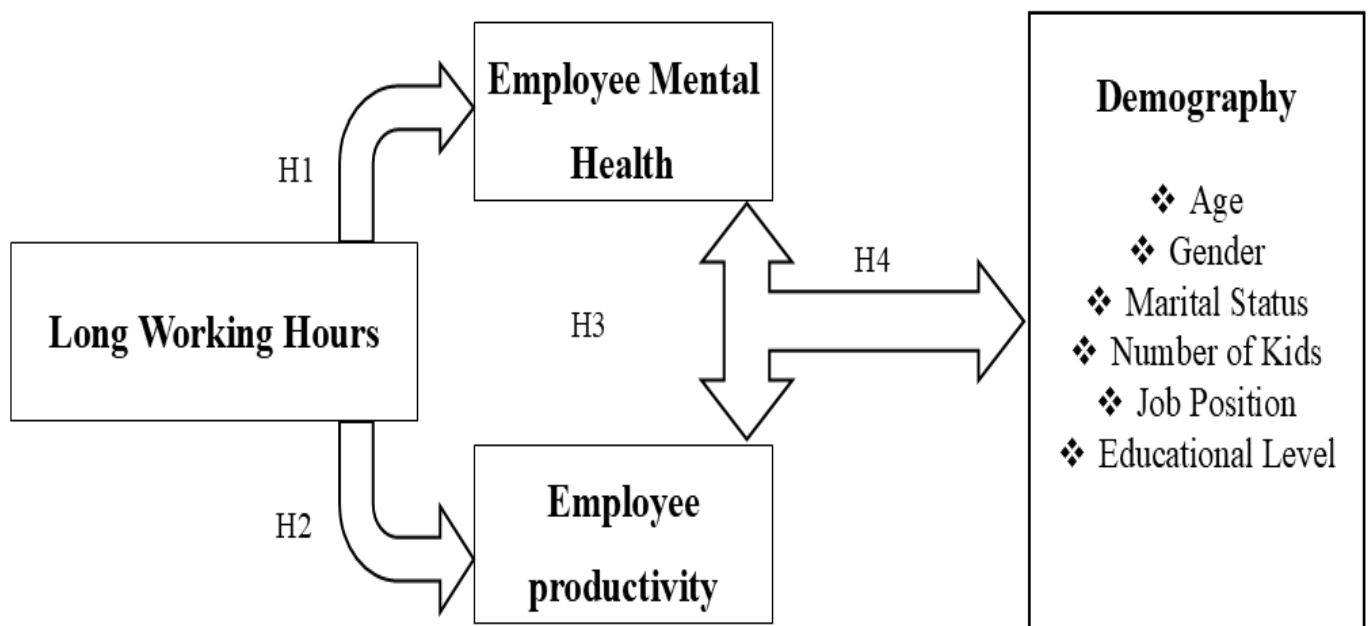


Figure 3.1: Conceptual Framework model.

3.5 Research Hypotheses

To address the research questions, the researcher formulates the following hypotheses based on the literature study conducted in part 2.

The main objective of this study is to answer the following research questions: What is the impact of long working hours on employee's mental health, and productivity?

- 6- Are there any demographic factors affecting employee mental health and productivity in the Bahraini bank sector?
- 7- Is there a significant relationship between long working hours and an employee's mental health?
- 8- Is there a significant relationship between long working hours and employees' productivity?
- 9- Is there a significant relationship between an employee's mental health and productivity?

H0: There is no significant relationship between employees.

HA= there is at least one significant relationship

H1o: There is no significant relationship between long working hours and employee mental health.

H1: There is a significant relationship between long working hours and employee mental health.

H.2o: There is no significant relationship between long working hours and employee productivity.

H.2: There is a significant relationship between long working hours and employee productivity.

H.3o: There is no significant relationship between employee mental health and productivity.

H.3: There is no significant relationship between employee mental health and productivity.

H4o: There is no significant relationship between demographic factors and employee mental health and productivity.

H4: There is a significant relationship between demographic factors and employee mental health and productivity.

3.6 Population and Sampling

3.6.1 Population of the Research

The research population refers to the total count of individuals employed in the banking sector of Bahrain. The banking sector in Bahrain has significantly contributed to the growth of the financial industry in 2016, the assets of the banking sector amounted to 192.7 billion USD, which is significantly more than the country's GDP. By implementing a comprehensive regulatory framework and employing highly skilled individuals (Galdeano, et al., 2019).

According to the figures published on December 30, 2023, the aggregate number of bank employees in the Kingdom of Bahrain amounted to almost 7229 (Alfardan, 2024).

The population of this study comprises employees employed in various sectors of the banking industry in the Kingdom of Bahrain.

The banking sector in Bahrain consists of Islamic banks and conventional banks. The table below shows the types and number of banks

in Bahrain, As per the comprehensive report provided by the Central Bank of Bahrain on April 15, 2024.

Table 3.1 Number of bank employees in the Kingdom of Bahrain

Total number of banks	84
Number of retail banks	29
Number of retail banks registered locally	13
Branches of foreign retail banks	16
Wholesale banks	55
Bank offices	7
Banking association	1
Islamic banks	15

3.6.2 Sampling of the Research

The likelihood is that the data was collected using the Random Sampling technique due to the large population in this research. The sampling size was determined using: an online calculator with a 95% confidence level, a 5% margin of error, and a population proportion of 0.5 (calculator.net, 2020).

P= Population proportion 0.5 d= Percentage Error 0.05 Z= confidence level 95%

Sample size = 365 Employees

I exerted much effort to attain the maximum number of participants; however, the total responses amounted to 150. Many banks declined to give the questionnaire to their staff to preserve information confidentially, as they are regarded as highly sensitive institutions due to concerns about potential hacking. The second issue pertains to the constrained timeframe

for gathering responses, as this thesis is a requisite for earning a master's degree.

3.7 Instrumentation

3.7.1 Development of the questionnaire

The research questionnaire was constructed using the self-administered (stand-alone questionnaire) method, which enables respondents to answer the questionnaire independently without any intervention from the researcher. Two types of self-administered methods were used:

- **Hand-delivered:** this type was used because respondents find it easier as they are relieved from the task of mailing the completed surveys back to research. Moreover, it gives the researcher the chance to provide a clear and concise explanation of the study's directions and objectives.
- **Electronic Self-administered:** This approach allows the researcher to maximize participant reach by distributing it over several social media sites. Participants can easily solve it, particularly by using their mobile devices.

The **self-administered approach** was employed for the subsequent rationales:

1. Clear and comprehensible.
2. Allow the participants sufficient time to respond to the inquiries.
3. Easily analyzable.
4. Embraced and endorsed by numerous models. (Masri, 2016).

The questionnaire consisted of close-ended questions derived from the models proposed in the literature review, and it was designed in both English and Arabic languages.

3.7.2 Source of the Questionnaire

The study aims were considered when designing the questionnaire, and a suitable set of questions to assess each variable was selected. Questionnaires from various models and sources were used to measure the variables.

3.7.3 Questionnaire Structure

A questionnaire consisting of 30 questions in both Arabic and English was created using Google Forms and then separated into four sections.

Included below are the sections of Appendix (A) - Research Questionnaire:

▲ Section 1: Demographic Factors including Gender, Age, Marital status, Number of kids, Job education level, and years of experience assessed through 8 Items.

➤ Section 2: Working hours (number of working hours, type of working hours, additional working hours, preferred working hours) presented through 4 items.

➤ Section 3: Mental health

- level of Anxiety and Depression presented through 5 items.
- level of Social Dysfunction presented in 3 items

GHQ-12 was used to measure employees' mental health by considering 8 questions. The General Health Questionnaire developed by (Goldberg,1970) is a prevalent instrument for evaluating mental health and

psychological discomfort across many demographics (Montazeri, et al., 2003).

➤ Section 4: Employee productivity

- Loss of efficiency (2 items).
- Feeling Motivated (4 items).
- Work-related anger and irritation (1 item).
- Mental and physical conditions (1 item).
- Good productivity (2 items).

Health & Labor Questionnaire (HLQ) instruments and Health Productivity Questionnaire (HPQ) developed by (Menezes & Xavier 2018) was adopted to measure employee productivity.

The questions were delineated into two dimensions. One set of factors is referred to as “Managerial Variables”, which assess five aspects related to reported satisfaction with the work done, competence and confidence in decision-making, and workers' degree of attention and efficiency. A further component is referred to as "Physical and Mental Variables", encompassing inquiries that investigate fluctuations in mood, clinical symptoms, and the degrees of physical and mental exhaustion experienced by workers (Menezes & Xavier, 2018).

In all sections, three and four items were measured using a five-point Likert scale ranging.

For mental health: (1= none of the time, 2= a little of the time, 3= some of the time, 4= most of the time, 5= all of the time).

For employee productivity: (1= poor, 2= fair, 3= good, 4= very good, 5= excellent).

Table 3.2: Variable items

Part	Items	Type
Demographic factors	8 items	Multiple choice
Working hours	4 items	Multiple choice & open-ended written questions.
Mental health	8 items	Likert Scale
Employee productivity	10 items	Likert Scale
Total	30 items	

3.7.4 Distribution of the questionnaire

The questionnaire was distributed among all the participants in this research, either Bharani citizens or non-Bahrainis who are currently working in the banking sector in Bahrain. The questionnaires were created in Arabic and English to facilitate comprehension for all participants.

The questionnaire was designed using Google Forms and disseminated to participants via various media to get the required number of participants as follows:

- 1. Personal distribution and bar-code:** the researcher personally distributed the questionnaire in hard copy as vehicles featuring QR bar-code format, facilitating participant responses through mobile scanning of the bar-code.
- 2. Social media:** The researcher utilized WhatsApp, Snapchat, and Instagram to disseminate the link for the questionnaire, which

proved to be the most effective method for recruiting people for the study. The link was dispatched to the bank personnel.

- 3. Using emails:** The questionnaire was distributed to numerous banks, particularly to the human resources departments, for dissemination among staff.

3.8 Data Collection

3.8.1 Pilot Survey

Before conducting the full survey, a pilot survey was tested. The pilot survey was distributed, and 30 responses were collected. Minor adjustments took place on the survey items by the pilot sample feedback. These minor changes were helpful to clarify the understanding of the respondents for the question statements. The survey was in the final stage thereafter. The piloted 30 responses were excluded from the final data analysis. In field surveys, a pilot survey is necessary to test the reliability and consistency of the questionnaires.

3.8.2 Field Survey

The field survey was conducted between March and May of 2024. The data collection was made electronically using Google Forms. The respondents were gathered randomly. In total, 150 valid responses were collected.

As mentioned above, more than one method was followed to reach the participants distributing the questionnaire personally to bank employees by visiting the banks furthermore, through social media channels, and emails.

3.9 Data Analysis

3.9.1 Data Preparation, Editing and Coding

As mentioned earlier, the field survey achieved a total of 150 responses. This level of response allows analysis of the sample responses at descriptive and inferential levels. All responses were found valid, and there was no missing data. The responses collected (sample data) were coded properly as per the questionnaire values (Codebook) kept in the (Appendix 2). IBM SPSS software was used to perform statistical analysis.

Table 3.3 below lists all the statistical tests performed to analyze the collected sample data using IBM SPSS.

Table 3.3 Statistical tests/methods used

No.	Statistical Level	Test/Method	Purpose
1	Descriptive analysis	Frequency tables	Was used to describe the surveyed sample distribution of responses to the categorical variables in terms of percentage.
2		Pie / Bar charts	Was used to describe graphically the surveyed sample distribution of responses to the categorical variables in terms of percentage. This allows us to capture the overall impression.
3		Mean and standard deviation values	Mean values were computed to describe the magnitude of the sample responses to the questions measured on a 5-point scale to classify the level on this scale.

			Standard deviation values were computed to describe the variability ($\pm$) around the mean value.
4	Reliability	Cronbach's alpha coefficient	Was used to assess the internal consistency of the scales studied where each scale was measured using a set of questions. A reliable scale has a Cronbach's alpha coefficient equal to or exceeding 0.7.
5	Normality distribution assumption check	Kolmogorov-Smirnov (K-S)	Was used to test whether (or not) the studied variables follow a normal distribution. The null hypothesis tested under this test states that the variable follows a normal distribution.
6	Odds/extreme values check	Boxplot	Was used to find out if there are odd or extreme values among the responses.
7	Inferential analysis	Spearman correlation coefficient	To test whether (or not) there is a linear relationship between two quantitative variables. The null hypothesis tested under states that the two variables are correlated. When the two variables are found to have a statistically significant correlation, then the correlation coefficient is interpreted for direction and strength. The correlation direction is either positive (when the correlation coefficient is greater than zero) or negative (when the

			correlation coefficient is less than zero). The correlation strength is determined by comparing the correlation coefficient value to zero, where if it was close to zero then it indicates a weak correlation. While if the correlation was close to +1, this indicates a very strong positive correlation and if it was close to -1, this would indicate a very strong negative correlation.
8		Mann-Whitney / Kruskal-Wallis	Were used to investigate whether (or not) there is an effect attributed to a demographic variable on the studied variables. Mann-Whitney is used when the demographic variable has only two categories, while Kruskal-Wallis is performed when the demographic variable has three or more categories. The null hypothesis tested states that there is no effect due to the demographic variable.

3.10 Ethical Consideration

Ethics in scientific research is essential for doing excellent work that benefits society. This research adhered to the following ethical standards:

1. The study was evaluated, and the validity and reliability of the material it included were confirmed.
2. Participants were solicited to engage in the research voluntarily.
3. Data was collected based on the premise of trust established between the researcher and the participants regarding the confidentiality of information.
4. The sample was obtained utilizing the methodologies suggested in the study.
5. The questionnaire was disseminated to several banks in the Kingdom of Bahrain, with certain institutions receiving less attention.
6. The primary objective of the personal distribution of the questionnaire was achieved.
7. The ethical objective of this research was to enhance Bahraini society, specifically the banking sector, without inflicting any harm.

3.11 Conclusion

This chapter elucidates the diverse methodologies employed to attain the research aims and their application, while also addressing the ethical considerations adhered to in this study. The subsequent chapter will concentrate on a meticulous and thorough analysis of the data about the examination of the link among the research variables.

Chapter 4: Analysis, Findings and Discussion

4.1 Introduction

The primary source used to collect data in this research was analyzed statistically to formulate the findings. The analysis was performed in two levels: descriptive and inferential. Descriptive analysis generates findings that reflect the sample responses gathered during the field study (responses on the questionnaire). Thus, descriptive findings describe the sample responses. Inferential analysis allows to assess the research hypothesis based on the statistical evidence resulting from the sample responses. Any hypothesis that is found supported with sufficient statistical evidence, would be generalized on the whole population studied.

This chapter presents first the description of sample responses by the various demographic variables. Next, the chapter presents the main studied research topic which are: mental health and employee productivity. Then inferential findings are presented to assess the research hypothesis.

The chapter ends with discussion section, where selected main findings are discussed.

4.2 Demographic description

In this section, the sample responses are described by several demographic and related characteristics as follows where frequency table and graphical representation (pie or bar) were the descriptive analysis methods used.

- Gender

Description of the surveyed sample by gender is shown in Table 4.2 and represented graphically in Figure 4.4. The gender distribution shows that females were the majority (66.7%) among the sample respondents, compared to males (33.3%).

Table 4.2 Distribution of surveyed sample respondents by gender

		Fr. ¹	%
Gender	Male	50	33.3%
	Female	100	66.7%
	Total	150	100.0%

1 Fr. refers to frequency (or count)

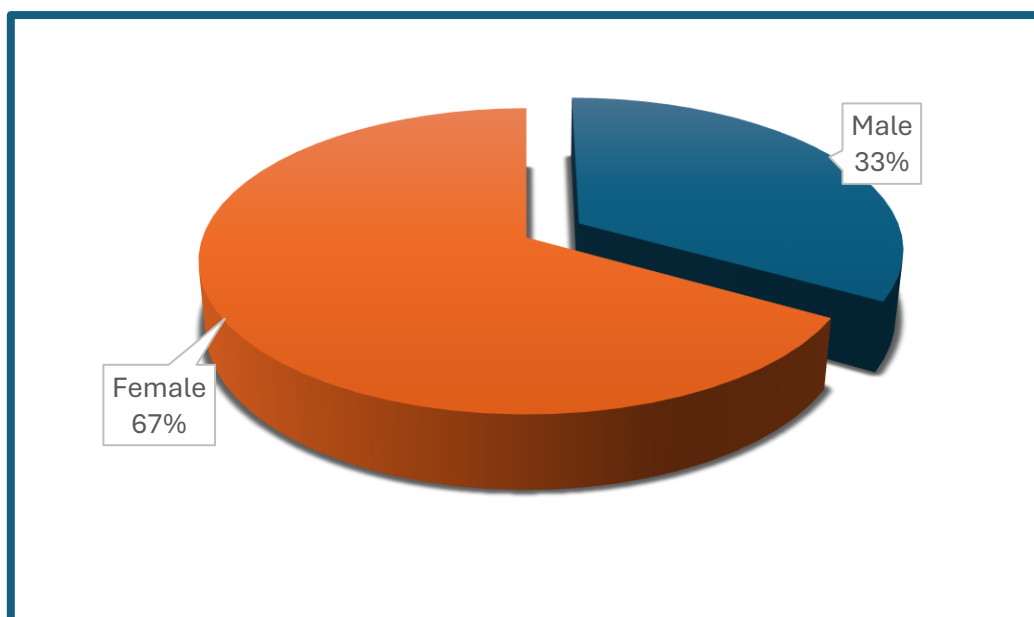


Figure 4.4 Pie chart of surveyed sample respondents by gender

- Age

The description of the surveyed sample by age categories is shown in Table 4.3 and represented graphically in Figure 2. The age distribution shows that the relative highest representative age category was 26-39 years (67.3%), followed by 40-59 years (22.7%), then those who are in the age of 25 years or below (7.3%), while the remaining percentage of 2.7% was for the age category of 60 years or more.

