

THE RELATIONSHIP BETWEEN DEPRESSION AND EMPLOYEE  
PRODUCTIVITY: THE CASE OF SULAYMANIYAH OFFICE WORKERS

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THE RELATIONSHIP BETWEEN DEPRESSION AND EMPLOYEE  
PRODUCTIVITY: THE CASE OF SULAYMANIYAH OFFICE WORKERS

ALI RAAD SHAHAB


A thesis submitted in fulfilment of the  
requirements for the award of the degree of  
Bachelor of Management Technology

School of Management Technology  
Faculty of Management and Social Sciences  
Qaiwan International University

JULY 2023

## DECLARATION

I declare that this thesis entitled “*The Relationship between Depression and Employee Productivity: The Case of Sulaymaniyah Office Workers*” is the result of my own research except as cited in the references. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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## **DEDICATION**

I extend my heartfelt dedication to my esteemed family members, whose unwavering support has been instrumental in my personal and professional accomplishments. Furthermore, I would like to express my deep gratitude to my esteemed supervisor and dear friends, whose invaluable guidance and unwavering encouragement have been instrumental in the successful completion of this thesis. I am sincerely grateful for their unwavering support throughout this journey

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## **ABSTRACT**

This research investigates the relationship between depression and employee productivity among office workers in Sulaymaniyah. The study aims to assess the level of depression and employee productivity among office workers in Sulaymaniyah and examine the association between these two variables. A quantitative cross-sectional study utilizing a questionnaire approach was employed to gather data from a sample of office workers in Sulaymaniyah. The study findings indicate that office workers in Sulaymaniyah experience a moderate level of depression and productivity. Furthermore, the research establishes a negative relationship between depression and employee productivity. The presence of depression significantly impacts the level of productivity among office workers. The study contributes to the existing literature by shedding light on the specific context of Sulaymaniyah and its office workers. It highlights the importance of addressing mental health concerns, such as depression, within the workplace and its impact on productivity. Employers and organizations can utilize the findings to develop strategies and interventions that promote mental well-being and enhance employee productivity.



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## **LIST OF ABBREVIATIONS**

DALY	-	Disability Adjusted Life Years
WHO	-	World Health Organization
DSM-5	-	Diagnosis and Statistical Manual of Mental Disorders- Fifth Edition
MDE	-	Major Depressive Episode
LPT	-	Lost Productivity Time
MDD	-	Major Depressive Disorder
HPQ	-	Health and Work Performance Questionnaire
SOPs	-	Standard Operation Procedures
SPSS	-	Statistical Package for Social Sciences

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction to the Study**

Employers must be aware of the association between depression and employee productivity. This is especially true for office workers in Sulaymaniyah, Iraq, who may be facing unique challenges such as a difficult economic situation, political instability, and the long-term effects of war. Employee productivity may decrease due to depression, which can lead to diminished motivation, increased absenteeism, and decreased job performance. Understanding the association between depression and employee productivity is critical for companies to identify at-risk employees and guarantee their employees can maintain a high level of productivity.

One of the keys focuses of the companies has been to increase staff productivity. This is due to the fact that increasing levels of employee productivity provide several benefits to both a firm and its employees. Productivity growth, for example, contributes to good economic growth, improved profitability, and greater social advancement (Sharma & Sharma, 2014). Furthermore, more productive personnel may be eligible for greater wages/salaries, improved working circumstances, and more prospects. Furthermore, greater productivity improves organizational competitiveness by lowering costs and increasing output quality (Baily et al., 2005; Hill et al., 2014; Wright, 2004). All of these benefits have increased staff productivity. As a result, understanding its forefathers is crucial to assuring the organization's long-term existence and prosperity.



Depression is one of the most common and major factors influencing employee productivity. Poor work performance, including absenteeism, productivity, and job retention, has been linked to depression. Few studies have looked at the severity of depressive symptoms in connection to occupational impairment in a broad and diverse patient population (Arne Beck et al, 2011).

Depression is frequent, and the indirect costs associated with lower work functioning, such as absenteeism, decreased productivity, and even decreased job retention, are significant across a wide range of occupations (Berndt et al., 1998, Lerner et al., 2004). Furthermore, modest or subthreshold depression (including dysthymia) has been linked to lower work performance in certain studies (Katon et al., 2009, Martin et al., 1996). Fewer studies have been conducted to examine the severity of depression symptoms in relation to the number of job losses, which includes both absenteeism and decreased productivity. (Simon et al., 2008) discovered that in outpatients treated for bipolar disorder, depression severity was strongly and persistently linked to a lower likelihood of employment and more days lost due to illness. Workers at the office had higher levels of anxiety and depression than those in manufacturing (Kang et al 2016).

This research focuses on examining the relationship between depression and employee productivity among office workers in Sulaymaniyah. The need for this study arises from the recognition of the potential impact of depression on employee productivity within this specific context. The specific objectives of the study are three-fold: first, to examine the level of depression among office workers in Sulaymaniyah; second, to assess the level of employee productivity among office workers in the same region; and third, to explore the relationship between depression and employee productivity among office workers in Sulaymaniyah.

Understanding the level of depression among office workers in Sulaymaniyah is crucial for comprehending the magnitude of this mental health issue within the workplace. By examining the prevalence and severity of depression, this study aims to shed light on the extent to which office workers are affected by this condition.

Assessing the level of employee productivity among office workers in Sulaymaniyah is essential for understanding their performance within the workplace. By evaluating the productivity levels of office workers, this research seeks to identify potential factors that may contribute to variations in productivity, such as the presence of depression.

Exploring the relationship between depression and employee productivity among office workers in Sulaymaniyah is a central objective of this study. By investigating the potential association between these two variables, this research aims to uncover whether depression impacts employee productivity. Understanding this relationship is crucial for identifying the potential causes and implications of depression on work performance.

By accomplishing these objectives, this research seeks to contribute to the existing knowledge base on the relationship between depression and employee productivity among office workers in Sulaymaniyah. The findings of this study can help organizations and policymakers gain insights into the causes and effects of depression on employee productivity, potentially leading to the development of targeted interventions and strategies to improve mental health and enhance workplace productivity.

## **1.2 Problem Statement**

Mental health is a growing global public health concern that impacts millions of people's health and productivity. With a lifetime frequency ranging from 2% to 15%, depression is the most prevalent mental health problem and a serious public health problem worldwide. Lopez and Murray (1996). In 2000, depression was the fourth most common cause of sickness burden, accounting for 4.4 percent of disability-adjusted life years (DALYs). Depression is expected to overtake heart disease as the world's second greatest source of sickness burden by 2020. Lopez and Murray (1996). In accordance with a transversal study of 245,404 adults was carried out by the World Health Organization (WHO) World Health Survey from 60

countries, the overall incidence of ICD-10 depression within the last year was determined to be 3.2%. In comparison, angina pectoris affects 4.5 percent of the population, arthritis affects 4.1 percent, asthma affects 3.3 percent, and type 2 diabetes affects 2.0 percent.

According to reports, the prevalence of depressive illnesses varies by country. Serious depression, for example, around 6.6 percent of adults in the United States experience this issue annually, and depressive disorders are expected to impact 16% of Americans over the course of their lives (Kessler et al., 2003). According to Blackmore et al. (2007), in a survey of Canadians, 4.6% of respondents satisfied the criteria for experiencing a severe depressive episode, while 4% of those employed had had a depressive episode in the previous year. (Gilmour and Patten, 2007). Sadness, on the other hand, is not peculiar to America. According to a study conducted in the Netherlands, 4.8 percent of working people suffered from severe depression (Laitinen-Krispijn and Bijl, 2000), In Australia, 2.2 percent of the population were found to have depression, according to Lim et al (2000). A review of prevalence studies on mental health issues, conducted by Sanderson and Andrews (2006), suggested that depression and moderate phobias were the most common disorders seen among working populations around the world.

Depression is linked to increased morbidity and mortality. Employers face increased incapacity as a result of these variables, as well as a variety of workplace implications such as absenteeism, decreased on-the-job productivity (known as presenteeism), and higher health-care costs Murray and Lopez (1996); Michaud et al. (2001). The economic losses of the cost of depression is estimated to be in the tens of billions of dollars, mostly as a result of reduced labor productivity (Greenberg et al., 1996; Kessler and Frank, 1997). Depression may be one of the most expensive health issues for many firms, according to one research (Burton et al., 1999; Druss et al., 2001; Kessler et al.).

The purpose of this study is to investigate the relationship between depression and employee productivity among Sulaymaniyah office workers. The study will investigate the prevalence of depression among office workers, the effect of

depression on employee productivity, and the viability of specific approaches to reduce the impact of depression on staff productivity. The study's findings will offer light on the incidence of depression and its effects on employee productivity in the Sulaymaniyah office context, as well as recommendations for increasing employee productivity in this setting.

### **1.3 Research Questions**

(a) What is the level of depression among office workers in Sulaymaniyah?

(b) What is the level of employee productivity among office workers in Sulaymaniyah?

(c) What is the relationship between depression and employee productivity among office workers in Sulaymaniyah?

### **1.4 Research Objectives**

(a) To examine the level of depression among office workers in Sulaymaniyah.

(b) To examine the level of employee productivity among office workers in Sulaymaniyah.

(c) To examine the relationship between depression and employee productivity among office workers in Sulaymaniyah.

## **1.5 Scope of Study**

This quantitative cross-sectional study includes office workers in Sulaymaniyah. This research will look at two to five office organizations in Sulaymaniyah. Data will be obtained through the distribution of questionnaires and analyzed using the SPSS application. The samples were collected from employees of the following office organizations in Sulaymaniyah: (IQ Online, Qaiwan group, and FKR Agency for Creativity and Advertisement).

## **1.6 Significance of Study**

The significance of this study lies in its provision of certain findings. Firstly, the data provided will assist employees in determining the issues affecting their productivity so that they can attempt to overcome them. The research assists people as well as the industry in increasing productivity. This research will provide new insights and knowledge into depression and its effects on employee productivity within office workers companies in Sulaymaniyah.

The goal of this study is to look into the relationship between depression and occupational productivity. The study will look at how depression impacts employees' capacity to accomplish their job obligations as well as how depression affects their productivity. The study will specifically look at how depression might contribute to decreased job performance, less creativity, and decreased overall productivity. The study will also look into how depression can affect absenteeism, tardiness, and morale among office workers. In addition, the study will investigate the influence of depression on employee turnover and job satisfaction. Finally, this study will bring fresh insights and knowledge regarding depression and its consequences on employee productivity in Sulaymaniyah office workers companies. The purpose of this study is to have a better understanding of the connection between depression and employee productivity.

## **1.7 Conceptual Definition**

Conceptual definitions for the variables determined in this study are as follows.

### **1.7.1 Employee Productivity**

Employee productivity is of utmost importance in enhancing employee performance, thereby contributing significantly to organizational success. Moreover, it is subject to the influence of various factors. (Qais Ahmed Almaamari et al, 2021).

### **1.7.2 Depression**

Depression is derived from the Latin word "depressio," which means "sinking." The individual feels as if they are carrying a burden. It is a sort of mood disorder that can range from a typical transient low mood in everyday life to a clinical illness with severe and long-term symptoms that deviate greatly from normalcy. (Rivas-Acua et al, 2007).

## **1.8 Operational Definition**

Operational definitions for the variables determined in this study are as follows.

### **1.8.1 Employee Productivity**

Employee productivity is a vital aspect that significantly impacts employee performance and subsequently contributes to the overall success of an organization.

It encompasses the ability of employees to efficiently complete tasks and achieve goals within the given time frame. While influenced by various factors, understanding and enhancing employee productivity is crucial for organizations seeking to optimize their workforce and drive positive outcomes.

### **1.8.2 Depression**

Depression is a psychological condition characterized by a persistent and profound feeling of sadness and hopelessness. The term "depression" originates from the Latin word "depressio," which conveys a sense of sinking, reflecting the experience of carrying a heavy emotional burden. It encompasses a spectrum of mood disorders, ranging from common, short-lived episodes of low mood that are part of the human experience to clinical depression, a serious and enduring illness that significantly deviates from the usual state of well-being, impacting various aspects of a person's life.

### **1.9 Summary**

The research is summarized in this chapter. It describes the main reason for undertaking this investigation. It was designed to achieve certain goals mentioned in the study's problem statement. This chapter also outlines the scope and significance of the study, as well as provides conceptual and practical descriptions of the key subjects under examination.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter examines previous studies and relevant publications relating to the environment and variables of the study, including the dependent variable (employee productivity) and the independent variable (depression).