Table 4.3 Distribution of surveyed sample respondents by age

	Fr.	%
Age 25 or below	11	7.3%
26-39	101	67.3%
40-59	34	22.7%
60 or more	4	2.7%
Total	150	100.0%

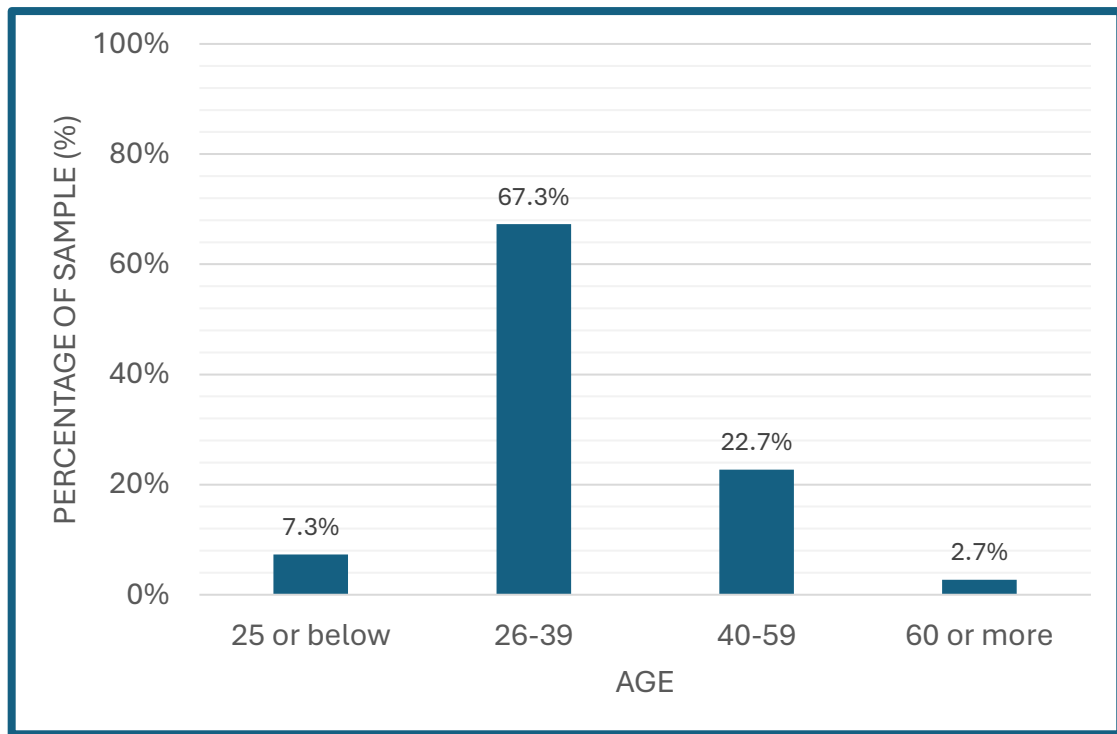


Figure 4.5 Bar chart of surveyed sample respondents by age

- Marital Status

Description of the surveyed sample by marital status is shown in Table 4.4 and represented graphically in Figure 4.6. The marital status distribution shows that the relative highest representative marital status was ‘married’ (67.3%), followed by ‘single’ (29.3%), then those who reported ‘divorced’ as their marital status (3.3%). There were no ‘widowed’ respondents in the surveyed sample (0%).

Table 4.4 Distribution of surveyed sample respondents by marital status

		Fr.	%
Marital status	Sigle	44	29.3%
	Married	101	67.3%
	Widowed	0	0.0%
	Divorced	5	3.3%
	Total	150	100.0%

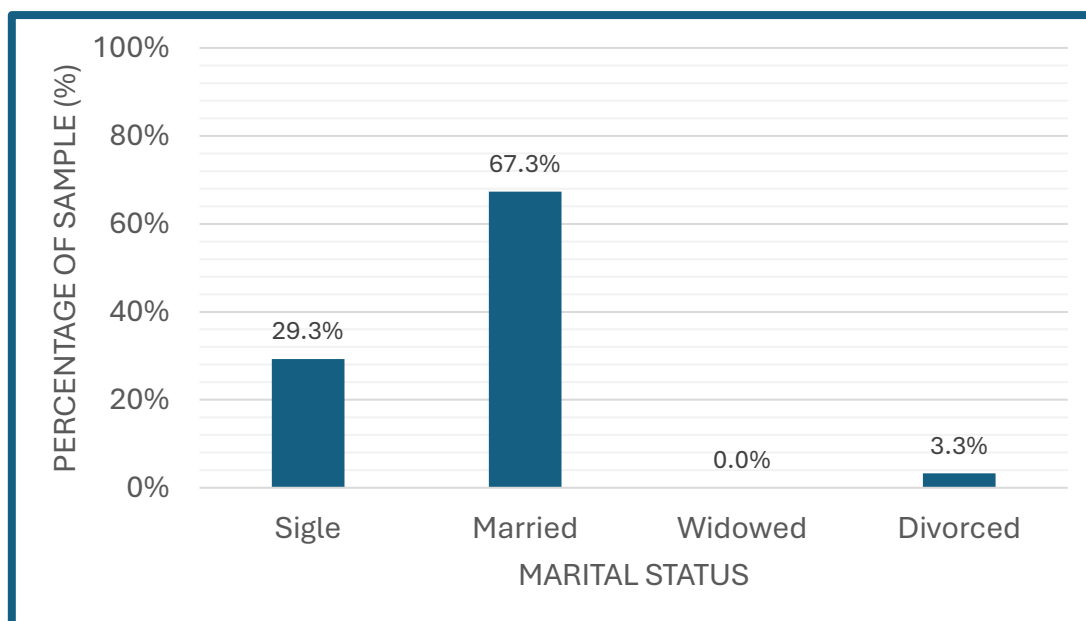


Figure 4.6 Bar chart of surveyed sample respondents by marital status

- Number of Kids

A description of the surveyed sample by number of kids for those who got married is shown in Table 4.5 and represented graphically in Figure 4.7. The number of kids (or family size) distribution shows that the relative highest representative number of kids was '1-2' kids (55.7%), followed by '3-4' kids (34.9%), then those who reported having 'no kids' yet (9.4%). No respondents reported having '5 and above' kids in the surveyed sample (0%).

Table 4.5 Distribution of surveyed sample respondents by number of kids

		Fr.	%
Number of Kids	No kids	10	9.4%
	1-2	59	55.7%
	3-4	37	34.9%
	5 and above	0	0.0%
	Total	106	100.0%

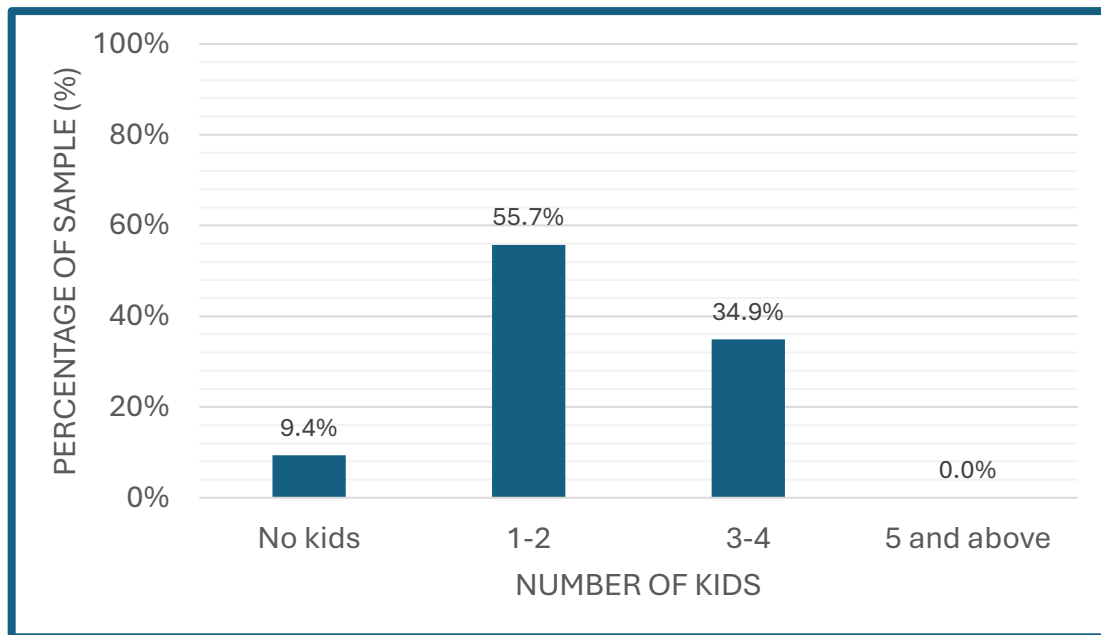


Figure 4.7 Bar chart of surveyed sample respondents by number of kids

- Job Position

Description of the surveyed sample by job position is shown in Table 4.6 and represented graphically in Figure 4.8. The job position distribution shows that the relatively highest representative job position was ‘employee’ (57.3%), followed by ‘manager’ (21.3%), then those who reported holding ‘other’ job position (11.3%), while the remaining percentage of 10% was those who reported holding ‘supervisor’ job position.

Table 4.6 Distribution of surveyed sample respondents by job position

		Fr.	%
Job Position	Employee	86	57.3%
	Supervisor	15	10.0%
	Manager	32	21.3%
	others	17	11.3%
	Total	150	100.0%

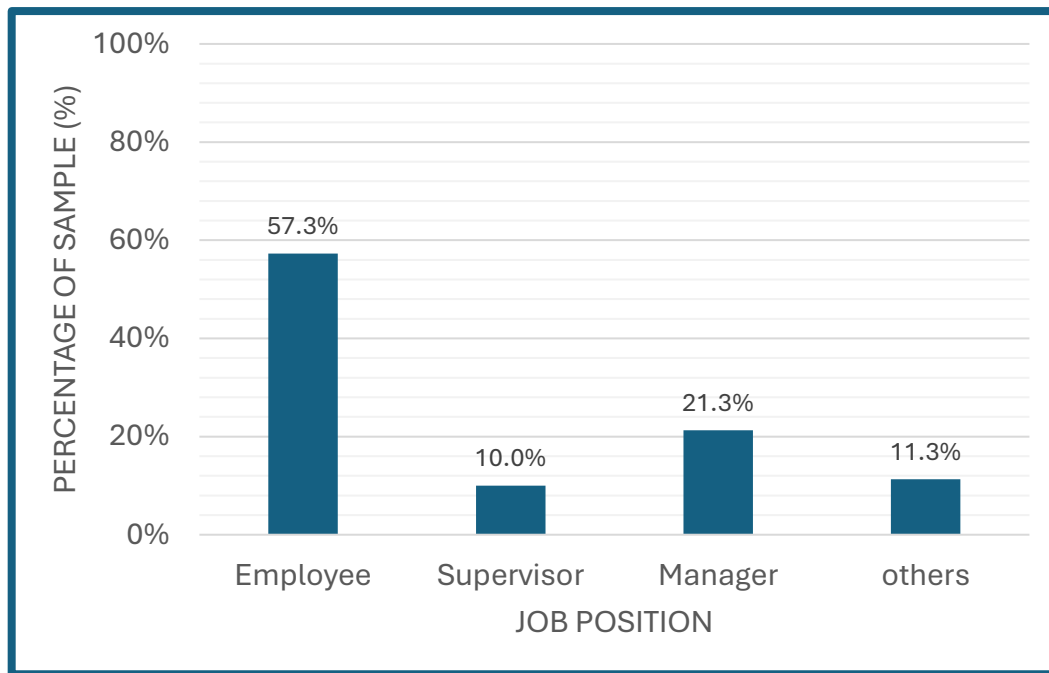


Figure 4.8 Bar chart of surveyed sample respondents by job position

- Years of Experience

The description of the sample surveyed by years of experience is shown in Table 4.7 and represented graphically in Figure 4.9. The years of experience distribution shows that the relatively highest representative years of experience category was '11-19' years (41.3%), followed by '6-10' years of experience (28.0%), then those who reported '5 years or below' of experience (20.0%), while the remaining percentage of 10.7% was those who reported 20 years or more of experience.

Table 4.7 Distribution of surveyed sample respondents by years of experience

		Fr.	%
Years of Experience	5 years or below	30	20.0%
	6-10 years	42	28.0%
	11-19 years	62	41.3%
	20 years or more	16	10.7%
	Total	150	100.0%

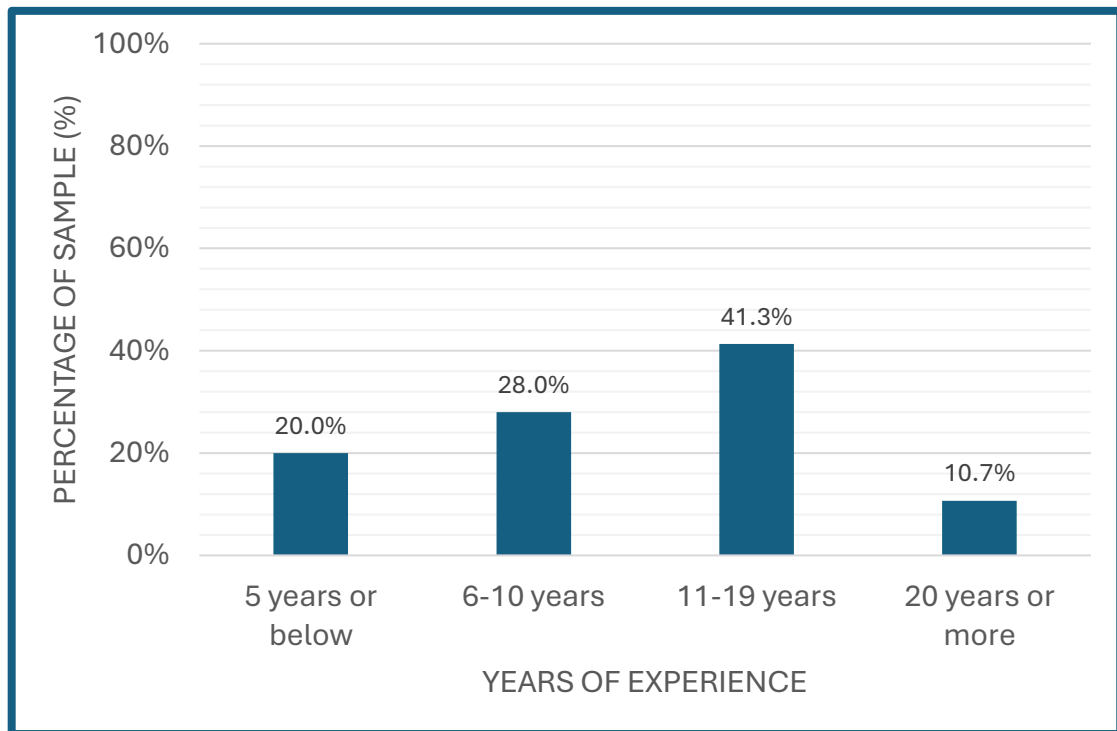


Figure 4.9 Bar chart of surveyed sample respondents by years of experience

- Education

Description of the surveyed sample by education is shown in Table 4.8 and represented graphically in Figure 4.10. The education distribution shows that the relatively highest representative education category was 'university graduate' (71.3%), followed by 'post-graduate degree' (17.3%), while the remaining percentage was distributed as follows: 5.3% of the respondents who reported 'secondary degree' and 'diploma', and 0.7% stated 'intermediate diploma' education level.

Table 4.8 Distribution of surveyed sample respondents by education

	Fr.	%
Education Level Secondary degree	8	5.3%
Diploma	8	5.3%
Intermediate diploma	1	0.7%
University graduate	107	71.3%
Post-graduate degree	26	17.3%
Total	150	100.0%

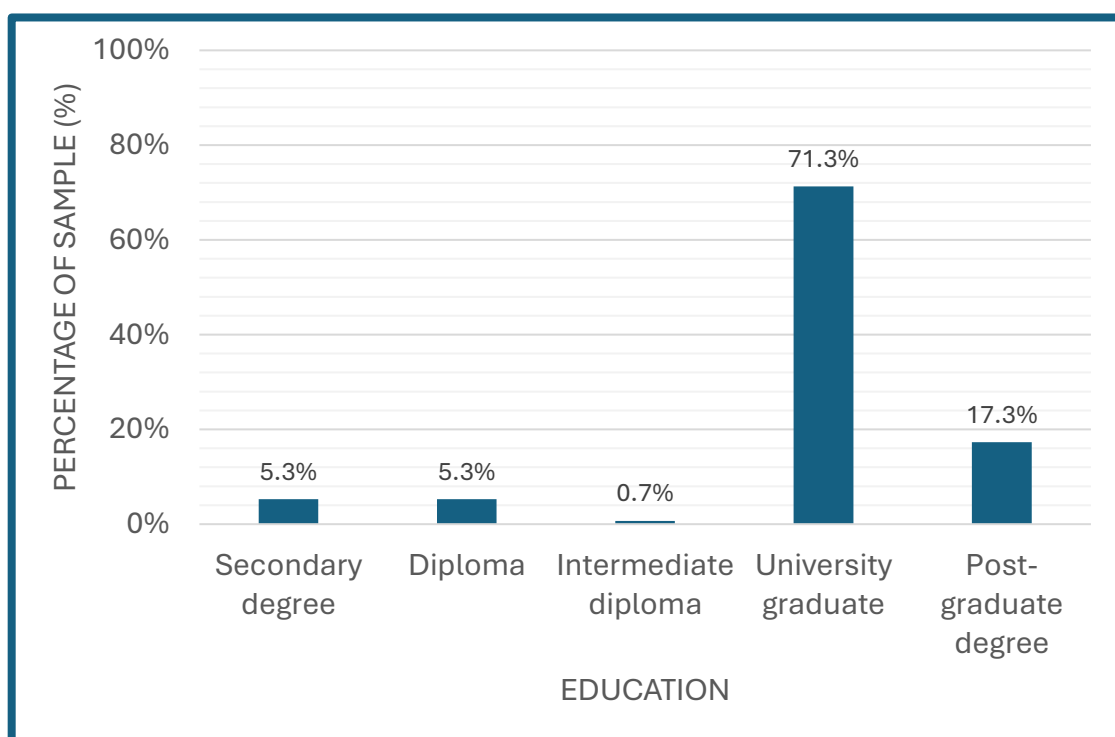


Figure 4.10 Bar chart of surveyed sample respondents by education

4.3 Working Hours

The description of the sample surveyed by actual working hours is shown in Table 4.9 and represented graphically in Figure 11. The actual working hours distribution shows that the relatively highest actual working hours were '40-45' hours per week (55.7%), followed by '46-51' hours per week (22.1%), then '36-39' hours per week (15.4%), while the remaining percentage was distributed as follows: 3.4% of the respondents who reported less than 35 working hours per week, 2% who reported working more than 51 hours and only 1.3% that stated other working hours per week.