#### **2.2 Employee Productivity**

Staff productivity is one of the most challenging difficulties faced by most organizations confront today. Employee productivity is a measure of a worker's or group of workers' efficiency. In reality, productivity has a direct impact on a company's profitability (Gummesson, 1998; Sels et al., 2006). Productivity is defined as an employee's production over a set period of time. Employee productivity is frequently measured in comparison to the average of employees doing similar tasks. It can also be defined as the number of units of a product or service handled by an employee in a given time period (Piana, 2001). Employee productivity has become an important goal for organizations because an organization's performance is mostly driven by its employees' productivity (Cato & Gordon, 2009; Gummesson, 1998; Sharma & Sharma, 2014).

Many studies have focused on one or two techniques of measuring productivity, and because the methodologies are so diverse, comparing the results can be difficult (Nollman, 2013). A well-defined and practical strategy for gauging productivity is generally lacking. According to Sharma and Sharma, employee productivity is determined by the length of time an employee is physically present at



work, as well as the extent to which he or she is "mentally present" or performing efficiently while on the job (2014). Businesses must address such concerns to achieve high worker productivity. According to Ferreira and Du Plessis (2009), productivity is the amount of time a person actively spends doing the work for which he or she was hired in order to achieve the results stipulated in the job description. Previous research has clearly emphasized the significance of staff productivity in determining organizational performance. According to Sharma and Sharma (2014), increasing productivity leads to economic growth, increased profitability, and social gain. Increased productivity can only lead to higher wages/salaries, better working conditions, and more job opportunities. Cato and Gordon (2009) also emphasized the significance of connecting a company's strategic purpose with employee productivity. "Employees will be motivated and inspired to be more creative as a result of this alignment, which will eventually improve their performance effectiveness in fulfilling company goals and objectives" (Morales et al., 2001; Obdulio, 2014). Increasing productivity boosts competitiveness by lowering costs and increasing output quality.

### **2.3 Depression**

Depression is a mental condition characterized by chronic sorrow and loss of interest. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) of the American Psychiatric Association categorizes depressive disorders as Disruptive mood dysregulation disorder, Major depressive disorder, Persistent depressive disorder (dysthymia), Premenstrual dysphoric disorder, and Depressive disorder due to another medical condition. All depressive illnesses share sorrow, emptiness, or irritated mood, as well as physical and cognitive abnormalities that greatly impair the individual's ability to function (Chand et al., 2023). Major depression is a prevalent disorder that impairs psychosocial functioning and lowers quality of life. In 2008, WHO listed major depression as the third leading cause of illness burden worldwide, with the disorder expected to rise to first place by 2030 (Malhi et al., 2018).

Depression is predicted to cost the US between \$36.6 and \$51.5 billion in lost productivity each year (Stewart WF et al., 2003). When compared to their non-depressed peers, depressed employees experience higher job loss, premature retirement, on-the-job functional restrictions, and absenteeism (Lerner DJ, 2008). Adverse job outcomes have been linked to increased depression symptom severity, the prevalence of particular symptoms (e.g., difficulties focusing), and poorer-quality depression therapy in patient samples. (Rost K, 2004).

Long-term research on community and clinic-based population samples has revealed that 60-90% of adolescent depression episodes recover within a year. (March et al., 2004; Dunn et al., 2006) In follow-up studies, however, 50-70% of people who remit have another depressive episode within 5 years. Patients who are sent to clinics do worse than those who are treated in the community (Lewinsohn et al., 2000, Lewinsohn et al., 1988) Furthermore, only a tiny proportion of person report complete clinical and functional recovery after a depressive episode, with the majority reporting lingering symptoms or handicaps. (Fava, Ruini, et al., 2007, Conradi HJ, et al., 2010).

Finally, adolescent sadness predicts a variety of adult mental health problems, including anxiety disorders, substance-related disorders, and depression, and bipolar disorder. (Ferguson et al., 2005, Kim-Cohen et al., 2003), as well as suicidal behavior, unemployment, and physical health issues (Ferguson et al., 2005). (Bardone, et al., 1998) Adolescent depression typically heralds the onset of a chronic or relapsing problem, as well as a wide range of psychological difficulties and illnesses.

## **2.4 Depression and employee productivity**

Depression affects over 5% of the working-age population in the United States (Blazer et al., 1994) and is a recurring disorder that causes significant functional limitation and social role handicap. (Wells, 1985, Wells, 1997) Despite the availability of new and effective treatments, the illness's control has been impeded by

underdiagnosis, poor adherence to suggested regimens, inadequate care delivery, and frequent co-morbidity with other mental illnesses. Calkins et al. (1991) and Schulberg HC et al. (1995) Since Wells and colleagues (Wells et al., 1989) Since the incapacitating influence of depression was first revealed in the 1980s, evidence of its human and economic costs has accumulated. Druss et al (2000), Simon et al., (1998) Recent study on depression's impact on employment and productivity gives new and compelling evidence of the disorder's severity and societal repercussions.

Depression is one of the most common health issues in the workplace. According to the Substance Abuse and Mental Health Services Administration's Office of Applied Studies, 7.0% of adult full-time employees (10.1% for women vs. 4.7% for men) had a major depressive episode (MDE) in the previous year. (Rockville, 2007). According to Kessler, Akiskal, Ames, et al. (2006), 6.4% of employees in the United States have been diagnosed with major depressive disorder (MDD), whereas 4.6% of working Canadians had MDE the previous year (Blackmore, Stansfeld, Weller, et al., 2007). Depressive disorders have been identified as the primary source of sickness burden in the working population of the United States, as measured by disability-adjusted life years, which is a common sign of illness burden (Greenberg, Kessler, Birnbaum, et al., 2003). These disorders have a major effect on employment productivity since they typically start early and last a long time (Druss, Rosenheck, Sledge, 2000). The economic burden of depression is calculated by taking into account direct expenses (such as medical bills), indirect costs (such as costs connected with depression in the job, such as poorer productivity), and mortality costs due to depression-related suicides. (Druss, Rosenheck, Sledge, 2000). In the case of mental health conditions such as depression, indirect costs are projected to equal or surpass direct costs (Collins, Baase, Sharda, et al., 2005; Stewart, Ricci, Chee, et al., 2003). In 2000, the economic burden of depression in the United States was estimated to be \$83.1 billion, including \$51.5 billion (62%) in indirect workplace expenses, \$26.1 billion (31%), and \$5.4 billion (7%) in expenditures associated with suicide-related death (Greenberg, Kessler, Birnbaum, et al., 2003). Many research studies make use of the idea of lost productive time in order to work out the hidden costs associated with "absenteeism" and "presenteeism" lost productive time (LPT). Absenteeism is the lost productive time (LPT) induced by poor on-the-job performance. (Brouwer, Koopmanschap,