Table 4.9 Distribution of surveyed sample respondents by actual working time (hours)

	Fr.	%
How many hours per week less than 35	5	3.4%
do you work (your actual 35-39	23	15.4%
working time)? 40-45	83	55.7%
46-51	33	22.1%
more than 51	3	2.0%
other	2	1.3%
Total	149	100.0%

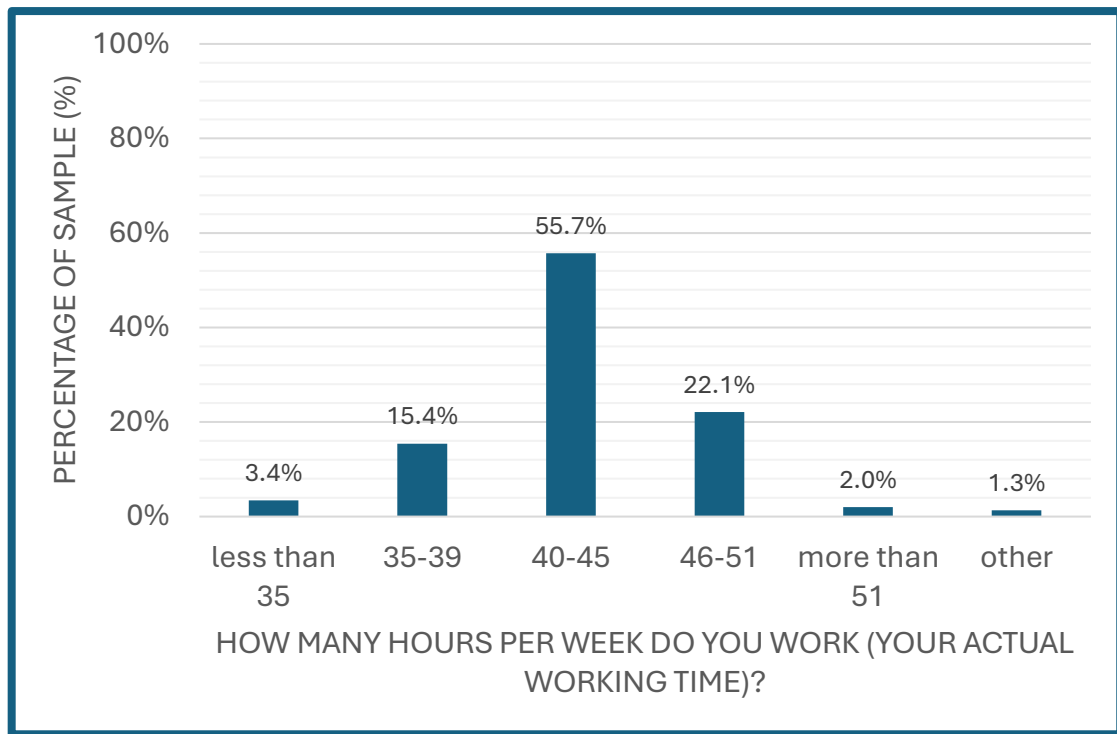


Figure 11 Bar chart of surveyed sample respondents by actual working time (hours)

- Shift and weekend Work

Description of the surveyed sample by shift, Friday or Saturday work is shown in Table 4.10 and represented graphically in Figure 4.12. The respondents were allowed to answer more than one answer (multiple responses). Since each respondent was allowed to have more than one answer, the total number of responses totaled 168 which is more in comparison to the total number of respondents (sample size) of 150. The shift, Friday or Saturday work distribution shows that 'Saturday work' was the relatively highest category (20.8%), followed by 'Friday work' (9.5%), then 'shift work' (6.5%), while the remaining percentage of 63.1% of the surveyed respondents reported have no shift, Friday or Saturday work.

Table 4.10 Distribution of surveyed sample respondents by shift, Friday or Saturday work

	Responses	
	N	Percent
Does your employment include the following (more than one answer was allowed)	Shift work	11 6.5%
	Friday work	16 9.5%
	Saturday work	35 20.8%
	None of the above	106 63.1%
Total	168	100.0%

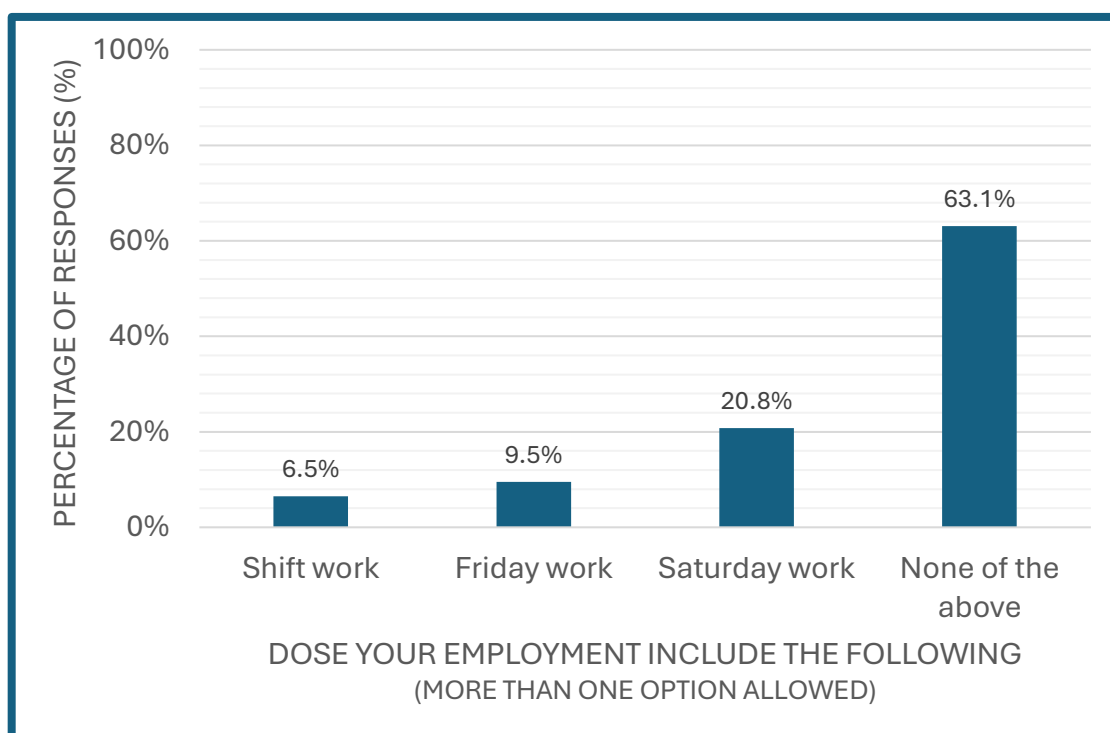


Figure 4.12 Bar chart of surveyed sample respondents by shift work, Friday or Saturday work

- Overtime and Weekend Working Hours

A description of the sample surveyed by working additional hours is shown in Table 11 and represented graphically in Figure 13. The working additional hours distribution shows that the relatively highest percentage among the respondents (41.9%) reported having additional working hours, followed by those who stated having no additional working hours (36.5%), while the remaining percentage of 21.6% were respondents who stated another category.

Table 11 Distribution of surveyed sample respondents by working additional hours

		Fr.	%
Do you work additional hours in addition to the hours agreed upon in the contract? If you answer "yes," please specify the number of hours.	Yes	62	41.9%
	No	54	36.5%
	other	32	21.6%
	Total	148	100.0%

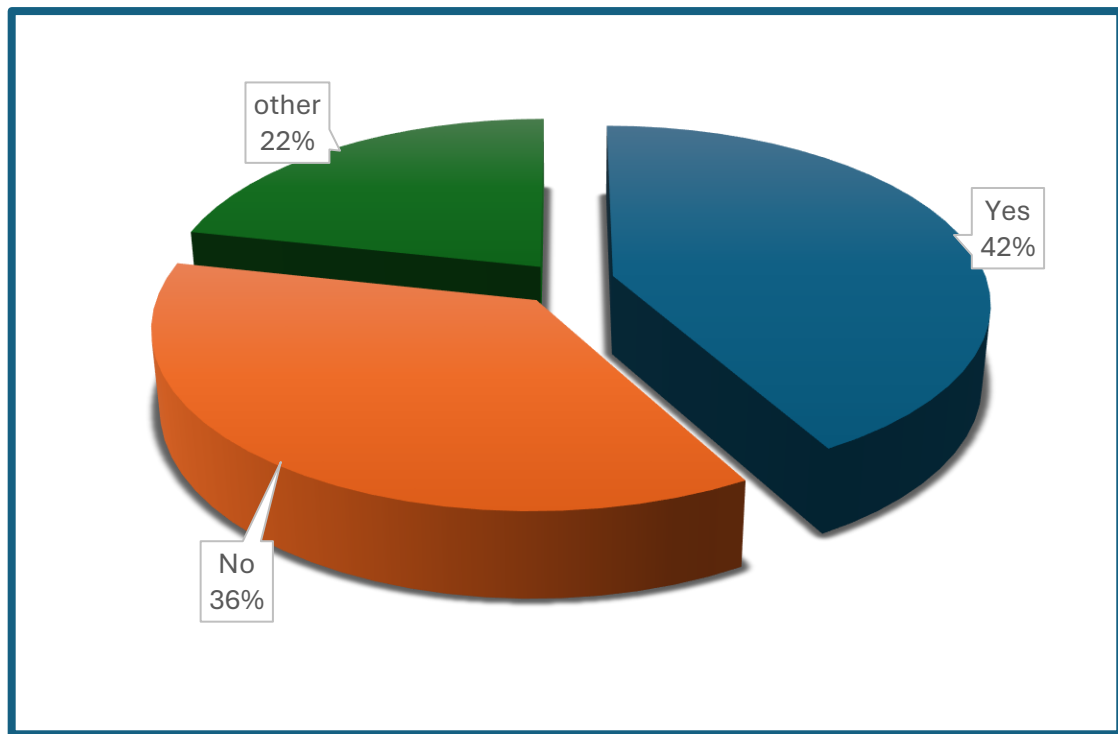


Figure 13 Pie chart of surveyed sample respondents by working additional hours

- Preference of Total Hours of Work Per Week

Description of the surveyed sample preference of total hours of work per week is shown in Table 4.12 and represented graphically in Figure 4.14. The preference of total hours of work per week distribution shows that the relatively highest actual working hours were '40-45' hours per week (55.7%), followed by '46-51' hours per week (22.1%), then '36-39' hours per week (15.4%), while the remaining percentage was distributed as follows: 3.4% of the respondents who reported less than 35 working hours per week, 2% who reported working more than 51 hours and only 1.3% that stated other working hours per week.

Table 4.12 Distribution of surveyed sample respondents by preference of total hours of work per week

		Fr.	%
How many hours per week would you prefer to work (with the same wage per hour as currently)?	Less than 35	87	58.0%
	35 - 40	55	36.7%
	more than 40	2	1.3%
	other	6	4.0%
	Total	150	100.0%

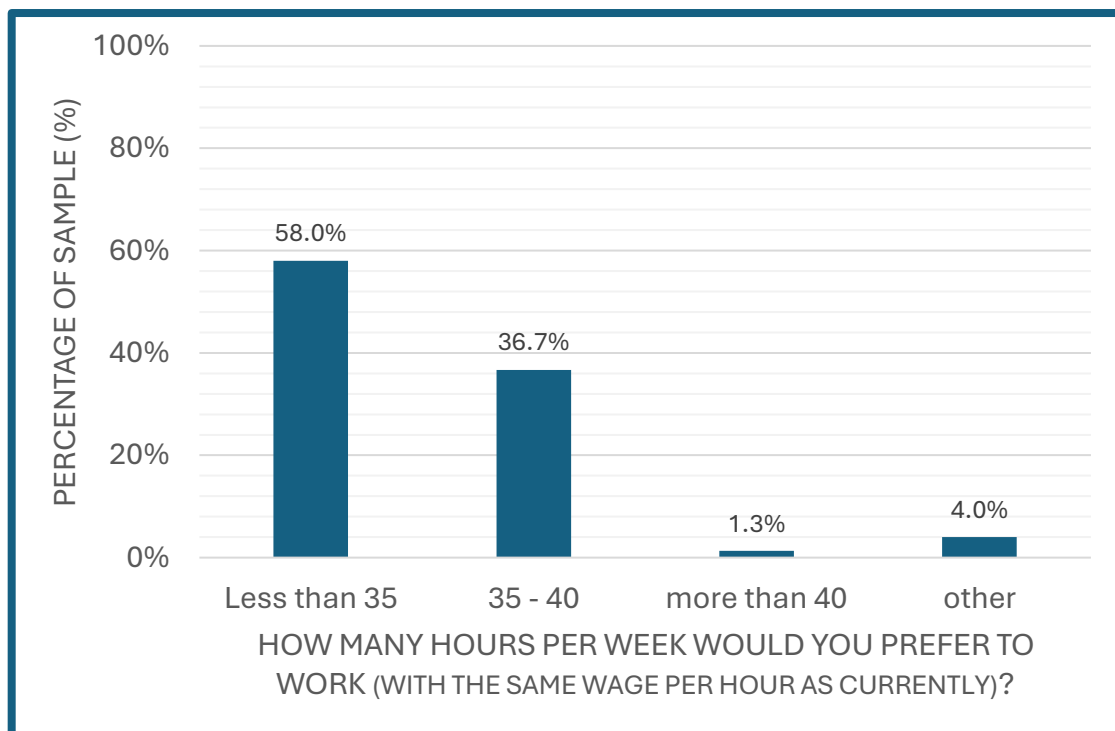


Figure 4.14 Pie chart of surveyed sample respondents by preference of total hours of work per week

Description of the surveyed sample by the previous demographic and other variables showed that the respondents represent the population studied. The following section presents the surveyed sample responses toward the Mental Health set of questions asked in the questionnaire.

4.4 Mental Health Description

This section presents the description of the Mental Health set of questions. These questions were asked using a 5-point scale where: 1 = none of the time, 2 = a little of the time, 3 = some of the time, 4 = most of the time, and 5 = all of the time. So, a higher value on this scale indicates a higher degree of the mental health aspect questioned. The descriptive analysis method that was used to describe these questions was mean value and standard deviation computation. The interpretation of mean values is as follows:

- Mean value between 1.00 and 1.79, is interpreted as ‘non of the time’
- Mean value between 1.80 and 2.59, is interpreted as ‘a little of the time’
- Mean value between 2.60 and 3.39, is interpreted as ‘some of the time’
- Mean value between 3.40 and 4.19, is interpreted as ‘most of the time’
- Mean value between 4.20 and 5.00, is interpreted as ‘all of the time’

The mean value is a central tendency measure that describes the average (or expected) value among all respondents. Standard deviation is a measure of dispersion which is the variability around the mean value. The smaller the standard deviation value, the smaller the dispersion from the mean value (in other words the closer the responses of the respondents to the mean value). Table 4.13 shows the description of the sample responses surveyed on Mental Health questions (items). The mean values on these questions (Table 4.13) that capture mental health aspects ranged from 2.21 (± 1.150 standard deviation) to 3.71 (± 1.025 standard deviation). This mean range is interpreted on the 5-point scale between ‘some of the time’ and ‘most of the time’.

Table 4.13 Surveyed sample responses on Mental Health items (n=150)

Mental Health	Mean ($\pm$ SD)	Interpretation
Have you been able to concentrate on whatever you're doing?	3.56 ($\pm$ 0.871)	most of the time
Did you lose much sleep over worry?	3.37 ($\pm$ 1.096)	some of the time
Did you feel capable of making decisions about things?	3.65 ($\pm$ 0.811)	most of the time
Did you feel constantly under strain?	3.71 ($\pm$ 1.025)	most of the time
Did you feel you couldn't overcome your difficulties?	2.71 ($\pm$ 1.059)	some of the time
Have you been able to enjoy your normal day-to-day activities?	2.66 ($\pm$ 1.009)	some of the time
Have you been feeling unhappy and depressed?	3.03 ($\pm$ 1.195)	some of the time
Have you been losing confidence in yourself?	2.21 ($\pm$ 1.150)	some of the time

Three questions of the mental health set of questions had a mean value at 'most of the time' level on the 5-point scale, while the remaining five questions had a mean value at 'some of the time'. The relative highest mean value was found in the responses to the question 'Did you feel constantly under strain?'. On the other hand, the relative lowest mean value was found in the responses to the question 'Have you been losing confidence in yourself?'.

The next section presents the description of responses to the Employee Productivity set of questions.

4.5 Employee Productivity Description

In this section, the set of questions about Employee Productivity are described by computing the mean and standard values. The set of questions on Employee Productivity were asked on a 5-point scale where: 1 = Poor, 2 = Fair, 3 = Good, 4 = Very good, and 5 = Excellent. So, a higher value on this scale indicates a higher level of employee productivity.

The descriptive analysis method that was used to describe these questions was mean value and standard deviation computation. The interpretation of mean values is as follows:

- Mean value between 1.00 and 1.79, is interpreted as ‘poor’
- Mean value between 1.80 and 2.59, is interpreted as ‘fair’
- Mean value between 2.60 and 3.39, is interpreted as ‘good’
- Mean value between 3.40 and 4.19, is interpreted as ‘very good’
- Mean value between 4.20 and 5.00, is interpreted as ‘excellent’

Table 4.14 shows the description of the surveyed sample responses to Employee Productivity questions (items). The mean values on these questions (Table 13) that capture mental health aspects ranged from 2.62 (± 1.230 standard deviation) to 3.45 (± 1.090 standard deviation). This mean range is interpreted on the 5-point scale between ‘good’ and ‘very good’.

Table 4.14 Surveyed sample responses on Employee Productivity items (n=150)

Employee Productivity	Mean ($\pm$ SD)	Interpretation
Have you been able to focus and work efficiently during the past period?	3.32 (± 1.032)	good
How tired or sleepy have you felt during the last period?	3.01 (± 1.232)	good

Employee Productivity	Mean ($\pm$ SD)	Interpretation
How productive have you felt during the last period?	3.42 ($\pm$ 1.076)	very good
How able to make work-related decisions have you been during the last period?	3.36 ($\pm$ 1.095)	good
How confident in your work-related decisions have you been during the last period?	3.41 ($\pm$ 0.997)	very good
How annoyed or upset have you been during the last period at work?	2.90 ($\pm$ 1.157)	good
How difficult has it been to finish work during the last period?	2.94 ($\pm$ 1.07)	good
How excited to work have you been during the last period?	2.62 ($\pm$ 1.230)	good
How have you been affected by physical symptoms (pain, dizziness, etc.) during the last period?	2.99 ($\pm$ 1.298)	good
How satisfied with your work performance you have been during the last period?	3.45 ($\pm$ 1.090)	very good

Three questions of the employee productivity set of questions had a mean value at the ‘very good’ level on the 5-point scale, while the remaining seven questions had a mean value of ‘good’. The relative highest mean value was found in the responses to the question ‘How satisfied with your work performance you have been during the last period?’. On the other hand, the relative lowest mean

value was found in the responses to the question ‘How excited to work have you been during the last period?’