Rutten, 1999), which can be caused by a variety of factors. Absenteeism is the lost productive time (LPT) resulting from poor work performance while present (Brouwer, Koopmanschap, Rutten, 1999), which can be caused by a lack of focus, motivation, weariness, or poor decision-making. Employee surveys are frequently used to assess presenteeism, Sanderson, Tilse, Nicholson, et al. (2007) and Kessler, Barber, Beck, et al. (2003) both included metrics that ranged from single items evaluating how much time an employee spent at work while sick all the way to multiple items that took into account the employee's own perception of their productivity in comparison to the productivity of their coworkers. Similarly, Wang, Patrick, Avorn, et al. (2006) and Berndt, Finkelstein, Greenberg, et al. (1998) also used a variety of metrics to evaluate employee performance. Workers' access to proper MDD care is hampered by a lack of awareness and social stigma (Wang, Berglund, Olfson, et al., 2005). Comprehending how much productivity is lost due to MDD, as well as the advantages of treatment in reducing lost productive time (LPT), can help make decisions about devoting extra funds to this group or broadening access to care. We employed the World Health Organization's Health and Work Performance Questionnaire (HPQ) to measure the loss of work productivity among individuals with MDD who had seen a therapist in Seoul, Korea (Kessler, Barber, Beck, et al., 2003). The lost productive time (LPT) was then compared to that of a healthy working control group, and the amount of productivity regained after 8 weeks of antidepressant therapy in an outpatient psychiatric setting was computed. Only MDD was taken into account in this investigation. After providing informed permission, 102 patients with MDD participated in the study. Age- and gender-matched healthy employees from the same region were recruited for the comparison group using local newspaper and online advertising. Initially, 150 persons were tested for DSM diseases using the Structured Clinical Interview in Korean, and another 100 people of similar age and gender distribution who did not have major physical or mental difficulties were chosen. Because significant job stress and upcoming life events, such as job loss, might bias productivity appraisal results, the data analysis excluded nine healthy participants. The surveys resulted in 91 persons being allocated to the comparison group. After an in-depth conversation, each patient gave their approval for taking part in this research after being fully informed. This investigation was authorized by the institutional review board of Inje University Seoul Paik Hospital.

People in high-strain employment reported greater levels of stress and job dissatisfaction in a recent large population research. Both men and women in the service, processing, and manufacturing industries expressed the highest dissatisfaction with their jobs. Job stress, shift work, and lower wages were all factors contributing to their discontent. Job dissatisfaction has been associated to greater stress, poor mental health, and more disability days (Shields, 2006). According to these findings, assessing job discontent at work might be a good indicator of depression. Burnout is a term that appears often in studies of mental health and impairment in a number of occupations, notably among health care professionals. Burnout appears to overlap considerably with depression and/or dysthymia, however this has not been properly investigated.

The research conducted on Finnish employees indicated that there is a strong correlation between burnout and strain, suggesting that this could have an impact on the relationship between strain and depression. According to the study, those in high-strain jobs are at a much greater risk of burnout, depressive symptoms, and depressive disorders than those in low-strain jobs, with the risk being 7.4 times, 3.8 times, and 1.7 times greater, respectively. (Ahola, Honkonen, Kivimaki, et al., 2006). In a prospective study of dentists, burnout was discovered to be an intermediary factor (Ahola, Hakanen, 2007). In terms of job satisfaction, measurements of occupational pressure and burnout may be useful as risk factors for clinical depression. There is, however, limited evidence that responding proactively in "burnout" situations lessens the likelihood of recurrent depression. Depression increases the likelihood of job loss and eventual unemployment. Depression is a major cause of job loss in comparison to chronic illnesses like rheumatoid arthritis, as individuals with depression are four to five times more likely to be laid off. Furthermore, depression is often the cause of job turnover, with the most likely result being the taking of a lower-paying role. This can be attributed to inadequate job performance, discrimination, employment accommodation barriers, and treatment quality (Lerner, Adler, Chang, et al., 2004). Following up on previously healthy young adults produced comparable effects, with those who were already disadvantaged suffering the most from unemployment and income loss (Whooley, Kiefe, Chesney, et al., 2002). It has been suggested that workplace circumstances are likely to play a part in the emergence of depression, which in turn is a risk factor for

suicide. Unemployment itself is a substantial risk factor for suicide, and so it is important to offer job assistance to those who are unable to work due to depression. Research indicates that doctors are just as likely to suffer from depression as the general population, and this is a major risk factor for suicide. Professional and personal losses, financial troubles, a tendency to work too much, and dissatisfaction with their job have all been recognized as risk factors for physician suicide (Center, Davis, Detre, et al., 2003).

Depression is sometimes regarded as a taboo topic in the workplace. A huge proportion of people suffer from work-related depression. Most people hide their sadness at work because they are afraid of being judged and ostracized. However, as a result of their depression and anxiety, most employees suffer workplace discrimination and unfavorable attitudes from employers and coworkers. Workplace depression is a mental disorder exacerbated by an unsafe working environment (Evans-Lacko, Knapp, 2018). Employees spend around 90,000 hours at work during their working careers (Rasool, Koser, 2016). Employees' poor mental health can be exacerbated by internal and external workplace variables, as well as inefficient management (McTernan, Dollard, LaMontagne, 2013). Job depression is stigmatized, and most persons with mental illnesses have additional challenges; they hide their mental diseases at work because most people are ignorant of workplace sorrow. Presentism is also seen to be a component of workplace depression, which is another source of employee productivity loss when an employee shows up for work but does not perform well or is disengaged (mentally absent). When employees leave their jobs due to workplace depression and are replaced by others, the organization faces the employment cost (Cocker, Martin, Scott, Venn, Sanderson, 2013).