4.6 Hypothesis Testing

The previous sections presented descriptive-level findings. In this section, the statistical analysis performed is at inferential level. The inferential analysis allows generalization at the population studied level.

The main four research hypotheses subject to testing as per the appropriate inferential analysis methods include the following:

- There is a significant relationship between long working hours and employee mental health (referred to by H1).
- There is a significant relationship between long working hours and employee productivity (referred to by H2).
- There is a significant relationship between employee mental health and productivity (referred to by H3).
- There is a significant relationship between demographic factors and employee mental health and productivity (referred to by H4).

To conduct the appropriate inferential analysis method, first the reliability of the two studied scales (Mental Health and Employee Productivity) would be assessed. Next, the two measured as a composite variable will be created. Then the normality assumption would be assessed, as well as, the outliers values.

The inferential analysis method then would be identified and conducted. The hypothesis within the inferential analysis will be assessed using the p-value rule. The hypothesis testing would be assessed according Any computed p-value equal to or greater than 0.05, the null hypothesis will NOT be rejected and accordingly it will be concluded at a 5% significance level. Thus, this provides 95% confidence.

- If any computed p-value is less than 0.05, the null hypothesis will be rejected and accordingly the alternative (or research) hypothesis will be concluded at a 5% significance level. Thus, this provides 95% confidence. This significance level will be denoted by (*).
- If any computed p-value is less than 0.01, the null hypothesis will be rejected and accordingly the alternative (or research) hypothesis will be concluded at a 1% significance level. Thus, this provides 99% confidence. This significance level will be denoted by (**).

a. Reliability Assessment

Table 4.15 shows the summary of the reliability assessment using Cronbach's alpha coefficient method.

Table 4.15 Reliability of the studied scales using Cronbach's alpha coefficient method

Composite variable studied (scale)	Total number of items (questions)	Excluded items, to achieve acceptable reliability	Cronbach's Alpha Coefficient	Reliability level, compared to 0.7 threshold
Mental health	8	None	0.779	Reliable
Employee productivity	10	None	0.727	Reliable

Cronbach's alpha coefficient for both mental health and employee productivity was computed by adjusting the reversed items. Both mental Health and Employee Productivity scales had a reliability coefficient greater than the 0.7 threshold, which means they have an acceptable reliability level.

4.7 Overall Description of Mental Health and Employee Productivity

As both Mental Health and Employee Productivity scales were found reliable, the set of questions that form each were combined to describe the overall scale level.

Table 15 shows that the mean and standard deviation were computed accordingly. The overall mean value for Mental Health was equal to 2.90 (± 0.648 standard deviation). Thus, the overall level of the surveyed sample responses on Mental Health was at ‘some of the time’ being measured on the 5-point scale.

The overall mean value for Employee Productivity was equal to 3.17 (± 0.609 standard deviation), as shown in Table 15. Thus, the overall level of the sample respondents surveyed on Employee Productivity was ‘good’ as measured on the 5-point scale.

Table 4.16 Summary statistics of the overall studied scales (n=150)

Scale	Mean ($\pm$ SD)
Mental health	2.90 (± 0.648)
Employee productivity	3.17 (± 0.609)

b. Normality assumption testing

Normality is an assumption that is assumed when conducting parametric inferential analysis methods, compared to non-parametric methods which do not assume it. Accordingly, the normality assumption was tested as shown in Table 4.17. In addition to testing the two scales (Mental Health and Employee

Productivity), two more variables were tested: actual working hours and preferred working hours since these are the variables that shape the research hypothesis.

The normality test (K-S) tests the null hypothesis: the variable follows a normal distribution (normality assumption is satisfied) versus the alternative hypothesis that states: the variable do not follow a normal distribution (i.e. normality assumption is not satisfied). It was found that (Table 4.17) all studied variables were found not to follow a normal distribution since the p-value was less than 0.05 or less than 0.01.

Accordingly, parametric inferential analysis methods can't be performed. One alternative is to conduct equivalent non-parametric inferential method.

Table 4.17 Normality assumption verification using the test of normality K-S

	Kolmogorov-Smirnov (K-S) ^a		
	Statistic	df	p-value
How many hours per week do you work (your actual working time)?	.283**	149	.000
How many hours per week would you prefer to work (with the same wage per hour as currently)?	.347**	149	.000
Mental health	.074*	149	.042
Employee productivity	.109**	149	.000

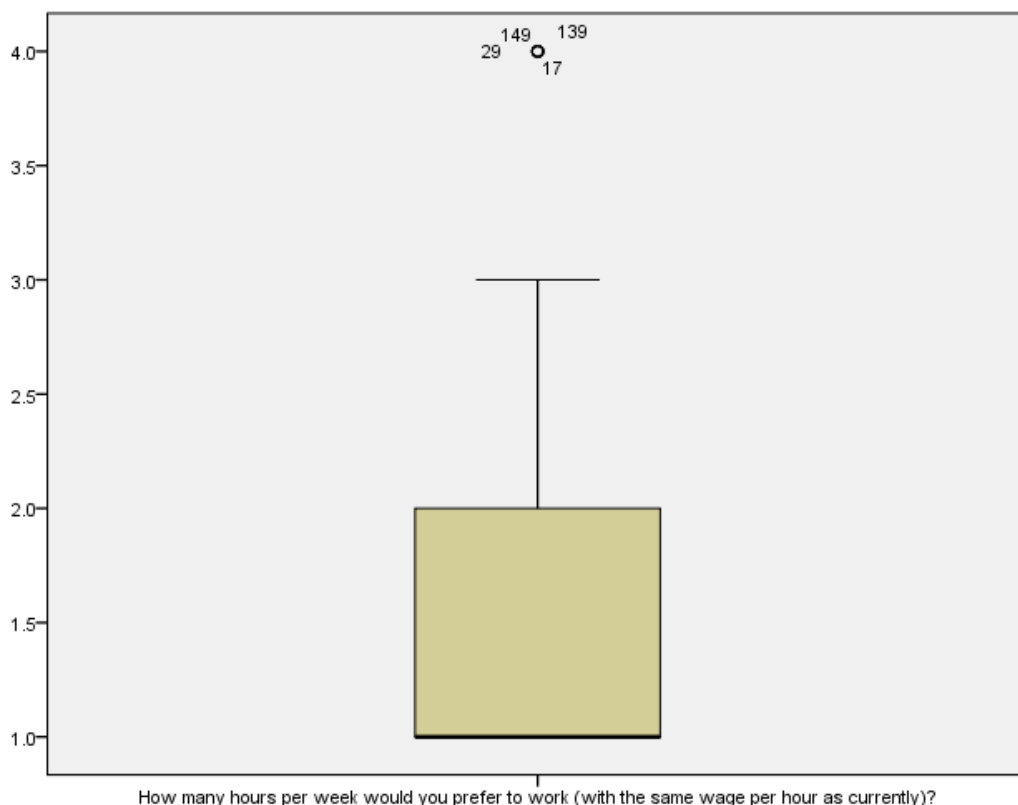
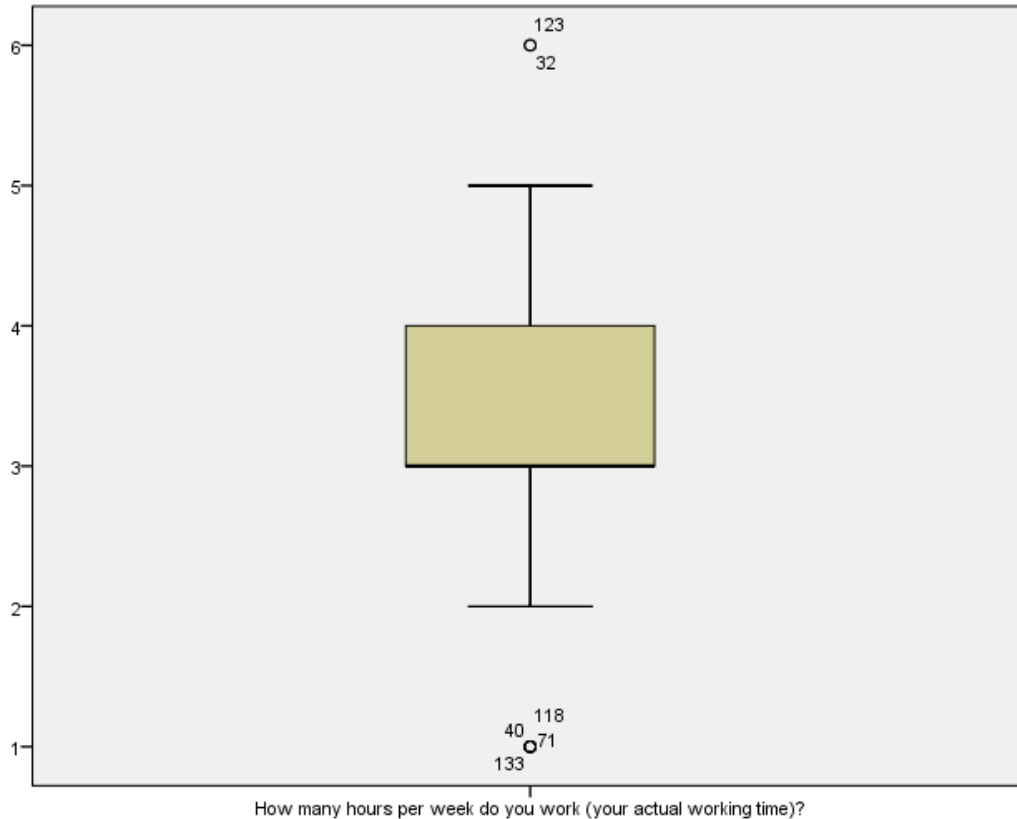
a. Lilliefors Significance Correction

* Significant at 5%; ** significant at 1%

Odd (extreme) Responses

Odd, outliers or extreme values when they are present among the sample responses, might mislead the hypothesis testing. Thus, a box plot was used to visually detect any outlier (or extreme) values in the four studied variables, as shown in Figure 12 on the next page.

Mental Health had no outlier, while the other three studied variables had four or six outlying values. Compared to the sample size (150) these outlying values are few. Examining carefully the severity of the identified outlying values suggests that these outliers fail to influence and give misleading measures. In this case, omitting the outliers or ignoring them is the same. Thus, they were ignored.



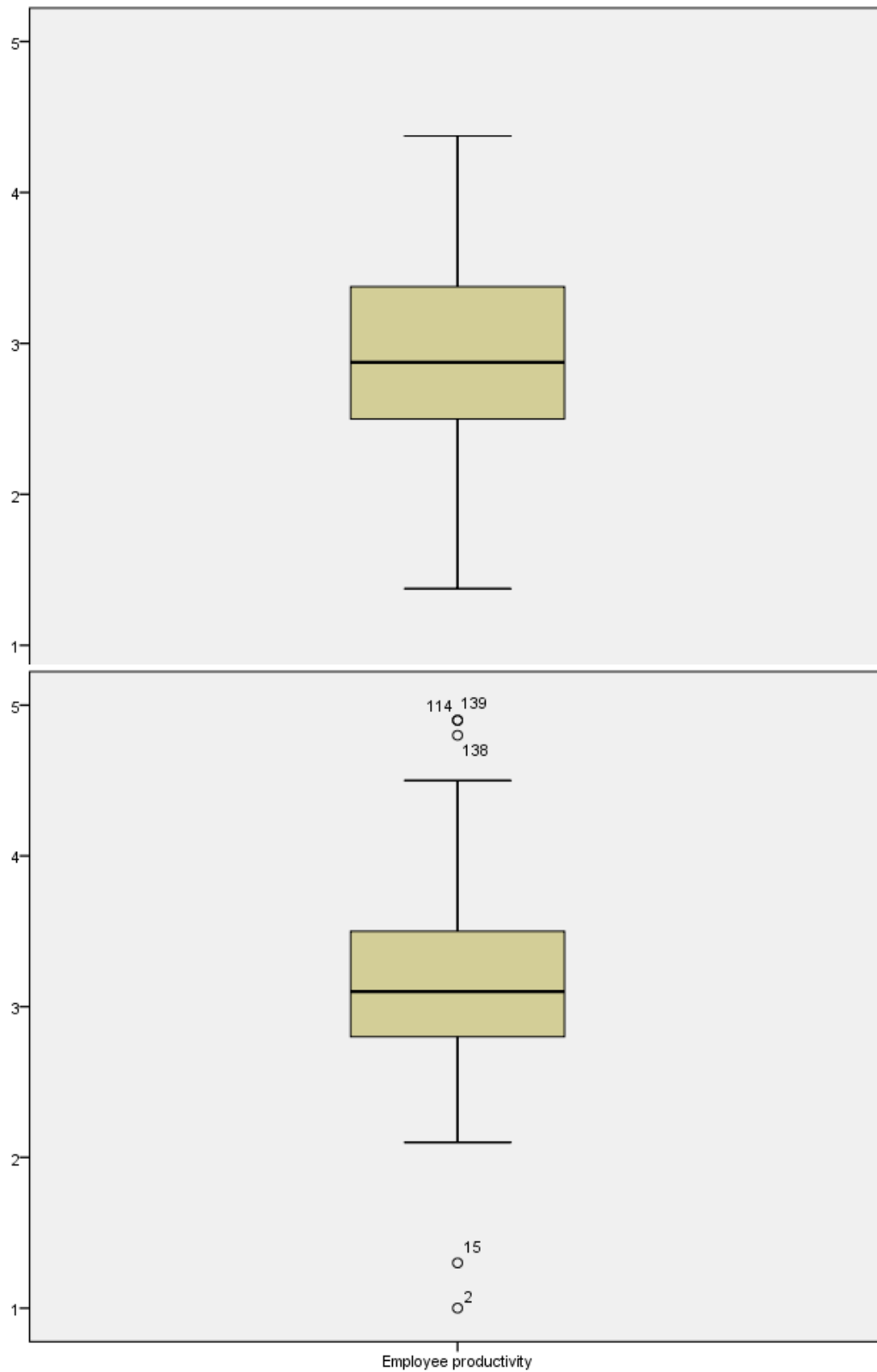


Figure 4.15 Box plots to check outliers

- Correlation Test

To assess the linear relationship between the four studied variables, which allows testing of the research hypotheses, the non-parametric correlation coefficient Spearman method was performed. Table 4.18 shows the correlation matrix results. In the row as well as the column, the four variables form the correlation matrix. The correlation coefficient when it is found statistically significant indicates that there is a correlation between the two variables. The sign of the correlation coefficient indicates if the correlation is positive (+) or negative (-). A positive correlation means the two variables have the same direction. However, a negative correlation indicates that the two variables have opposite directions (one variable increases, the other decreases). The strength of the correlation is determined by comparing the correlation coefficient value to zero, 0.5 (or -0.5), and 1 (or -1). The general indicator is: the closer the correlation coefficient value to zero, the correlation would be described as weak, while the closer its value is from 1 (or -1) it would be described as strong. A correlation coefficient around 0.5 (or -0.5) is described as a moderate correlation.

It was found that preferred working hours per week had a positive correlation with actual working hours (Spearman correlation coefficient = 0.188*, p-value = 0.025) at 5% significance level (Table 17). However, the strength of this correlation was weak since the correlation coefficient value is close to zero.

Also, the correlation results (Table 4.18) showed a statistically significant negative correlation between Mental Health and Employee Productivity (Spearman correlation coefficient = -0.641*, p-value <0.001), at a 1% significance level. Moreover, this correlation is moderate in strength as the correlation coefficient value is

Other correlations were found not statistically significant since the p-value was greater than 0.05.

Table 4.18 Correlation test using Spearman correlation coefficient method

	1	2	3	4
1. How many hoursCorrelation per week do youCoefficient work (your actual working time)?p-value	1.000 .			
2. How many hoursCorrelation per week wouldCoefficient you prefer to workp-value (with the same wage per hour as currently)?	.188* .025	1.000 .		
3. Mental health Correlation Coefficient p-value	.034 .686	.047 .579	1.000 .	
4. Employee Correlation productivity Coefficient p-value	-.005 .956	.028 .742	-.641** .000	1.000 .

* Significant at 5%; ** significant at 1%

4.8 Demographic Effect on Mental Health and Employee Productivity

To verify the fourth research hypothesis (H4), Mann-Whitney and Kruskal-Wallis non-parametric tests were performed to investigate any statistically significant demographic effect on mental health and employee productivity. Mann-Whitney is performed when the demographic variable has only two

categories such as gender (female and male), while Kruskal-Wallis is performed for the demographic variables that have three or more categories such as age (which had four categories). The null hypothesis tested in these two inferential tests is: that there is no demographic effect on the studied variables (in this research the variables studied are: mental health and employee productivity). The alternative hypothesis states: that there is a demographic effect on the studied variables.

All demographic variables (mentioned earlier in the descriptive findings section of this chapter) were tested. Only two demographic variables were found to have a statistically significant effect: gender and years of experience. In all other demographic variables, the p-value was greater than 0.05.

Mann-Whitney test revealed that gender had a statistically significant effect on mental health only ($Z = -3.100$, p-value = 0.002) at 1% significance level. By computing the median values for mental health by gender groups, it was found that females (3.0) had higher levels of mental health compared to males (2.63).

Kruskal-Wallis test revealed that years of experience had a statistically significant effect on employee productivity only ($\chi^2 = 8.067$, p-value = 0.045) at a 5% significance level. By computing the median values for employee productivity by years of experience groups, it was found that those respondents with '20 years or more of experience' (3.65) had higher levels of employee productivity compared to all other years of experience levels.

To summarize, Table 4.19 below shows the hypothesis testing results according to the correlation test.

Table 4.19 Summary of main research hypotheses findings

Hypothesis	Hypothesis statement	Statistical Evidence
H1	There is a significant relationship between long working hours and employee mental health	Not supported at 5% significance level
H2	There is a significant relationship between long working hours and employee productivity	Not supported at 5% significance level
H3	There is a significant relationship between employee mental health and productivity	Supported at 1% significance level
H4	There is a significant relationship between demographic factors and employee mental health and productivity	• Gender at 1% significance level: female had significantly higher level of mental health compared to male • Years of experience at 5% significance level: 20 years or more of experience had the highest level of employee productivity

4.9 Discussion

The descriptive level of analysis revealed that 22.1% of the surveyed sample works between 46 and 51 hours per week, and 2% work more than 51 hours per week. 55.7% work between 40 and 45 hours per week, which is considered normal working hours. 18.8% work less than 39 hours per week.

Mental Health scale was found to have an overall mean value of 2.9 on the 5-point scale. This level is interpreted as ‘some of the time’. In other words, the sample had a moderate overall mental health level.

Employee Productivity scale had an overall mean equal to 3.17. This mean level is interpreted on the 5-point scale as ‘good’. Thus, the sample responses revealed a moderate level of employee productivity.

Testing the hypothesized relationship revealed that mental health negatively correlates with employee productivity. The correlation strength was moderate. Since the scale of mental health indicates that a higher value is unfavorable (poor mental health). Therefore, the negative moderate correlation found is carefully interpreted as follows. As mental health deteriorates, employee productivity reduces. The opposite is also correct: as mental health improves, employee productivity increases.

The correlation test failed to find sufficient statistical evidence that supports a relationship between working hours and both mental health and employee productivity. These statistical findings must be carefully and cautiously addressed. These findings do not imply that there is no logical relationship between working hours and the two measures studied (mental health and employee productivity) in absolute terms. Yet, failing to conclude a statistically significant relationship means there is no LINEAR relationship found. So, it might be possible that the relationship is non-linear. Another possible case is that there is no direct relationship between working hours and both mental health and employee productivity, whereas an indirect relationship might be the case. The indirect relationship takes two forms: mediation or moderation. This research scope was framed to investigate a direct relationship. Investigating an indirect

relationship is beyond the scope of this research. A future study can further investigate a non-linear relationship and an indirect relationship.

The outcome aligns with other prior studies: the correlation between hours worked and mental health is nonlinear, with adverse health outcomes concentrated at the extremities of the hours worked distribution (Sparks et al., 2018; Burns et al., 2016).

For the nonlinear relationship, the theory posits that mental health is diminished among under-employed individuals due to adverse correlations with status, self-esteem, and economic stability, elevated in those with standard work hours, and diminished in those working extended hours (Frijters et al., 2009).

The influence of working hours on perceived mental disorders exhibits a U-shaped relationship (Li et al., 2022). A comprehensive nationwide investigation conducted in China yielded the following conclusion: The U-shaped relationship between working hours and depression indicates that when working fewer than 48.688 hours per week, depression diminishes as working hours increase, perhaps due to enhanced self-esteem and income (Niu et al., 2024; De Moortel et al., 2017; Kósa et al., 2023).

Lee et al. (2014) elucidate the absence of a direct correlation between working hours and employee productivity as follows: Working hours may exert two opposing influences on hourly productivity: a "fatigue effect" and a "learning effect." Increasing working hours may enhance a worker's proficiency and expertise in their role, concurrently leading to an escalation in the worker's weariness levels. Numerous variables contribute to the absence of a linear correlation between extended working hours, mental health, and productivity, including industry type, gender, age, years of experience, marital status, job type, and specific duties (Song, et al., 2022; Lee, et al., 2017).

The factors contributing to the non-linear link among extended working hours, mental health, and productivity, as indicated in prior research, can be encapsulated as follows:

- **Cumulative vs. Acute Impact :**Long working hours can have both cumulative and acute impacts on mental health. Initially, employees may experience minimal adverse effects, but over time, inadequate rest, social isolation, and insufficient recuperation can lead to chronic stress, weariness, and burnout. However, if extended working hours are concentrated in short intervals, acute stress may lead to mental health disorders like anxiety or depression.
- **Individual and Contextual Variations:** The nonlinear correlation between working hours and mental health is influenced by individual factors, such as personality traits, coping strategies, and life situations. The type of work and the type of work can also affect mental health concerns. A conducive work environment, favourable social interactions, and adaptable regulations can mitigate the negative effects of extended hours.
- **Work-Life Balance:** The balance between professional and personal life and recovery is also influenced by employees' ability to manage prolonged working hours without significant mental health repercussions.
- **The Role of Job Autonomy:** job autonomy, which allows employees to regulate their work schedule and responsibilities, can significantly affect the relationship between working hours and mental health. Understanding this complexity is crucial for formulating workplace regulations and interventions that safeguard employees' mental health while addressing workload expectations.

The lack of a linear link does not imply that working hours do not influence mental health or productivity. Various extensive national studies have yielded definitive conclusions regarding this relationship, potentially attributable to the participant count and the sector in which the research was undertaken.

Gender was found to have a statistically significant effect on only mental health (not on employee productivity). Females on average had a higher level of mental health compared to male respondents. These findings might shape plans and programs that address the two genders differently. This outcome aligns with Belloni, et al., (2022) & (Ma, X,2023).

Years of experience were found to determine employee productivity (not also mental health). Long years of experience, such as 20 years or more, were found to have the highest level of employee productivity in comparison to all other lower levels of years of experience. This aligns with prior research from the literature review, which confirms and anticipates the existence of a link between years of experience and employee productivity (Sari & Ali, 2022).

All other demographic variables (as mentioned in this research, in the questionnaire, and this chapter) did not have any statistically significant effect on both mental health and employee productivity. suggests that simply reducing work hours may not necessarily improve mental health outcomes. It is important to also consider factors such as job demands, work-life balance, and workplace support in addressing mental health issues.

4.10 Conclusion

Chapter Four presented the findings obtained from the statistical analysis of the sample responses gathered during the field survey. Statistical analysis took place in two levels: descriptive and inferential, which fulfill the research objectives and allow for verification of the research hypothesis. The scales studied for mental health and employee productivity were found to have an

acceptable reliability level. The descriptive analysis provided useful findings regarding the perception of the sample surveyed on a mental health level, employee productivity level, and long working hours distribution. Normality test results showed that the studied variables do not follow the normal distribution, and hence non-parametric inferential tests were performed in such a case as they do not assume normality. To answer the first research question which was about any demographic factors affecting employee mental health and productivity in the bank sector in Bahrain, the results of Mann-Whitney and Kruskal-Wallis found that gender and years of experience had a statistically significant effect. To answer the second research question about the relationship between long working hours and an employee's mental health, the Spearman correlation test showed no direct linear statistically significant relationship. This might suggest an indirect and non-linear relationship that exists, which might be researched in the future-by-future researchers. The third research question was about the relationship between long working hours and employees' productivity, where the Spearman correlation test did not find a statistically significant direct linear relationship. However, there might be an indirect or non-linear relationship. The fourth research question regarding the relationship between an employee's mental health and productivity was assessed using the Spearman correlation test which found a statistically significant negative moderate relationship.

Chapter 5: Recommendation and Conclusion

5.1 Introduction

This chapter will offer a summary of the research, accompanied by administrative recommendations for managing human resources in banks within the Kingdom of Bahrain and other nations. Furthermore, the research recommendations will be articulated based on the findings derived from this study. The research limitations will be discussed, and recommendations for further investigations for future studies will be provided.

5.2 Result Summary

The study aimed to investigate the relationship between mental health and employee productivity in the Bahraini bank sector. Statistical analysis was conducted at descriptive and inferential levels, revealing an acceptable reliability level. The descriptive analysis revealed a significant impact of gender and years of experience on employee mental health and productivity. However, the Spearman correlation test did not find a direct linear relationship between long working hours and mental health, suggesting an indirect or non-linear relationship. The relationship between long working hours and employee productivity was also not found to be statistically significant, suggesting an indirect or non-linear relationship. The fourth research question assessed the relationship between mental health and productivity, finding a statistically significant negative moderate relationship. These findings highlight the importance of understanding the relationship between mental health and employee productivity in the context of the bank sector.

5.3 Managerial Implication

1- This research's findings are advised for use by general managers, HR managers, their representatives, and decision-makers inside firms in Bahrain's banking sector.

2- Human resource managers and decision-makers should be apprised that there exists no direct linear correlation between long working hours and employee mental health and productivity; however, this does not preclude the potential for an indirect association.

3- Human resource managers and decision-makers must consider the correlation between demographic demographics and employees' mental health and productivity, as years of experience significantly influence employee productivity, and women are more prone to experiencing poor mental health.

4- Human resource managers and decision-makers in banks should prioritize employees' years of experience, as the findings indicate the following: Employees possessing twenty or more years of experience have a high output rate.

5- Legal Regulation: Some countries have begun to regulate working hours to protect employees' mental health. The findings indicated that a significant proportion of employees exceed the hours stipulated in their employment contracts without getting supplementary compensation. Consequently, it is imperative to enact regulatory legislation governing labor hours.

5.4 Recommendation

Based on the findings from the analysis of the correlation between long working hours, mental health, and employee productivity, the ensuing recommendations will enhance the banking sector, particularly in the Kingdom of Bahrain:

1- Bank administrations and human resources should personnel to prioritize the implementation of mental health programs to foster psychological well-being, thereby mitigating job burnout and overwork, which adversely impact staff productivity.

2- The findings indicate that female employees in banks experience greater mental health challenges due to the demands of balancing professional responsibilities with caregiving for children, self-care, and spousal obligations, resulting in significant pressure that may impair their work productivity. Consequently, psychological support programs should be designated for this demographic, including workshops aimed at enhancing mental health and achieving equilibrium between social life and professional responsibilities, as well as offering incentive benefits such as remote work days or flexible working hours.

3- Assessment of the psychological well-being of employees revealed that bank personnel experience significant challenges related to self-confidence. Human resources management must bolster employees' self-confidence by implementing training programs, fostering motivation and admiration, and disseminating exemplary practices among employees to promote confidence in themselves.

4- It is advisable to designate specialists to train employees in managing work challenges, while also addressing the factors that contribute to these difficulties and allowing employees to articulate their grievances and propose solutions to mitigate work-related hardships.

5- Human Resource management and decision-makers in banks should prioritize the enhancement of employees' mental health, as this study posits the equation: healthier employees yield greater productivity.

6- Legal Regulation: While the study did not identify a linear correlation between extended working hours, mental health, and productivity, bank management cannot overlook the presence of a non-linear link. The survey revealed that 41.3% of employees exceed the hours stipulated in their employment contracts, potentially resulting in significant work-related stress and

subsequently impacting their productivity. Consequently, it is necessary to implement regulatory legislation regarding working hours.

7- Employers can alleviate mental health concerns linked to prolonged working hours by implementing flexible working arrangements, providing mental health support programs, and promoting work-life balance. Offering compensated leave and fostering a culture that prioritizes rest is essential.

8- The findings indicated that Employees possessing 20 or more years of professional experience have high productivity levels. These individuals can assist other staff or offer programs that enhance efficiency.

5.5 Research Limitation

Several constraints were identified during the research process, which are:

Measuring mental health encompasses various methodologies and characteristics. The mental health questionnaire was selected for its greater appropriateness for the workplace, as indicated by prior studies in the same domain.

The research encompasses not only mental health but also long working hours and employee productivity, making it challenging to incorporate additional dimensions for measurement. This complexity may result in an excessively lengthy questionnaire, potentially leading to low participation rates or responses lacking accuracy verification from employees. As a master's student, I have a designated timeframe from the university to complete my research paper. Furthermore, I encountered challenges in defining working hours and the criteria for categorizing them as extended hours, as this differs among countries and studies based on the nature of the work.

Reaching participants posed a significant issue since several banks declined to permit the distribution of the questionnaire to staff due to privacy concerns. In addition, The restricted timeframe for study submission significantly hindered the acquisition of the maximum proportion of participants, as this research is requisite for acquiring a master's degree. Moreover, There are no prior comparable studies available for the GCC countries to reference and derive recommendations from.

5.6 Future of Research

Future research may broaden the assessment of mental health by incorporating new variables, including obsessive-compulsive disorder, reactive sensitivity, aggression, and terror anxiety. A questionnaire encompassing 90 dimensions (SCL-90-R - Symptom Checklist-90-Revised) developed by Leonard R. may be utilized, contingent upon the timeframe for data collection and the research population. Furthermore, will be advantageous if it encompasses the other sectors of business in Bahrain or other countries to investigate the impact of prolonged working hours on employee mental health and productivity.

Future research ought to integrate longitudinal designs with both objective and subjective assessments of stressors from several sources to enhance comprehension of organizational stress. The study sample must be extensive and comprehensive, akin to a nationwide survey.

Incorporating moderating variables is advisable to examine the correlation between long working hours employee mental health and productivity. Future studies should examine the non-linear relationship between working hours, mental health, and employee productivity, as well as the indirect relationships between these factors.

Reference:

- Abba, H. D., Anumaka, I. B., & Gaite, S. S. (2016). Leadership practices and productivity of academic staff in polytechnics in Nigeria. *American Journal of Academic Research*, 1(2), 56-67.
- Abdelwahed, N. A. A., Soomro, B. A., & Shah, N. (2023). Predicting employee performance through transactional leadership and entrepreneur's passion among the employees of Pakistan. *Asia Pacific Management Review*, 28(1), 60-68.
- Abugre, J.B. and Acquaaah, M. (2022). A contextual study of co-worker relationship and turnover intentions: the mediating role of employee cynicism, *African Journal of Economic and Management Studies*, Vol. 13 No. 2, pp. 219-235. <https://doi.org/10.1108/AJEMS-08-2021-0384>
- Adrian, T., & Ashcraft, A. B. (2016). Shadow banking: a review of the literature (pp. 282-315). Palgrave Macmillan UK.
- Afif, M., Mariyanti, T., Septiani, N., & Dolan, E. (2023). Factor affecting employee motivation to increase performance of Sharia bank in Indonesia on Islamic perspective. *APTISI Transactions on Management (ATM)*, 7(2), 131-142.
- Afonso, P., Fonseca, M., & Pires, J. (2017). Impact of working hours on sleep and mental health. *Occupational Medicine*, 67(5), 377-382. doi: 10.1093/occmed/kqx054.
- Agyei, J., Sun, S., Abrokwah, E., Penney, E. K., & Ofori-Boafo, R. (2020). Mobile banking adoption: Examining the role of personality traits. *Sage Open*, 10(2), 2158244020932918.
- Ahmed, U., Khalid, N., Ahmed, A., & Shah, M. H. (2017). Assessing moderation of employee engagement on the relationship between work discretion, job clarity

and business performance in the banking sector of Pakistan. *Asian Economic and Financial Review*, 7(12), 1197-1210.

Akinyele, S. T. (2010). The influence of work environment on workers productivity: A case of selected oil and gas industry in Lagos, Nigeria. *African journal of business management*, 4(3), 299-307.

Al-dalahmeh, M., Khalaf, R., & Obeidat, B. (2018). The effect of employee engagement on organizational performance via the mediating role of job satisfaction: The case of IT employees in Jordanian banking sector. *Modern Applied Science*, 12(6), 17-43.

AlSaqer, L. (2008). Experience of female public relations practitioners in Bahrain. *Public Relations Review*, 34(1), 77-79.

Alfardan, A. (2024, February 21). know about the number of employees in banks in Bahrain and the percentage of Bahrainization. Albilad News Paper. Bahrain. .

Almatrooshi, B., Singh, S. K., & Farouk, S. (2016). Determinants of organizational performance: a proposed framework. *International Journal of Productivity and performance management*, 65(6), 844-859.

Alnaser, M. Z., Almaqsied, A. M., & Alshatti, S. A. (2021). Risk factors for work-related musculoskeletal disorders of dentists in Kuwait and the impact on health and economic status. *Work*, 68(1), 213-221.

Alsaad, L. H., & Almaamari, Q. A. (2020). A semi literature review of factors influencing employee's performance at banking service. *International Journal of Management (IJM)*, 11(8). Doi: 10.34218/IJM.11.8.2020.108

Amponsah-Tawiah, K., Tagoe, T., Tamakloe, S. A., & Mensah, J. (2020). The effect of mental health on the innovative behaviour of bank employees: evidence from the Ghanaian banking sector. *African Journal of Employee Relations*, 44(1), 1-19.

Anasi, S.N. (2020), Perceived influence of work relationship, work load and physical work environment on job satisfaction of librarians in South-West, Nigeria, *Global Knowledge, Memory and Communication*, 1(3), 377-398.

Andriani, S., Kesumawati, N., & Kristiawan, M. (2018). The influence of the transformational leadership and work motivation on teachers performance. *International journal of scientific & technology research*, 7(7), 19-29.

Anttila, T., Härmä, M., & Oinas, T. (2021). Working hours—tracking the current and future trends. *Industrial health*, 59(5), 285-292.

Artazcoz, L., Cortès, I., Escribà-Agüir, V., Cascant, L., & Villegas, R. (2009). Understanding the relationship of long working hours with health status and health-related behaviors. *Journal of Epidemiology & Community Health*, 63(7), 521-527.

Bahrain Labor law in the private sector. (2012, August 2). The Formal Newspaper, p. 14 (51). doi:

Bahrain's banking sector remains stable despite fluctuations in the regional market – Bahrain 2018. (2022). Retrieved from

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annu. Rev. Organ. Psychol. Organ. Behav.*, 1(1), 389-411.

Banker, R. D., Chang, H., & Lee, S. Y. (2010). Differential impact of Korean banking system reforms on bank productivity. *Journal of Banking & Finance*, 34(7), 1450-1460.

Bannai, A., & Tamakoshi, A. (2014). The association between long working hours and health: a systematic review of epidemiological evidence. *Scandinavian journal of work, environment & health*, 5-18.

- Bannai, A., & Tamakoshi, A. (2014). The association between long working hours and health: a systematic review of epidemiological evidence. *Scandinavian Journal of Work, environment & Health*, 5-18.
- Barker, I. (2019). Brexit Planning Provokes Considerable Tax Recruitment. *Int'l Tax Rev.*, 30, 62.
- Bartoll, X., & Ramos, R. (2020). Worked hours, job satisfaction, and self-perceived health. *Journal of Economic Studies*, 48(1), 223-241.
- Basahal, A., Jelli, A. A., Alsabban, A. S., Basahel, S., & Bajaba, S. (2022). Factors influencing employee productivity—A Saudi manager's perspective. *International Journal of Business and Management*, 17(1), 39-51.
- Basalamah, M. S. A., & As'ad, A. (2021). The Role of Work Motivation and Work Environment in Improving Job Satisfaction. *Golden Ratio of Human Resource Management*, 1(2), 94-103.
- Belloni, M., Carrino, L., & Meschi, E. (2022). The impact of working conditions on mental health: Novel evidence from the UK. *Labour Economics*, 76, 102176.
- Bharathi, T., & Gupta, K. S. (2017). Job stress and productivity: A conceptual framework. *International Journal of Emerging Research in Management & Technology*, 6(8), 393-398.
- Bianchi, A., & Biffignandi, S. (2020). Workplace social environment indicator: A comparative analysis of European Regions. *Social Indicators Research*, 1-20.
- Bingham, R., & Banner, N. (2014). The definition of mental disorder: evolving but dysfunctional?. *Journal of Medical Ethics*, 40(8), 537-542.
- Biygautane, M., & Al Yahya, K. O. (2014). Talent management in the MENA and GCC regions: Challenges and opportunities. *Global talent management: Challenges, strategies, and opportunities*, 197-215.