Work productivity is the measurement of employee effort, according to Cocker, Martin (Enis Bulak, Turkyilmaz, 2014), whereas work engagement, efficiency, accuracy, and effectiveness reflect the input of human resources into productive output. Employees must exert effort and maintain high levels of job engagement while utilizing limited resources in order to spend time on the intended objective, which is referred to as work productivity (Chang, Graff Zivin, Gross, Neidell, 2019). According to a prior research, productivity does not have a single

operational meaning and instead fluctuates depending on various situations, organizational kinds, and cultures (Khan, Sabri, Nasir, 2016; Street, Lacey, Somoray, 2019; Newmann-Godful, 2013). Worker productivity is linked to organizational productivity and job performance, both of which influence work quality (Yusoff, Khan, 2013). The productivity of a job is influenced by several factors, including the working environment, supportive supervision, individual abilities, and a comprehensive set of motivational policies and organizational standard operating procedures (SOPs). Employee productivity can be measured and monitored using organizational characteristics (social, human, financial, and organizational capital) (Faisal Ahammad, 2015; Shier, Nicholas, Graham, and Young, 2018). The office environment is also significant in increasing and boosting worker productivity based on the employee's capacity and social network. Employees that are satisfied with their occupations are more productive and enthusiastic about them. As a result, businesses should prioritize building a workplace that benefits both the corporation and its people (Mathieu, Wolfson, Park, 2018).

## **2.5 Hypothesis**

H1: There is a high level of depression among sulaymaniyah office workers.

H2: There is a low level of productivity among sulaymaniyah office workers.

H3: There is a negative relationship between depression and employee productivity among sulaymaniyah office workers.

## **2.6 Research Framework**

Based on the previous discussion on the literature review and suggestions gathered from other researchers, a framework has been developed for analyzing the relationship between depression and employee productivity.

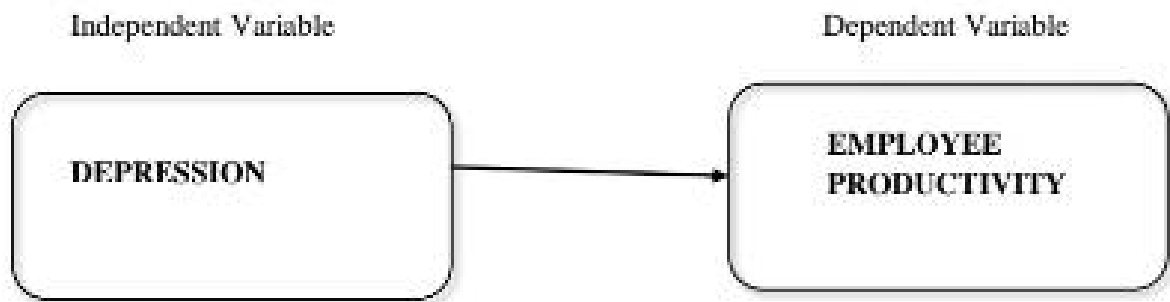


Figure 2.1 Research Framework

## 2.7 Summary

This chapter has provided an overview of office workers in Sulaymaniyah, conducted a literature review of depression, employee productivity, and their relationship, and outlined the research framework.



## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The methodologies utilized to conduct the research are described in this chapter, with the purpose of establishing the study's validity. It goes into detail on the study plan, population, instrument, and procedures utilized to analyze the data.

#### **3.2 Research Design**

Research design refers to the overall plan or strategy implemented to conduct a scientific investigation and gather empirical evidence to address research questions or test hypotheses. It encompasses the systematic arrangement of methods, procedures, and techniques employed to collect, analyze, and interpret data. A well-designed research study ensures the validity, reliability, and generalizability of findings by carefully selecting the appropriate research approach (such as experimental, correlational, or qualitative), determining the target population or sample, defining variables and measures, and establishing the sequence and timing of data collection. The research design serves as a roadmap, guiding researchers in effectively investigating phenomena, drawing meaningful conclusions, and contributing to the existing body of knowledge in a rigorous and reliable manner.

A study design is the development of conditions for data collection and analysis in such a way that seeks to balance relevance to the research objective with economy and method. (Jahoda, Deutch, and Cook. Research Methodology, Ahuja Ram, 2010).

The plan, structure, method, and research concaved in order to gain assurance to search inquiry and manage variation. (P V Borwankar et al., Research Methodology, 1995). According to Henry Manheim, research design not only predicts and describes the seemingly unlimited number of data collection, processing, and analysis decisions, but it also gives a logical justification for these decisions. (Research Methods in the Social Sciences, by Claire Selltiz and colleagues, 1962) Zikmund termed as "a master plan defining the methods and procedure for collecting and analyzing the needed information". F J Herbst and D Coldwel (2004).

This study uses a quantitative cross-sectional study with a questionnaire approach to investigate the association between depression and employee productivity. as well as any disparities between male and female job productivity under certain conditions. Statistical tools such as SPSS are used to examine data acquired from diverse sources. To detect correlations between the two variables and show the findings in the form of tables, the explanatory research design is used. The study's purpose is to gain a better understanding of the relationship between depression and employee productivity, as well as to look for any differences in male and female job productivity under certain settings.

### **3.3 Population and Sampling**

In this study, the focus is on office workers in Sulaymaniyah who are experiencing depression. The population consists of office workers from various organizations in the city.

The sampling technique used in this research is convenience sampling. Convenience sampling is a non-probability sampling method where the researcher selects participants based on their accessibility and availability. In this case, convenience sampling is employed because the number of office workers in Sulaymaniyah who meet the criteria of being depressed is relatively low, making it

difficult to conduct a random sampling method. Hence, the researcher selects participants based on their convenience and willingness to participate in the study.

The respondents for this study are office workers from three different organizations in Sulaymaniyah. These organizations include IQ Online Company, Qaiwan Group, and FKR Agency for Creativity and Advertisement. The distribution of respondents among these organizations is 55 respondents from IQ Online Company, 35 respondents from Qaiwan Group, and 18 respondents from FKR Agency for Creativity and Advertisement.

These organizations were chosen as target groups for the study due to their provision of depression support groups for their office workers. Given that the research focuses on depressed office workers in Sulaymaniyah, these organizations present an ideal target population. By selecting participants from these organizations, the study aims to gather insights from individuals who have access to support systems and resources related to depression within their workplace. This approach allows for a comprehensive examination of the challenges faced by office workers in different organizational contexts and their utilization of available support structures.