Bondagji, D., Fakeerh, M., Alwafi, H., & Khan, A. A. (2022). The effects of long working hours on mental health among resident physicians in Saudi Arabia. *Psychology Research and Behavior Management*, 1545-1557.

Boyer-Davis, S. (2019). Technostress in accounting professionals: A quantitative examination of the differences between managers and non-managers. *Journal of Accounting and Finance*, 19(2), 25-41.

Bozdo, A., & Kripa, E. (2015). The impact of macro-economic factors on non-performing loans in albania. *Academic Journal of Interdisciplinary Studies*, 4(3 S1), 534.

Brough, P., Timms, C., Chan, X. W., Hawkes, A., & Rasmussen, L. (2020). Work–life balance: Definitions, causes, and consequences. *Handbook of socioeconomic determinants of occupational health: From macro-level to micro-level evidence*, 473-487.

Bubonya, M., Cobb-Clark, D. A., & Wooden, M. (2017). Mental health and productivity at work: Does what you do matter?. *Labour economics*, 46, 150-165.

Bucher, M. A., Suzuki, T., & Samuel, D. B. (2019). A meta-analytic review of personality traits and their associations with mental health treatment outcomes. *Clinical psychology review*, 70, 51-63.

Burns, R. A., Butterworth, P., & Anstey, K. J. (2016). An examination of the long-term impact of job strain on mental health and wellbeing over a 12-year period. *Social psychiatry and psychiatric epidemiology*, 51, 725-733.

Burris, H. H., Lorch, S. A., Kirpalani, H., Pursley, D. M., Elovitz, M. A., & Clougherty, J. E. (2019). Racial disparities in preterm birth in USA: a biosensor of physical and social environmental exposures. *Archives of disease in childhood*, 104(10), 931-935.

- Böheim, R., & Taylor, M. P. (2004). Actual and preferred working hours. *British Journal of Industrial Relations*, 42(1), 149-166.
- Campbell, I. (2002). Extended working hours in Australia. *Labour & Industry: a journal of the social and economic relations of work*, 13(1), 91-110.
- Cao, Y., & Rubin, B. A. (2014). Market transition and the deinstitutionalization of standard work hours in post-socialist China. *ILR Review*, 67(3), 864-890.
- Cao, Y., & Rubin, B. A. (2014). Market transition and the deinstitutionalization of standard work hours in post-socialist China. *ILR Review*, 67(3), 864-890.
- Chan, P. W., & Kaka, A. (2007). Productivity improvements: understand the workforce perceptions of productivity first. *Personnel Review*.
- Chandra, T. (2016). The Influence of Leadership Styles, Work Environment and Job Satisfaction of Employee Performance--Studies in the School of SMPN 10 Surabaya. *International Education Studies*, 9(1), 131-140.
- Chandrasekar, K. (2011). Workplace environment and its impact on organisational performance in public sector organisations. *International journal of enterprise computing and business systems*, 1(1), 1-19.
- Choi, E., Choi, K. W., Jeong, H. G., Lee, M. S., Ko, Y. H., Han, C., ... & Han, K. M. (2021). Long working hours and depressive symptoms: moderation by gender, income, and job status. *Journal of Affective Disorders*, 286, 99-107.
- Chong, S. A., Vaingankar, J. A., Abidin, E., & Subramaniam, M. (2013). Mental disorders: employment and work productivity in Singapore. *Social psychiatry and psychiatric epidemiology*, 48, 117-123.
- Chukwuma, N. N. (2022). Physical Work Environment and Workers' Productivity in Selected Small and Medium Scale Enterprises in Umuahia, Abia State, Nigeria. *South Asian Res J Bus Manag*, 4(3), 82-89.

- Cooper, C. L., Sparks, K., & Fried, Y. (1997). The effects of hours of work on health: A meta-analytical review. *J. Occup. Organize. Psychol*, 70(1), 391-408.
- Coote, A., Harper, A., & Stirling, A. (2021). The case for a four-day week. Cambridge, UK: Polity Press.
- Dajani, D., & Zaki, M. A. (2015). The impact of employee engagement on job performance and organizational commitment in the Egyptian banking sector. *Journal of Business and Management Sciences*, 3 (5), 138-147. doi: 10.12691/jbms-3-5-1.
- Dalgaard, V. L., Aschbacher, K., Andersen, J. H., Glasscock, D. J., Willert, M. V., Carstensen, O., & Biering, K. (2017). Return to work after work-related stress: a randomized controlled trial of a work-focused cognitive behavioral intervention. *Scandinavian Journal of Work, environment & Health*, 436-446. Doi: 10.5271/sjweh.3655
- Damir-Geilsdorf, S., & Pelican, M. (2019). Between regular and irregular employment: subverting the kafala system in the GCC countries. *Migration and Development*, 8(2), 155-175.
- Dappa, K. B., & Onuoha, B. C. (2020). Work Environment and Employee Performance in Selected Private Business Organisations in Rivers State. *Nigerian Academy of Management Journal*, 15(4), 112-123.
- De Moortel, D., Thévenon, O., De Witte, H., & Vanroelen, C. (2017). Working hours mismatch, macroeconomic changes, and mental well-being in Europe. *Journal of health and social behavior*, 58(2), 217-231.
- Dhungana, P., & Chalise, M. (2020). Prevalence of sick building syndrome symptoms and its associated factors among bank employees in Pokhara Metropolitan, Nepal. *Indoor air*, 30(2), 244-250.

Diamantidis, A. D., & Chatzoglou, P. (2019). Factors affecting employee performance: an empirical approach. *International Journal of Productivity and Performance Management*, 68(1), 171-193.

Diamond, D. M., Campbell, A. M., Park, C. R., Halonen, J., & Zoladz, P. R. (2007). The temporal dynamics model of emotional memory processing: a synthesis on the neurobiological basis of stress-induced amnesia, flashbulb and traumatic memories, and the Yerkes-Dodson law 2007. Neural plasticity.

Dias, F. S., & Angélico, A. P. (2018). Burnout syndrome in bank employees: a literature review. *Trends in Psychology*, 26, 15-30.

Diop, A., Le, K. T., & Ewers, M. C. (2016). Working and living conditions of migrant workers in the GCC. In *India Migration Report 2016* (pp. 97-111). Routledge India.

Dobson, K. S., Szeto, A., Knaak, S., Krupa, T., Kirsh, B., Luong, D., ... & Pietrus, M. (2018). Mental health initiatives in the workplace: models, methods and results from the Mental Health Commission of Canada. *World Psychiatry*, 17(3), 370.

Duan, X., Ni, X., Shi, L., Zhang, L., Ye, Y., Mu, H., ... & Wang, Y. (2019). The impact of workplace violence on job satisfaction, job burnout, and turnover intention: the mediating role of social support. *Health and quality of life outcomes*, 17(1), 1-10.

E-Government - Bahrain. (2023). Retrieved from https://www.bahrain.bh/wps/portal/ar/!ut/p/z1/tZLNUsIwFIVfpS667OS2TX9Yo ugUHa2CBZoNkzYBIjQpNSK8vanDxgWtLry7zJwzOfd8FxG0QETSg1hTLZ SkO_POSbh0xwEk8Q1A8vQ8gjBN4siLrn2MPTT_KXBfM4CX2Xg4Se9GLm AXkQ5_6p_9cGGG8Dt_h4B0558hgkhdCoZyz8UeXcWhE3hR5OBywJwiBO wEHNNTIG5PmvVpdS13qC8kPWSNjbQQn1oS2-4tRVyzVRLw0pIKktuUcksee7S4qWSqjrZ0PAd1ZxZWtWifLehoLJ1fqvPzp69T

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2Fabout%2Bthe%2Bkingdom%2Ffinance%2Band%2Bnational%2Beconomy%
2Frelated%2Btopics%2Fbanking%2Band%2Bfinance

Eberendu, I. F., Ozims, S. J., Agu, G. C., Ihekaire, D. E., Obioma-Elemba, J. E., Amah, H. C., ... & Amah, C. C. (2018). Workplace health risks associated diseases and health promotion in the Nigerian banking sector. *International Journal of Advanced Research in Biological Sciences*, 5 (2), 197-208.

Edbuser. (2020). Retrieved from

Egbuta Olive, U., Akinlabi Babatunde, H., & Nanle, M. (2019). Work-life balance and employee performance: A study of selected deposit money banks in Lagos State, Nigeria. *The Journal of Social Sciences Research*, 5(12), 1787-1795.

Ehsan, M., & Ali, K. (2019). The impact of work stress on employee productivity: Based in the banking sector of Faisalabad, Pakistan. *International Journal of Innovation and Economic Development*, 4(6), 32-50.

Elaho, O. B., & Odion, A. S. (2022). The Impact of Work Environment on Employee Productivity: A Case Study of Business Centers in University of Benin Complex. *Amity Journal of Management Research*, 5(1), 782-797.

Enshassi, A., Mohamed, S., Mustafa, Z. A., & Mayer, P. E. (2007). Factors affecting labour productivity in building projects in the Gaza Strip. *Journal of civil engineering and management*, 13(4), 245-254.

Evans, J. M., Lippoldt, D. C., & Marianna, P. (2001). Trends in working hours in OECD countries. Doi: <https://doi.org/10.1787/674061356827>

Fernando, M., Caputi, P., & Ashbury, F. (2017). Impact on Employee Productivity From Presenteeism and Absenteeism. *Journal of occupational and environmental medicine*, 59(7), 691-696.

Fernando, M., Caputi, P., & Ashbury, F. (2017). Impact on Employee Productivity From Presenteeism and Absenteeism. *Journal of occupational and environmental medicine*, 59(7), 691-696.

Figart, D. M., & Golden, L. (Eds.). (2013). Working Time: International trends, theory and policy perspectives. Routledge.

Four working days a week: Which countries have adopted the experiment and how are things going? (2022, October 8). Albilad Newspaper . Retrieved from

Frijters, P., Johnston, D. W., & Meng, X. (2009). The mental health cost of long working hours: the case of rural Chinese migrants. Unpublished Manuscript, Department of Economics, University of Queensland.

Fusar-Poli, P., de Pablo, G. S., De Micheli, A., Nieman, D. H., Correll, C. U., Kessing, L. V., ... & van Amelsvoort, T. (2020). What is good mental health? A scoping review. *European Neuropsychopharmacology*, 31, 33-46. doi: 10.1016/j.euroneuro.2019.12.105

Gachengo, V., & Wekesa, S. (2017). Influence of motivation on employee performance: a case of national bank of Kenya. *International Journal of Business, Management and Social Research*, 3(2), 179-185.

Galdeano, D., Ahmed, U., Fati, M., Rehan, R., & Ahmed, A. J. M. S. L. (2019). Financial performance and corporate social responsibility in the banking sector of Bahrain: Can engagement moderate?. *Management Science Letters*, 9(10), 1529-1542.

- Galderisi, S., Heinz, A., Kastrup, M., Beezhold, J., & Sartorius, N. (2017). A proposed new definition of mental health. *Psychiatria Hungarica*, 51(3), 407-411.
- Ghosh, D., Huang, X., & Sun, L. (2020). Managerial ability and employee productivity.
- Giattino, C., Ortiz-Ospina, E., & Roser, M. (2020). Working hours. Our World in Data.
- Giga, S. I., and Hoel, H. (2003). Violence and stress at Work in Financial Services. Geneva: Working Paper, International Labor Office.
- Gilmore, O. (2019). A 4-day week for Ireland?. A Report on the Feasibility of a Four-Day Working Week in Ireland. Forsa. Retrieved March, 19, 2021.
- Giorgi, G., Arcangeli, G., Ariza-Montes, A., Rapisarda, V., & Mucci, N. (2019). Work-related stress in the Italian banking population and its association with recovery experience. *International Journal of Occupational Medicine and Environmental Health*, 32(2), 255-265.
- Giorgi, G., Arcangeli, G., Leon-Perez, J. M., Fioriti, M., Tommasi, E., & Mucci, N. (2020). Stress, well-being and aging in the Italian banking sector: evidence and future perspectives. In *Handbook of Research on Stress and Well-Being in the Public Sector* (pp. 167-180). Edward Elgar Publishing.
- Giorgi, G., Arcangeli, G., Perminiene, M., Lorini, C., Ariza-Montes, A., Fiz-Perez, J., ... & Mucci, N. (2017). Work-related stress in the banking sector: a review of incidence, correlated factors, and major consequences. *Frontiers in psychology*, 8, 2166.
- Goetzel, R. Z., Ozminkowski, R. J., Sederer, L. I., & Mark, T. L. (2002). The business case for quality mental health services: why employers should care about

the mental health and well-being of their employees. *Journal of occupational and environmental medicine*, 320-330.

Government of Canada. (2006). The human face of mental health and mental illness in Canada. Canada Minister of Public Works and Government Services of Canada. doi:10.1037/e611102012-001.

Gridwichai, P., Kulwanich, A., Piromkam, B., & Kwanmuangvanich, P. (2020). Role of personality traits on employees job performance in pharmaceutical industry in Thailand. *Systematic Reviews in Pharmacy*, 11(3), 185-194.

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

Gunderson, R. (2019). Work time reduction and economic democracy as climate change mitigation strategies: Or why the climate needs a renewed labor movement. *Journal of Environmental Studies and Sciences*, 9(1), 35-44. doi:10.1007/s13412-018-0507-4.

Haar, J., Schmitz, A., Di Fabio, A., & Daellenbach, U. (2019). The role of relationships at work and happiness: A moderated moderated mediation study of New Zealand managers. *Sustainability*, 11(12), 3443.

Hafeez, I., Yingjun, Z., Hafeez, S., Mansoor, R., & Rehman, K. U. (2019). Impact of workplace environment on employee performance: mediating role of employee health. *Business, Management and Economics Engineering*, 17(2), 173-193.

Hanaysha, J. (2016). Improving employee productivity through work engagement: Evidence from higher education sector. *Management Science Letters*, 6(1), 61-70.

Hanaysha, J. (2016). Testing the effects of employee empowerment, teamwork, and employee training on employee productivity in higher education sector. *International Journal of Learning and Development*, 6(1), 164-178.

Hanaysha, J. (2016). Work Environment and Organizational Learning as Key Drivers of Employee Productivity: Evidence from Higher Education Sector. *International Journal of Human Resource Studies*, 6(2), 1-13.

Harvey, S. B., Modini, M., Joyce, S., Milligan-Saville, J. S., Tan, L., Mykletun, A., ... & Mitchell, P. B. (2017). Can work make you mentally ill? A systematic meta-review of work-related risk factors for common mental health problems. *Occupational and environmental medicine*, 74(4), 301-310.

Hawaldar, I. T., Lokesh, L., Sison, S. M., & Joseph, N. (2016). Factors affecting leaders' behaviour: a study of Bahrain banking sector. *British Journal of Economics, Finance and Management Sciences*, 12(1), 11-21.

Hertog, S. (2012). A comparative assessment of labor market nationalization policies in the GCC.

Hilton, M. F., Scuffham, P. A., Vecchio, N., & Whiteford, H. A. (2010). Using the interaction of mental health symptoms and treatment status to estimate lost employee productivity. *Australian & New Zealand Journal of Psychiatry*, 44(2), 151-161. doi: 10.3109/00048670903393605.

Horwitz, A. V. (2010). An overview of sociological perspectives on the definitions, causes, and responses to mental health and illness. A handbook for the study of mental health, 6-19.

Howard, M. C., Cogswell, J. E., & Smith, M. B. (2020). The antecedents and outcomes of workplace ostracism: A meta-analysis. *Journal of applied psychology*, 105(6), 577.

- Hu, N. C., Chen, J. D., & Cheng, T. J. (2016). The associations between long working hours, physical inactivity, and burnout. *Journal of occupational and environmental medicine*, 58(5), 514-518.
- Huo, D., Rice, N., Roberts, J., & Sechel, C. (2022). Mental health and productivity: evidence for the UK. The Sheffield Economic Research Paper Series (SERPS), 2022023(2022023).
- Idris, A. (2014). Flexible working as an employee retention strategy in developing countries. *Journal of Management Research*, 14(2), 71-86.
- Idris, A. (2014). Flexible working as an employee retention strategy in developing countries. *Journal of Management Research*, 14(2), 71-86.
- Iis, E. Y., Wahyuddin, W., Thoyib, A., Ilham, R. N., & Sinta, I. (2022). The Effect of Career Development and Work Environment On Employee Performance With Work Motivation As Intervening Variable At The Office Of Agriculture And Livestock In Aceh. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)*, 2(2), 227-236.
- Islam, J., Rahman, Z., & Hollebeek, L. D. (2017). Personality factors as predictors of online consumer engagement: an empirical investigation. *Marketing Intelligence & Planning*, 35(4), 510-528.
- Jenica, S. (2016). A Study of Leadership Styles and Its Impact on Employees. *International Journal of Applied Research*, 2(8), 802-7.
- Jeong, I., Rhie, J., Kim, I., Ryu, I., Jung, P. K., Park, Y. S., ... & Won, J. U. (2013). Working hours and cardiovascular disease in Korean workers: a case-control study. *Journal of occupational health*, 55(5), 385-391.
- Johnson, J. V., & Lipscomb, J. (2006). Long working hours, occupational health and the changing nature of work organization. *American journal of industrial medicine*, 49(11), 921-929.

Johnson, J. V., Gardell, B., & Johansson, G. (2020). The psychosocial work environment: work organization, democratization, and health: essays in memory of Bertil Gardell. Routledge.

Jolivet, A., & Lee, S. (2004). Employment conditions in an ageing world: Meeting the working time challenge. International Labour Office.

Joshi, B., & Ralavaniya, S (2021). A study on relationship of forgiveness with psycho-immunity among managers of banking sector. 59(5), 0378 – 4568.

Kalogiannidis, S. (2021). Impact of employee motivation on organizational performance. A scoping review paper for public sector. The Strategic Journal of Business & Change Management, 8 (3), 984, 996, 3.

Kareem, M. A., & Hussein, I. J. (2019). The impact of human resource development on employee performance and organizational effectiveness. *Management Dynamics in the Knowledge Economy*, 7(3), 307-322.

Kaur, K., Kaur, P., & Kumar, P. (2017). Stress, coping mechanisms and its socio-economic impact on organisations-A review. Indian Journal of Economics and Development, 13(2a), 744-751.

Kelliher, C., Richardson, J., & Boiarintseva, G. (2019). All of work? All of life? Reconceptualising work-life balance for the 21st century. *Human resource management journal*, 29(2), 97-112. doi: <https://doi.org/10.1111/1748-8583.12215>

Kenny S, V. (2019). Employee productivity and organizational performance: A theoretical perspective.

Keyes, C. L. (2014). Mental Health as a Complete State: How the Salutogenic Perspective Completes the Picture. Bridging Occupational, Organizational and Public Health, 179.

- Khalid, A., Pan, F., Li, P., Wang, W., & Ghaffari, A. S. (2020). The impact of occupational stress on job burnout among bank employees in Pakistan, with psychological capital as a mediator. *Frontiers in public health*, 7, 410.
- Khan, S., Thomas, G., Kunbhar, B. A., & Mohamed, N. H. M. (2022). Impact of Work–Life Balance on Working Women in the Banking Sector. *Administrative Sciences*, 13(1), 7.
- Koopmanschap, M., Burdorf, A., & Lötters, F. (2013). Work absenteeism and productivity loss at work. *Handbook of work disability: prevention and management*, 31-41.
- Kurniawan, S., Bamumin, F. A., & Kusnandar, K. N. (2023). The Effect of Toxic Workplace Environment on Employee Performance Mediated by Employee Engagement and Work Stress Among F&B Employees in Jakarta. *Business Economic, Communication, and Social Sciences Journal (BECOSS)*, 5(2), 127-136.
- Kósa, K., Vincze, S., Veres-Balajti, I., & Bába, É. B. (2023). The pendulum swings both ways: Evidence for U-shaped association between sleep duration and mental health outcomes. *International Journal of Environmental Research and Public Health*, 20(9), 5650.
- Lee, D., & Lim, H. (2014). Nonlinearity in nexus between working hours and productivity. *Bank of Korea WP*, 24.
- Lee, D., & Lim, H. (2017). Multiple thresholds in the nexus between working hours and productivity. *Contemporary Economic Policy*, 35(4), 716-734.
- Lee, N. R., Kim, S. W., Joo, J. H., Lee, J. H., Lee, J. H., & Lee, K. J. (2022). Relationship between workplace violence and work-related depression/anxiety, separating the types of perpetrators: a cross-sectional study using data from the

fourth and fifth Korean Working Conditions Surveys (KWCS). *Annals of occupational and environmental medicine*, 34.

Leitão, J., Pereira, D., & Gonçalves, Â. (2021). Quality of work life and contribution to productivity: Assessing the moderator effects of burnout syndrome. *International Journal of Environmental Research and Public Health*, 18(5), 2425.

Li, C., Ning, G., Wang, L., & Chen, F. (2022). More income, less depression? Revisiting the nonlinear and heterogeneous relationship between income and mental health. *Frontiers in Psychology*, 13, 1016286.

Licina, D., & Yildirim, S. (2021). Occupant satisfaction with indoor environmental quality, sick building syndrome (SBS) symptoms and self-reported productivity before and after relocation into WELL-certified office buildings. *Building and Environment*, 204, 108183.

Lorincová, S., Štarchoň, P., Weberová, D., Hitka, M., & Lipoldová, M. (2019). Employee motivation as a tool to achieve sustainability of business processes. *Sustainability*, 11(13), 3509.

Lou, Y., Zhu, Y., You, Q., Jiang, Q., Meng, X., Di, H., ... & Cao, S. (2022). Maternal long working hours and offspring's weight-related outcomes: A systematic review and meta-analysis. *Obesity Reviews*, 23(6), e13439.

Lubbadeh, T. (2021). Job Burnout and Counterproductive Work Behaviour of the Jordanian Bank Employees. *Organizacija*, 54(1), 49-62. Doi:

Ma, T., Moore, J., & Cleary, A. (2022). Climate change impacts on the mental health and wellbeing of young people: A scoping review of risk and protective factors. *Social Science & Medicine*, 301, 114888.

Ma, X. (2023). Impact of Long Working Hours on Mental Health: Evidence from China. *International Journal of Environmental Research and Public Health*, 20(2), 1641. doi: 10.3390/ijerph20021641.

Ma, X. (2023). Impact of long working hours on mental health: evidence from China. *International journal of environmental research and public health*, 20(2), 1641.

Maddi, S. R. (1996). *Personality theories: A comparative analysis*. Thomson Brooks/Cole Publishing Co.

Maddison, A. (2001). *World Economy: A Millennial Perspective*. Paris: Development Centre of the Organisation for Economic Co-operation and Development.

Malik, N. (2011). A study on occupational stress experienced by private and public banks employees in Quetta City. *African journal of business management*, 5(8), 3063.

Malik, S., Qayyum, S., & Younas, F. (2020). Motivation, Work Environment and Turnover Intentions in Private Banks' Employees. *Journal of the Research Society of Pakistan*, 57(3), 47.

Manjunatha, M. K., & Renukamurthy, T. P. (2017). Stress among banking employee-A literature review. *Int. J. Res. Granthaalayah*, 5, 207-213.

Mannocci, A., Marchini, L., Scognamiglio, A., Sinopoli, A., De Sio, S., Sernia, S., & La Torre, G. (2018). Are bank employees stressed? Job perception and positivity in the banking sector: An Italian observational study. *International journal of environmental research and public health*, 15(4), 707.

Mansoor, D., & Jalal, A. (2011). The global business crisis and consumer behavior: Kingdom of Bahrain as a case study. *International Journal of Business and Management*, 6(1), 104.

Manwell, L. A., Barbic, S. P., Roberts, K., Durisko, Z., Lee, C., Ware, E., & McKenzie, K. (2015). What is mental health? Evidence towards a new definition from a mixed methods multidisciplinary international survey. *BMJ open*, 5(6), e007079.

Marcu, M. R. (2021). The impact of the COVID-19 pandemic on the banking sector. *Management Dynamics in the Knowledge Economy*.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of organizational behavior*, 2(2), 99-113.

Mathieu, C. (2012). How Can Managers' Personality and Behaviors Affect Employees' Well-Being?. *International Journal of Science in Society*, 3(3).

Mekpor, B., & Dartey-Baah, K. (2017). Leadership styles and employees' voluntary work behaviors in the Ghanaian banking sector. *Leadership & Organization Development Journal*, 38(1), 74-88.

Menezes, F. S. D., & Xavier, A. A. D. P. (2018). Development, validation, and reliability testing of the brief instrument to assess workers' productivity during a working day (IAPT). *Revista Brasileira de Gestão de Negócios*, 20, 232-247.

Messenger, J. (2018). Working time and the future of work. *ILO future of work research paper series*, 6(8), 33-37.

Messenger, J. C. (2011). Working time trends and developments in Europe. *Cambridge Journal of Economics*, 35(2), 295-316.

Messenger, J. C., Lee, S., & McCann, D. (2007). Working time around the world: Trends in working hours, laws, and policies in a global comparative perspective. Routledge.

Mirkamali, K., Ahmadizad, A., Kazemzadeh, S., & Varmaghani, M. (2019). Determining the relationship between job burnout and employee productivity. *Iranian Journal of Ergonomics*, 7(1), 37-44.

Mishra, S., & Mishra, D. (2019). Peer co-worker relationships and its consequences in the organization. *IAHRW International Journal of Social Sciences Review*, 7(5-III), 1759-1762.

Montani, F., Vandenberghe, C., Khedhaouria, A., & Courcy, F. (2020). Examining the inverted U-shaped relationship between workload and innovative work behavior: The role of work engagement and mindfulness. *Human Relations*, 73(1), 59-93.

Mungania, A. K., Waiganjo, E. W., & Kihoro, J. M. (2016). Influence of flexible work arrangement on organizational performance in the banking industry in Kenya. *International Journal of Academic Research in Business and Social Sciences*, 6(7), 159-172.

Nappi, I., de Campos Ribeiro, G., & Cochard, N. (2020). The interplay of stress and workspace attachment on user satisfaction and workspace support to labour productivity. *Journal of Corporate Real Estate*, 22(3), 215-237.

Naser, H. (2018). Financial Development and Economic Growth in Oil-Dependent Economy: The case of Bahrain. Retrieved from:

Ngozi, O. A., & Chinelo, U. (2020). Effect of work life balance and employee productivity in Nigerian Organizations. *International Journal of Advanced Research in Management and Social Sciences*, 9(2), 67-93.

Nguyen, N., Pascart, S., & Borteyrou, X. (2021). The dark triad personality traits and work behaviors: A person-centered approach. *Personality and Individual Differences*, 170, 110432.

Niu, X., Li, C., & Xia, Y. (2024). How does working time impact perceived mental disorders? New insights into the U-shaped relationship. *Frontiers in Public Health*, 12, 1402428.

Oakman, J., Macdonald, W., Bartram, T., Keegel, T., & Kinsman, N. (2018). Workplace risk management practices to prevent musculoskeletal and mental health disorders: what are the gaps?. *Safety science*, 101, 220-230.

Obrenovic, B., Jianguo, D., Khudaykulov, A., & Khan, M. A. S. (2020). Work-family conflict impact on psychological safety and psychological well-being: A job performance model. *Frontiers in psychology*, 11, 475.

Ohrnberger, J., Fichera, E., & Sutton, M. (2017). The relationship between physical and mental health: A mediation analysis. *Social science & medicine*, 195, 42-49.

Okolo, D. (2018). An exploration of the relationship between technostress, employee engagement and job design from the Nigerian banking employee's perspective. *Management Dynamics in the Knowledge Economy*, 6(4), 511-531.

Oman Labour Law, (2003). <https://www.mol.gov.om/Laborlaw>

Owusu-Ansah, S., Azasoo, J. Q., & Adu, I. N. (2016). Understanding the effects of techno-stress on the performance of banking staff. *International Journal of Business Continuity and Risk Management*, 6(3), 222-237.

Owusu-Ansah, S., Azasoo, J. Q., & Adu, I. N. (2016). Understanding the effects of techno-stress on the performance of banking staff. *International Journal of Business Continuity and Risk Management*, 6(3), 222-237.

Park, S., Kook, H., Seok, H., Lee, J. H., Lim, D., Cho, D. H., & Oh, S. K. (2020). The negative impact of long working hours on mental health in young Korean workers. *PloS one*, 15(8), e0236931.

Parker, K. M., Wilson, M. G., Vandenberg, R. J., DeJoy, D. M., & Orpinas, P. (2009). Association of comorbid mental health symptoms and physical health conditions with employee productivity. *Journal of occupational and environmental medicine*, 1137-1144. doi: 10.1097/JOM.0b013e3181b8c155.

Parr, H. (2007). Mental health, nature work, and social inclusion. *Environment and Planning D: Society and Space*, 25(3), 537-561.

Parrique, T. (2019). The political economy of degrowth (Doctoral dissertation, Université Clermont Auvergne (2017-2020)).

Pellinen, V. (2022). Health of the banking and finance sector workers.

Pencavel, J. (2015). The productivity of working hours. *The Economic Journal*, 125(589), 2052-2076.

Petrie, K., Crawford, J., LaMontagne, A. D., Milner, A., Dean, J., Veness, B. G., ... & Harvey, S. B. (2020). Working hours, common mental disorder and suicidal ideation among junior doctors in Australia: a cross-sectional survey. *BMJ open*, 10(1), e033525. doi:

Pheko, M. M., Monteiro, N. M., & Segopolo, M. T. (2017). When work hurts: A conceptual framework explaining how organizational culture may perpetuate workplace bullying. *Journal of Human Behavior in the Social Environment*, 27(6), 571-588.

Prince, M., Patel, V., Saxena, S., Maj, M., Maselko, J., Phillips, M. R., & Rahman, A. (2007). No health without mental health. *The lancet*, 370(9590), 859-877.

Qatar labour law. (1962).

Quinn, R. E. (2018). Productivity and the process of organizational improvement: Why we cannot talk to each other. In *Public sector performance* (pp. 9-19). Routledge.

Rafsanjani, F., Nursyamsi, I., & Pono, M. (2019). The effect of work-life balance on employee performance with job stress and job satisfaction as intervening variables. *Hasanuddin Journal of Business Strategy*, 1(4), 37-42.

Rahimi, G. R., Khezri, S., & Niknafs, S. (2016). Investigation the relationship of Leadership Styles on managers on productivity Staff Tax Administration of West Azerbaijan province. *Human Resource Management*, 3(10), 39-43.

Raihan, A., Rashid, M., Voumik, L. C., Akter, S., & Esquivias, M. A. (2023). The Dynamic Impacts of Economic Growth, Financial Globalization, Fossil Fuel, Renewable Energy, and Urbanization on Load Capacity Factor in Mexico. *Sustainability*, 15(18), 13462.

Rajput, N., Gupta, M., & Kesharwani, S. (2011). Impact of Technostress in Enhancing Human Productivity: An Econometric Study. *Global Journal of Enterprise Information System*, 3(3), 5-13.

Ramadhani, S. (2014). Factors influencing job satisfaction and turnover intentions in commercial Banks (Doctoral dissertation, The Open University of Tanzania), 54 (1) 42-43.

Rantanen, J., Muchiri, F., & Lehtinen, S. (2020). Decent work, ILO's response to the globalization of working life: Basic concepts and global implementation with special reference to occupational health. *International journal of environmental research and public health*, 17(10), 3351.

Rasool, S. F., Maqbool, R., Samma, M., Zhao, Y., & Anjum, A. (2019). Positioning depression as a critical factor in creating a toxic workplace environment for diminishing worker productivity. *Sustainability*, 11(9), 2589.

Rasool, S. F., Wang, M., Tang, M., Saeed, A., & Iqbal, J. (2021). How toxic workplace environment effects the employee engagement: The mediating role of organizational support and employee wellbeing. *International journal of environmental research and public health*, 18(5), 2294.

Reference:

Rehman, S., Rahman, H. U., Zahid, M., & Asif, M. (2018). Leadership styles, organizational culture and employees' productivity: Fresh evidence from private banks of Khyber-Pakhtunkhwa, Pakistan. *Abasyn Journal of Social Sciences*, AICTBM-18, 1-15.

Riaz, T., Akram, M. U., & Ijaz, H. (2016). Impact of transformational leadership style on affective employees' commitment: An empirical study of banking sector in Islamabad (Pakistan). *The Journal of Commerce*, 3(1), 43. Impact of transformational leadership style on affective employees' commitment: An empirical study of banking sector in Islamabad (Pakistan). *The Journal of Commerce*, 3(1), 43.

Ricoh Europe (2019). Workforce United. doi:

Roberts, B. W., & Yoon, H. J. (2022). Personality psychology. *Annual review of psychology*, 73, 489-516. Doi:

Ruggeri, K., Garcia-Garzon, E., Maguire, Á., Matz, S., & Huppert, F. A. (2020). Well-being is more than happiness and life satisfaction: a multidimensional analysis of 21 countries. *Health and quality of life outcomes*, 18(1), 1-16.

Rugulies, R. (2019). What is a psychosocial work environment? *Scandinavian Journal of Work, Environment & Health*, 45(1), 1–6.

SONG, H., GAO, R., ZHANG, Q., & CHENG, Y. (2022). Nonlinear relationship between work hours and job performance: A meta-analysis. *Advances in Psychological Science*, 30(12), 2666.

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of managerial psychology*, 21(7), 600-619.

Salvagioni, D. A. J., Melanda, F. N., Mesas, A. E., González, A. D., Gabani, F. L., & Andrade, S. M. D. (2017). Physical, psychological and occupational

consequences of job burnout: A systematic review of prospective studies. *PloS one*, 12(10), e0185781.

Samson, G. N. (2014). Effect of workplace environment on the performance of commercial banks employees in Nakuru town.

Sani, A., & Maharani, V. (2013). *Human Resource Management Research Methodology (Theory, Questionnaire, and Data Analysis)*. Malang: UIN Maliki.

Santini, Z. I., Thygesen, L. C., Koyanagi, A., Stewart-Brown, S., Meilstrup, C., Nielsen, L., ... & Ekholm, O. (2022). Economics of mental wellbeing: A prospective study estimating associated productivity costs due to sickness absence from the workplace in Denmark. *Mental Health & Prevention*, 28, 200247.

Sari, D. P., & Ali, H. (2022). Literature Review Measurement Model of Individual Behavior and Organizational Citizenship Behavior: Individual Characteristics, Work Culture and Workload. *Dinasti International Journal of Management Science*, 3(4), 647-656.

Sarode, A. P., & Shirsath, M. (2014). The factors affecting employee work environment & it's relation with employee productivity. *international Journal of Science and Research*, 3(11), 2735-2737.

Selby-Green, M. (2018). 'If you keep working, you will die': London bankers in their 20s and 30s are having more heart attacks, doctors say. *Business Inside*.

Siddiqui, DA (2019). Impact of motivation on employees performance in Pakistan. *Business Management and Strategy*, 10(1), 1-22.

Skidelsky, R. (2019). *How to achieve shorter working hours*. London: PEF.

Sohail, M., & Rehman, C. A. (2015). Stress and Health at the Workplace-A Review of the Literature. *Journal of Business Studies Quarterly*, 6(3), 94.

Sparks, K., Cooper, C., Fried, Y., & Shirom, A. (2018). The effects of hours of work on health: A meta-analytic review. In *Managerial, Occupational and Organizational Stress Research* (pp. 451-468). Routledge.

Sparks, K., Faragher, B., & Cooper, C. L. (2001). Well-being and occupational health in the 21st century workplace. *Journal of occupational and organizational psychology*, 74(4), 489-509.

Statement on the financial sector. (n.d.). Retrieved from <https://www.cbb.gov.bh/ar/fact-sheet/>.

Stevenson, D. (2017). Thriving at work: The Stevenson/Farmer review of mental health and employers. Department for Work and Pensions and Department of Health, London.

Strong, M. H., Jeanneret, P. R., McPhail, S. M., Blakley, B. R., & D'Egidio, E. L. (1999). Work context: Taxonomy and measurement of the work environment.

Sunter, D., & Morissette, R. (1994). The hours people work. *Perspectives on Labour and Income*, 6(3), 8-12.

Tafi, Z., Smajović, A., Škrijelj, V., Temimović, R., Sadiković, T. J., Poturak, S., ... & Lazarević, S. B. (2022). Burnout syndrome in the banking sector of Bosnia and Herzegovina. *Journal of Health Sciences*, 12(1), 10-15.

Taheri, R. H., Miah, M. S., & Kamaruzzaman, M. (2020). Impact of working environment on job satisfaction. *European Journal of Business and Management Research*, 5(6).

Teigen, K. H. (1994). Yerkes-Dodson: A law for all seasons. *Theory & Psychology*, 4(4), 525-547.