The utilization of convenience sampling and the inclusion of office workers from IQ Online Company, Qaiwan Group, and FKR Agency for Creativity and Advertisement provide an opportunity to gain valuable insights into the experiences and needs of depressed office workers in Sulaymaniyah.

Table 3.1 Respondent's Population

No.	Office Works Organizations	No. of Employees
1	IQ Online Company	55
2	Qaiwan Group	35
3	FKR Agency for Creativity and	18

	Advertisement	
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### **3.4 Data Collection Method**

A data collection methodology is a set of ways for collecting data relating to a study's variables. The primary sources were used to collect data for this quantitative analysis. After evaluating various methods of primary data collecting, it was determined that a questionnaire utilizing Google Forms was the best way to take it. The variables of the study were considered when developing the questionnaire. Furthermore, prior to disseminating the questionnaire, consent from the university administration was required. After these procedures are finished, the questionnaire will be distributed to the chosen respondents. This method of data collection will allow the data to be gathered.

### **3.5 Research Instrument**

A questionnaire is a type of research instrument composed of a series of questions meant to elicit information from respondents. (Saul McLeod & Saul McLeod, 2018). As a result, there are 26 items on depression and employee productivity in the questionnaire.

To collect primary data for the study, a questionnaire distribution technique will be used. The questionnaire is designed on the Five-Likert scale format. A five-item response is assigned to each question or statement. The quantity of agreement is determined by the five components of agreement based on the statements/questions (strongly agree, agree, neutral, disagree, strongly disagree). The questionnaire questions for both variables will be adapted from the resources listed below:

Table 3.2 Instrumentation

Section	Details
PART A	Demographic Questions
PART B	Depression (20 Questions) Adapted From: William W. K. Zung, MD, Durham, NC (2013) Reliability: 0.864
PART B	Employee's Productivity (8 Questions) Adapted From: Mohammad, Md, Bowyer & Md (2020) Reliability: 0.868

### 3.6 Data Analysis Method

The analysis of data is a critical phase in any research process. It enables scientists to get insights into their data, detect patterns and trends, and form relevant conclusions. SPSS (Statistical Package for Social Sciences) is a comprehensive data analysis software that allows academics to evaluate their data fast and accurately. The initial stage in SPSS data analysis is to enter the info into the program. Depending on the data format, it may be imported straight from a file, such as an Excel spreadsheet or a text file, or it may need to be manually input. Once the data has been entered into the computer, the researcher can begin the process of evaluating it. The data will next be subjected to descriptive statistics. This will provide you a high-level view of the data, including the mean, median, mode, standard deviation, and range. This will help the researcher comprehend the data better and detect any outliers or other unexpected outcomes. After that, the researcher might proceed to more advanced analysis, such as correlation and

regression. Correlation measures the link between two or more variables, whereas regression predicts the value of one variable based on the values of other variables. After completing the analysis, the researcher can develop graphs and charts to graphically display the data. This can make the results easier to comprehend and interpret. Finally, the researcher might draw findings and make recommendations based on the analysis results. This will aid future research and decision-making. SPSS data analysis is a significant tool for academics. It enables them to examine their data fast and precisely, allowing them to form significant conclusions. Researchers may ensure that they get the most out of their data analysis by following the methods indicated above.

### **3.6.1 Descriptive Analysis**

The acquired data undergoes descriptive analysis to determine the correlation levels between depression and employee productivity, measured through mean scores, frequencies, and percentages. Consequently, the research heavily relies on frequency analysis, encompassing values spanning from very low to exceedingly high. This type of analysis holds significant importance in the data analysis process as it facilitates the provision of exceptionally useful insights by means of summarization. Through descriptive analysis, researchers gain a more comprehensive understanding of the explicitly modeled observation sets.

### **3.6.2 Inferential Statistics**

Inferential statistics play a crucial role in the analysis of data, particularly in correlational analysis. They aid in evaluating the data's ability to generalize to a broader population. In this study, the Spearman correlation is employed to examine the relationship between the variables.

Table 3.3 Demographic questionnaire

Variable	item
<b>Demographic Questionnaire</b>	Age
	Gender
	Current marital status
	Education level
	Department

Table 3.4 Depression questionnaire

Variable	item
<b>Depression</b>	I'm depressed and blue.
	I feel the best in the morning.
	I get weeping bouts or feel like it.
	I have difficulties sleeping at night.
	I eat as much as I used to.
	I'm noticing that I'm losing weight.
	My heart is beating faster than normal.
	I become weary for no reason.
	My thinking is as clear as it was before.
	I find it simple to accomplish the things I used to do.
	I'm restless and can't sit still.
	I am optimistic about the future.
	I'm a little more irritable than usual.
	Making decisions comes naturally to me.
	I believe I am useful and required.
	My life is quite full.
	Others would be better off if I died, in my opinion.
	I still like the activities I used to adore.

### 3.7 Questionnaire Development

Table 3.5 Employee Productivity questionnaire

Variable	item
<b>Employee Productivity</b>	I usually do my task on time.
	I am capable of devising innovative solutions to work-related challenges.
	I am pleased with the volume of output that I create.
	My company's output goal is within my grasp.
	I work without wasting raw materials.
	I prefer to work carefully without engaging in talking with others.
	I am pleased with the standard of my work.
	I am capable of meeting the technical requirements of the job.

### 3.8 Summary

Finally, this chapter provides a brief overview of how this study is carried out. Its goal is to convince the reader that this study was carried out with validity and reliability.



## **CHAPTER 4**

### **DATA ANALYSIS**

#### **4.1 Introduction**

The objective of this chapter is to analyze the data collected during the research and interpret the findings in order to achieve the research objectives and provide answers to the research question based on the acquired data. In order to conduct this analysis, SPSS Statistics Software was employed to generate frequency analysis tables of demographic data, conduct reliability tests, analyze mean scores pertaining to work-life balance and employee productivity, and examine correlations between independent and dependent variables in the study.

#### **4.2 Demographic Analysis**

Demographic analysis is a crucial aspect of research that involves examining and understanding the characteristics of a population, such as age, gender, ethnicity, income, education level, and other relevant factors. This analysis provides researchers with valuable insights into the social and economic context of the population being studied, enabling them to identify patterns and trends that can inform their research. Demographic analysis is commonly used in a range of disciplines, including social sciences, marketing, and public health, to help researchers make informed decisions about study design, sampling strategies, and data analysis. By utilizing demographic analysis, researchers can gain a better understanding of their target population and ensure that their research findings are accurate, reliable, and applicable to the broader population.

### 4.2.1 Respondent's Age

Table 4.1 Respondent's Age

		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Valid</b>	20-25	5	4.6	4.6	4.6
	26-31	39	36.1	36.1	40.7
	32-38	40	37.0	37.0	77.8
	39-44	24	22.2	22.2	100.0
	Total	108	100.0	100.0	

The data provided shows the distribution of respondents' age in different age brackets. The majority of respondents (37.0%) fall in the 32-38 age bracket, closely followed by those in the 26-31 age bracket (36.1%). A smaller percentage of respondents fall in the 39-44 age bracket (22.2%), while only a small proportion of respondents (4.6%) are aged between 20-25. This information is useful in understanding the age distribution of the population being surveyed.

#### 4.2.2 Respondent's Gender

Table 4.2 Respondent's Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Valid</b>	<b>Male</b>	33	30.6	30.6	30.6
	<b>Female</b>	75	69.4	69.4	100.0
	<b>Total</b>	108	100.0	100.0	

Based on the given data, the demographic analysis shows that the majority of the respondents were female, accounting for 69.4% of the total. Meanwhile, males represented 30.6% of the respondents. Understanding the gender distribution of respondents is crucial for businesses and organizations because it can also help in creating a more diverse and inclusive environment that considers the perspectives of different genders.

#### 4.2.3 Work state

Table 4.3 Work state

		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Valid</b>	<b>Part Time</b>	17	15.7	15.7	15.7

	<b>Full time</b>	91	84.3	84.3	100.0
	<b>Total</b>	108	100.0	100.0	

The demographic analysis of work state for the given data shows that the majority of the respondents, which is 84.3%, are working full-time. This suggests that a significant portion of the sample population is engaged in full-time employment. On the other hand, 15.7% of respondents reported that they are working part-time. This figure indicates that there is still a sizeable portion of the population that is either unable or not interested in working full-time. A deeper analysis of this data, along with other demographic variables, can provide more insights into the employment patterns and trends among the respondents.

#### 4.2.4 Education level

Table 4.4 Education level

		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
<b>Valid</b>	<b>Associate degree</b>	4	3.7	3.7	3.7
	<b>Bachelor's degree</b>	86	79.6	79.6	83.3
	<b>Master degree</b>	18	16.7	16.7	100.0
	<b>Total</b>	108	100.0	100.0	

Based on the data provided, it can be observed that a majority of the respondents, 79.6%, held a bachelor's degree. This suggests that the sample population is well-educated, with a significant proportion having attained at least a four-year undergraduate education. 16.7% of respondents held a master's degree, indicating that a smaller but still substantial portion of the population had gone on to pursue advanced graduate education. Interestingly, none of the respondents reported having a Ph.D. or higher, which may indicate that the sample population was limited in its representation of individuals with doctoral-level education. Overall, the data suggests that the sample population has a relatively high level of education, with a focus on undergraduate and master's level degrees.

### 4.3 Reliability Statistics

The reliability statistics for the given information indicate high internal consistency for both the dependent variable, employee productivity, and the independent variable, depression. Cronbach's Alpha of 0.931 for the dependent variable and 0.897 for the independent variable suggest that the measurements for both variables are highly reliable and consistent. This indicates that the items used to measure these variables are consistent with each other and are measuring the same construct consistently. Therefore, the results obtained from the measurements are likely to be accurate and trustworthy.

Table 4.5 Reliability Statistics

Items	No. of Items	Cronbach's Alpha
<b>Dependent Variable:</b> <b>Employee Productivity</b>	8	0.931
<b>Independent Variable:</b> <b>Depression</b>	18	0.897

#### **4.4 Descriptive Statistics (Mean Score Analysis)**

Descriptive Statistics, specifically Mean Score Analysis, has been performed to provide a more detailed understanding of the collected data and to reinforce and condense the findings of this research. With the objective of meeting the research goals, a comprehensive Mean Score Analysis has been executed, which will be thoroughly elucidated in the subsequent subsection.

##### **4.4.1 Objective 1: To examine the level of depression among office workers in Sulaymaniyah**

The measured independent variable, the depression mean score, exhibits a quantified value of 3.3858. This numerical representation aligns with the moderate range, as stipulated by the esteemed scholars Zikmund, Babin, Carr, and Griffin (2010). Consequently, the research findings draw a definitive inference, asserting that the level of depression experienced among office workers in Sulaymaniyah is indeed moderate in nature.

Table 4.6 Descriptive Statistics of Depression

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>1. I'm depressed and blue.</b>	108	3.79	1.086
<b>2. I feel the best in the morning.</b>	108	3.24	.946

<b>3. I get weeping bouts or feel like it.</b>	108	3.74	1.233
<b>4. I have difficulties sleeping at night.</b>	108	3.87	1.136
<b>5. I eat as much as I used to.</b>	108	3.18	1.151
<b>6. I'm noticing that I'm losing weight.</b>	108	3.50	1.315
<b>7. My heart is beating faster than normal.</b>	108	3.59	1.033
<b>8. I become weary for no reason.</b>	108	3.66	1.006
<b>9. My thinking is as clear as it was before.</b>	108	3.21	.948
<b>10. I find it simple to accomplish the things I used to do.</b>	108	3.29	.918
<b>11. I'm restless and can't sit still.</b>	108	3.87	1.193

<b>12. I am optimistic about the future.</b>	108	3.55	.847
<b>13. I'm a little more irritable than usual.</b>	108	3.63	.635
<b>14. Making decisions comes naturally to me.</b>	108	3.44	.777
<b>15. I believe I am useful and required.</b>	108	3.53	.676
<b>16. My life is quite full.</b>	108	2.93	.651
<b>17. Others would be better off if I died, in my opinion.</b>	108	2.47	.690
<b>18. I still like the activities I used to adore.</b>	108	2.47	.880
<b>Total</b>	108	3.3858	.58617

Questions 17 and 18 display the lowest mean scores, measuring 2.47 each, accompanied by standard deviations of 0.690 for question seventeen and 0.880 for question eighteen, respectively. In contrast, Questions 4 and 11 exhibit the highest



mean scores of 3.87, accompanied by standard deviations of 1.136 for question four and 1.193 for question eleven.