Thirumakkal, M. (2015). A study on role of occupational stress on employees productivity. *Int J Manage*, 6, 560-72.

Thirunavurakasu, M., Thirunavukarasu, P., & Bhugra, D. (2013). Concepts of mental health: definitions and challenges. *International Journal of Social Psychiatry*, 59(3), 197-198.

Tijdens, K., & Dragstra, A. (2007). 'How Many Hours Do You Usually Work?' An analysis of the working hours questions in 26 large-scale surveys in six countries and the European Union. *Time & Society*, 16(1), 119-130.

Uka, A., & Prendi, A. (2021). Motivation as an indicator of performance and productivity from the perspective of employees. *Management & Marketing. Challenges for the Knowledge Society*, 16(3), 268-285.

United Arab Emirates labour law. (2021).Doi: and-services/jobs/working-in-uae-government-sector/working-hours-in-the-public-sector

Wahyono, T., Zaman, B., Saifudin, S., & Hartono, R. (2020). Analysis of Factors Affecting BRI Bank Employee Performance. *Journal of the Social Sciences*, 48(3), 466-475.

Wang, S., Kamerade, D., Bessa, I., Burchell, B., Gifford, J., Green, M., & Rubery, J. (2022). The impact of reduced working hours and furlough policies on workers' mental health at the onset of COVID-19 pandemic: a longitudinal study. *Journal of Social Policy*, 1-25.

Weimann-Sandig, N. (2021). Everyday struggle-Gender Equal Working Conditions for Females in Cambodia?. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 6(1), 245-254.

Whiteford, H. (2022). The Productivity Commission inquiry into mental health. *Australian & New Zealand Journal of Psychiatry*, 56(4), 328-331. doi: 10.1177/00048674211031159.

Wiedmann, T., Lenzen, M., Keyßer, L. T., & Steinberger, J. K. (2020). Scientists' warning on affluence. *Nature communications*, 11(1), 3107.

Wintraecken, V. M., Vulik, S., de Wild, S., Dirksen, C., Koppert, L. B., de Vries, J., & Smidt, M. L. (2022). A descriptive systematic review of the relationship between personality traits and quality of life of women with non-metastatic breast cancer. *BMC cancer*, 22(1), 1-12.

Wong, K., Chan, A. H., & Ngan, S. C. (2019). The effect of long working hours and overtime on occupational health: a meta-analysis of evidence from 1998 to 2018. *International journal of environmental research and public health*, 16(12), 2102.

Wong, K., Chan, A. H., & Ngan, S. C. (2019). The effect of long working hours and overtime on occupational health: a meta-analysis of evidence from 1998 to 2018. *International journal of environmental research and public health*, 16(12), 2102.

World Health Organization. (2004). Promoting mental health: Concepts, emerging evidence, practice: Summary report.

World Health Organization. (2004). Promoting mental health: Concepts, emerging evidence, practice: Summary report. World Health Organization.

Wöhrmann, A. M., Dilchert, N., & Michel, A. (2021). Working time flexibility and work-life balance. *Zeitschrift für Arbeitswissenschaft*, 75(1), 74-85.

Yadav, G., Kumar, A., Luthra, S., Garza-Reyes, J. A., Kumar, V., & Batista, L. (2020). A framework to achieve sustainability in manufacturing organisations of developing economies using industry 4.0 technologies' enablers. *Computers in industry*, 122, 103280.

Yuxin, W., & Farooq, M. (2019). Conceptual framework development for job satisfaction in Fujian banking industry, China. *International Journal of Human Resource Studies*, 9(1), 253-265. doi:10.5296/ijhrs.v9i1.14356

Zakaria, A. M., Farea, M. M., & Al-hodiany, Z. M. (2017). Leadership style effect on employee productivity in Al-Madinah International University. *International Sciences of Management Journal*, 1(1).

Zondo, R. W. (2020). The influence of employee engagement on labour productivity in an automotive assembly organisation in South Africa. *South African Journal of Economic and Management Sciences*, 23(1), 1-9.

Appendix

Appendix (A) – Research Questionnaire

Letter To Respondents

Dear Participant,

The undersigned is a student in the master's program at the University of Bahrain. The questionnaire will help me to fulfil the requirements of my master's degree. The key objective of the research is: "assessing the implications of long working hours on employee mental health and productivity in the Bahrain banking sector."

Your contribution is highly appreciated.

Thank you in advance for taking the time to participate in this survey.

All of your responses will remain completely confidential.

Best regards,

Sara Ali

رسالة إلى المشاركين في الاستبيان

عزيزي المشارك،

أني الموقعة أدناه طالبة في برنامج الماجستير في جامعة البحرين. سيساعدني الاستبيان في تلبية متطلبات أتمام بحثي للحصول على درجة الماجستير. الهدف الرئيسي للبحث هو: "تقييم تأثير ساعات العمل الطويلة على الصحة النفسية للموظفين والإنتاجية في القطاع المصرفي في البحرين". مساهمتكم تحنوا بمحل تقدير كبير.

نشكركم مقدماً على الوقت الذي أمضيتموه للمشاركة في هذا الاستطلاع.

كما سيتم التعامل مع جميع ردودكم بسرية تامة.

لكم مني أطيب التحيات،

الطالبة سارة علي

Guidelines

Please answer the following questions regarding your working hours, mental health, and productivity levels during the workday.

This tool is personal, self-administered, and pertains to your performance during the past period.

At the onset of the survey, you will be requested to provide personal data, enabling the researcher to gain a more comprehensive understanding of your response.

It is important to note that it is necessary to provide answers to all inquiries.

There is no absolute correctness or incorrectness in this matter.

The evaluation of the instrument is based on personal opinions and perspectives. Therefore, please provide your answer to all the questions.

إرشادات

- شكرا لكم على الإجابة على جميع الأسئلة المتعلقة بساعات عملكم وصحتكم النفسية ومستوى إنتاجيتكم.
- بداية الاستبيان، سيُطلب منك تقديم بياناتكم شخصية، مما سيخول للباحث الحصول على فهم أكثر شمولاً لإجاباتكم.
- من الضروري تقديم إجابات على جميع الأسئلة.
- ليس هناك إجابة صحيحة أو خاطئة. لذلك، لا تتردد في الإجابة على السؤال.

Section A: Participant profile

القسم أ: الملف التعريفي :

للمشارك

Please tick (✓) for the most appropriate answer regarding the following items.

يرجى وضع علامة (✓) لتدوين الإجابة الأكثر ملاءمة فيما يتعلق بالبند التالي

Gender الجنس	Male ذكر	☐					Female انثى	☐
Age العمر	25 or below 25 و أقل	☐	26-39	☐	40-59	☐	60 or more 60 و أكثر	☐
Marital status الحالة الاجتماعية	Single عزباء / أعزب	☐	Married متزوج (ة)	☐	Widowed أرمل (ة)	☐	Divorced مطلق (ة)	☐
Number of kids عدد الأبناء	No kids لا يوجد	☐	1-2	☐	3-4	☐	5 and above 5 وأكثر	☐
Job Position الوظيفة	Employee موظف	☐	Supervis or مشرف	☐	Manager مدير	☐	Senior manager مدير أول	☐
Years of experience سنوات الخبرة	5 or below أقل من 5 سنوات	☐	6 -10 سنوات	☐	11 – 19 سنوات	☐	20 or more 20 سنة و أكثر	☐
Education level المستوى التعليمي	Secondary degree الدرجة الثانوية	☐	Intermed iate diploma دبلوم متوسط	☐	University graduate خريج جامعي	☐	Post- graduation degree درجة الدراسات العليا	☐
Drinking habits شرب الكحول	Non-drinker لا أشرب الكحول	☐	Occasion al أحياناً في بعض الأوقات	☐	Drinker أشرب الكحول بشكل مستمر	☐		

SECTION B: The research variables القسم ب: متغيرات البحث**البحث**

Please tick (✓) for the most appropriate answer regarding the following items.

يرجى منكم وضع علامة (✓) لتدوين الإجابة الأكثر ملاءمة فيما يتعلق بالبند التالي.

N o.	ITEM	Please Tick (/)
1- Working hours ساعات العمل		
1	How many hours per week do you work (your actual working time)? كم ساعة تعمل في الأسبوع في الوقت الحالي (ساعات العمل الفعلية)؟ ☐ Less than 35 hours ☐ 35-39 ☐ 40-45 ☐ 46-51 ☐ 52 or above, please mention ساعة أو أكثر ، فضلاً ذكر عدد الساعات ☐	
2	Does your employment include, you can choose more than one option: ☐ Shift work ☐ Friday work	هل يشمل عملك (يمكنك اختيار أكثر من خيار) : ☐ العمل بنظام الورديات (العمل بنظام المناوبة) ☐ العمل يوم الجمعة ☐ العمل يوم السبت ☐ العمل الإضافي

	☐ لا شيء مما سبق ☐ Saturday work ☐ Overtime ☐ None- the above
3	هل تعمل ساعات إضافية بالإضافة إلى الساعات المتفق عليها في العقد؟ إذا كانت إجابتك "نعم"، يرجى تحديد عدد الساعات. Do you work additional hours in addition to the hours agreed upon in the contract? If you answer "yes," please specify the number of hours. ☐ لا ☐ نعم ☐ No ☐ Yes الساعات: Number of hours:
4	كم ساعة في الأسبوع تفضل العمل (بنفس أجر الساعة حاليًا)؟ How many hours per week would you prefer to work (with the same wage per hour as currently)?

المتغير التابع: الصحة النفسية

Thank you for responding to questions regarding your mental health during the **last period**.

Please tick (✓) for the most appropriate answer regarding the following items.

نشكركم على الإجابة على الأسئلة المتعلقة بصحتكم النفسية خلال الفترة الأخيرة.

يرجى وضع علامة (✓) لتدوين الإجابة الأكثر ملاءمة فيما يتعلق بالبند التالي.

None of the Time مطلقاً	A little of the Time قليلاً من الوقت	Some of the Time بعضاً من الوقت	Most of the Time أغلب الوقت	all of the Time كل الوقت
1	2	3	4	5

No.	ITEM	Please Tick (✓) من فضلك ضع علامة (✓)				
2- Mental Health 2- الصحة النفسية		1	2	3	4	5
1	Have you been able to concentrate on whatever you're doing? هل كنت قادراً على التركيز في كل ما تفعله؟					
2	Did you lose much sleep over worry? هل فقدت الكثير من ساعات النوم بسبب القلق؟					
3	Did you feel capable of making decisions about things? هل شعرت بالقدرة على اتخاذ القرارات؟					
4	Did you feel constantly under strain? هل شعرت باستمرار أنك تحت الضغط؟					

5	Did you feel you couldn't overcome your difficulties? هل شعرت أنك غير قادر على التغلب على الصعوبات التي تواجهك؟					
6	Have you been able to enjoy your normal day-to-day activities? هل تمكنت من الاستمتاع بأنشطتك اليومية العادية؟					
7	Have you felt unhappy and depressed because of the ?nature of your work هل شعرت بالتعاسة والاكتئاب بسبب طبيعة عملك؟					
8	Have you been losing confidence in yourself? هل فقدت الثقة في نفسك؟					

المتغير التابع: انتاجية الموظفين

Thank you for responding to questions regarding your productivity levels during the workday in **the last period**.

Please tick (✓) for the most appropriate answer regarding the following items.

يُرجى منكم الرد على الأسئلة المتعلقة بإنتاجيتكم خلال الفترة الماضية.

يرجى وضع علامة (✓) لتدوين الإجابة الأكثر ملاءمة فيما يتعلق بالبنود التالية.

Very poor ضعيف جداً	Poor ضعيف	Fair محايد	Good جيد	Very Good جيد جداً
1	2	3	4	5

No.	ITEM	Please Tick (/)				
3- Employee Productivity		1	2	3	4	5
1	Have you been able to focus and work efficiently during the past period? هل كنت قادرًا على التركيز والعمل بكفاءة خلال الفترة الماضية؟					
2	How tired or sleepy have you felt during the last period? ما مدى شعورك بالتعب أو النعاس خلال الفترة الماضية؟					
3	Were you able to focus and work efficiently during the past period? هل كنت قادرًا على التركيز والعمل بكفاءة خلال الفترة الماضية؟					
4	How able to make work-related decisions have you been during the last period? ما مدى قدرتك على اتخاذ القرارات المتعلقة بالعمل خلال الفترة الماضية؟					
5	How confident in your work-related decisions have you been during the last period? ما مدى ثقتك في قراراتك المتعلقة بالعمل خلال الفترة الماضية؟					

6	How annoyed or upset during work have you been during the last period? ما مدى انزعاجك أو اضطرابك أثناء العمل خلال الفترة الماضية؟					
7	How difficult has it been to finish work during the last period? ما مدى صعوبة إنهاء العمل خلال الفترة الماضية؟					
8	How excited to work have you been during the last period? ما مدى حماسك للعمل خلال الفترة الماضية؟					
9	How have you been affected by physical symptoms (pain, dizziness, etc.) during the last period? ما مدى تأثرك بالأعراض الجسدية (ألم، دوار، إلخ) خلال الفترة الماضية؟					
10	How satisfied with your work performance you have been during the last period? ما مدى رضاك عن أدائك العملي خلال الفترة الماضية؟					

Appendix (B) – Codebook

Variable Information

Variable	Label	Measurement Level
serial	<none>	Nominal
time	Timestamp	Scale
gender	Gender	Nominal
age	Age	Ordinal
marital_status	Marital status	Nominal
kids	Number of Kids	Ordinal
job	Job Position	Ordinal
experience	Years of Experience	Ordinal
education	Education Level	Ordinal
smoking	Smoking	Ordinal
drinking	Drinking Alcohols	Ordinal
bank	The bank name	Nominal
actual_working_hours	How many hours per week do you work (your actual working time)?	Ordinal
actual_working_hours _other	other per week hours	Nominal
include1	Shift work	Nominal
include2	Friday work	Nominal

Variable Information

Variable	Label	Measurement Level
include3	Saturday work	Nominal
include4	None of the above	Nominal
additional_hours	Do you work additional hours in addition to the hours agreed upon in the contract? If you answer "yes," please specify the number of hours.	Nominal
additional_hours_other	other additional hours	Nominal
per_week_hours	How many hours per week would you prefer to work (with the same wage per hour as currently)?	Ordinal
per_week_hours_other	other per week hours preferred	Nominal
mental_health1	Have you been able to concentrate on whatever you're doing?	Ordinal
mental_health2	Did you lose much sleep over worry?	Ordinal
mental_health3	Did you feel capable of making decisions about things?	Ordinal
mental_health4	Did you feel constantly under strain?	Ordinal
mental_health5	Did you feel you couldn't overcome your difficulties?	Ordinal
mental_health6	Have you been able to enjoy your normal day-to-day activities?	Ordinal

Variable Information

Variable	Label	Measurement Level
mental_health7	Have you been feeling unhappy and depressed?	Ordinal
mental_health8	Have you been losing confidence in yourself?	Ordinal
employee_productivity1	Have you been able to focus and work efficiently during the past period?	Ordinal
employee_productivity2	How tired or sleepy have you felt during the last period?	Ordinal
employee_productivity3	How productive have you felt during the last period?	Ordinal
employee_productivity4	How able to make work-related decisions have you been during the last period?	Ordinal
employee_productivity5	How confident in your work-related decisions have you been during the last period?	Ordinal
employee_productivity6	How annoyed or upset have you been during the last period at work?	Ordinal
employee_productivity7	How difficult has it been to finish work during the last period?	Ordinal
employee_productivity8	How excited to work have you been during the last period?	Ordinal

Variable Information

Variable	Label	Measurement Level
employee_productivity 9	How have you been affected by physical symptoms (pain, dizziness, etc.) during the last period?	Ordinal
employee_productivity 10	How satisfied with your work performance you have been during the last period?	Ordinal

Variable Values

Value		Label
gender	1	Male
	2	Female
age	1	25 or below
	2	26-39
	3	40-59
	4	60 or more
marital_status	1	Sigle
	2	Married
	3	Widowed
	4	Divorced
kids	1	No kids
	2	1-2
	3	3-4
	4	5 and above
job	1	Employee
	2	Supervisor
	3	Manager
	4	others
experience	1	5 years or below

Variable Values

Value		Label
	2	6-10 years
	3	11-19 years
	4	20 years or more
education	1	Secondary degree
	2	Diploma
	3	Intermediate diploma
	4	University graduate
	5	Post- graduate degree
actual_working_hours	1	less than 35
	2	35-39
	3	40-45
	4	46-51
	5	more than 51
	6	other
additional_hours	1	Yes
	2	No
	3	other
per_week_hours	1	Less than 35
	2	35 - 40

Variable Values

Value		Label
	3	more than 40
	4	other
mental_health1	1	non of the time
	2	a little of the time
	3	some of the time
	4	most of the time
	5	all of the time
mental_health2	1	non of the time
	2	a little of the time
	3	some of the time
	4	most of the time
	5	all of the time
mental_health3	1	non of the time
	2	a little of the time
	3	some of the time
	4	most of the time
	5	all of the time
mental_health4	1	non of the time
	2	a little of the time

Variable Values

Value		Label
mental_health5	3	some of the time
	4	most of the time
	5	all of the time
	1	non of the time
	2	a little of the time
mental_health6	3	some of the time
	4	most of the time
	5	all of the time
	1	non of the time
	2	a little of the time
mental_health7	3	some of the time
	4	most of the time
	5	all of the time
	1	non of the time
	2	a little of the time
mental_health8	3	some of the time
	4	most of the time
	5	all of the time
	1	non of the time

Variable Values

Value	Label
2	a little of the time
3	some of the time
4	most of the time
5	all of the time
employee_productivity1	Poor
2	Fair
3	Good
4	Very good
5	Excellent
employee_productivity2	Poor
2	Fair
3	Good
4	Very good
5	Excellent
employee_productivity3	Poor
2	Fair
3	Good
4	Very good
5	Excellent

Variable Values

Value	Label
employee_productivity4	Poor
2	Fair
3	Good
4	Very good
5	Excellent
employee_productivity5	Poor
2	Fair
3	Good
4	Very good
5	Excellent
employee_productivity6	Poor
2	Fair
3	Good
4	Very good
5	Excellent
employee_productivity7	Poor
2	Fair
3	Good
4	Very good

Variable Values

Value	Label
5	Excellent
employee_productivity8	Poor
2	Fair
3	Good
4	Very good
5	Excellent
employee_productivity9	Poor
2	Fair
3	Good
4	Very good
5	Excellent
employee_productivity10	Poor
2	Fair
3	Good
4	Very good
5	Excellent