#### **4.4.2 Objective 2: To examine the level of employee productivity among office workers in Sulaymaniyah**

The dependent variable, namely employee productivity, exhibits a mean score of 2.8727. This score falls within the moderate range as established by Zikmund, Babin, Carr, and Griffin (2010). Consequently, it can be inferred that the productivity levels of office workers in Sulaymaniyah are positioned at a moderate level.

Table 4.7 Descriptive Statistics of Employee Productivity

	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>1. I usually do my task on time.</b>	108	2.67	.854
<b>2. I am capable of devising innovative solutions to work-related challenges.</b>	108	3.00	.797
<b>3. I am pleased with the volume of output that I create.</b>	108	2.93	.720

<b>4. My company output goal is within my grasp.</b>	108	2.86	.742
<b>5. I work without wasting raw materials.</b>	108	3.00	.723
<b>6. I prefer to work carefully without engaging in talking with others.</b>	108	2.60	1.004
<b>7. I am pleased with the standard of my work.</b>	108	2.56	.714
<b>8. I am capable of meeting the technical requirements of the job.</b>	108	3.36	.676
<b>Total</b>	108	2.8727	.64534

Question 7 exhibits the lowest mean score of 2.56, accompanied by a standard deviation of 0.714. On the other hand, question eight demonstrates the highest mean score of 3.36, with a standard deviation of 0.676.

## 4.5 Pearson Correlation Analysis

A Pearson correlation analysis has been meticulously conducted with the primary objective of ascertaining the degree of correlation existing between the variables of depression and Employee Productivity within the population of office workers situated in Sulaymaniyah. These comprehensive analyses serve a paramount purpose in the fulfillment of research objective three, thus substantiating the validity and significance of this research endeavor. Elaborated findings, elucidating the intricate relationship between the aforementioned variables, shall be expounded upon and presented in a clear and organized manner in Table 4.8, enhancing the accessibility and comprehensibility of the research outcomes.

### 4.5.1 Objective 3: To examine the relationship between depression and employee productivity among office workers in Sulaymaniyah

Table 4.8 Pearson Correlation.

		Depression	Employee Productivity
Depression	Pearson Correlation	1	-.564**
	Sig. (2-tailed)		.000
	N	108	108
Employee Productivity	Pearson Correlation	-.564**	1

	Sig. (2-tailed)	.000	
	N	108	108
<b>**.</b> Correlation is significant at the 0.01 level (2-tailed).			

The Pearson correlation coefficient,  $r = -0.564$ , reveals a negative relationship between depression and employee productivity among office workers in Sulaymaniyah. This statistical measure assesses the strength and direction of the linear association between two variables. In this case, the negative value indicates that as levels of depression increase, employee productivity tends to decrease. The magnitude of the coefficient suggests a moderate negative correlation, implying that higher levels of depression are moderately associated with lower levels of productivity. These findings highlight the importance of addressing depression in the workplace, as it can have a detrimental impact on employee performance and overall productivity.

#### 4.6 Summary

Within the confines of this particular chapter, an extensive and meticulous data analysis has been skillfully undertaken with the primary intention of expounding upon and visually presenting the data derived from the comprehensive questionnaires. In order to effectively achieve the predetermined research objectives that were meticulously crafted during the preliminary stages of this study, an array of robust statistical methodologies has been employed. Notably, these include the implementation of descriptive frequency analysis, a rigorous examination of reliability through testing, a comprehensive assessment of mean scores, and an in-depth exploration of Pearson correlation analyses. Consequently, the results gleaned from these rigorous analyses can now be succinctly summarized as follows:

Table 4.9 Findings Summary

Research Objectives	Findings	Interpretation
<b>RO1:</b> To examine the level of depression among office workers in Sulaymaniyah	Mean score: 3.3858 Level: Moderate	The level of depression among office workers in Sulaymaniyah is moderate
<b>RO2:</b> To examine the level of employee productivity among office workers in Sulaymaniyah	Mean score: 2.8727 Level: Moderate	The level of productivity among employees in office workers in Sulaymaniyah is moderate.
<b>RO3:</b> To examine the relationship between depression and employee productivity among office workers in Sulaymaniyah	Correlation: $r = -0.564$	There is a moderately strong negative correlation between depression and employee productivity

## **CHAPTER 5**

### **CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

The primary objective of this chapter is to elucidate the study's findings and draw conclusions. Moreover, it aims to propose suggestions for future research on similar topics, as well as provide recommendations specifically tailored to office workers.

#### **5.2 Discussion of Findings**

The objective of this research is to elucidate the correlation between depression and employee productivity within the context of office workers in Sulaymaniyah. Through the presentation and analysis of the obtained results, it is anticipated that this study will successfully achieve its goals and provide comprehensive answers to all three research inquiries.

##### **5.2.1 Objective 1: To examine the level of depression among office workers in Sulaymaniyah**

Based on the findings of Objective 1, it can be inferred that among office workers in Sulaymaniyah, there is a moderate level of depression. This inference is based on the lower mean scores (2.47) observed for questions 17 and 18, indicating a relatively lower prevalence of depressive symptoms related to feeling hopeless or having difficulty concentrating. Conversely, higher mean scores (3.87) for questions

4 and 11 suggest a higher prevalence of depressive symptoms related to feeling down, depressed, experiencing little pleasure, feeling tired, or having low energy. These inferences provide valuable insights into the specific areas of depression that may require attention and intervention to support the mental well-being of office workers in Sulaymaniyah.

One of the reasons for the moderate level of depression among office workers in Sulaymaniyah, as observed in the analysis of the obtained data, is the prevalence of full-time employment among the respondents. A significant number of office workers in the study were engaged in full-time work, which often entails longer working hours, increased job demands, and limited personal time for rest and relaxation. Full-time employment can create a stressful work environment, with higher workloads, deadlines, and pressures to perform consistently. These factors can contribute to feelings of exhaustion, burnout, and ultimately impact the mental well-being of office workers. The lack of sufficient time for leisure activities, self-care, and social interactions due to full-time work commitments may further exacerbate feelings of stress and isolation, leading to a moderate level of depression. Therefore, the association between full-time employment and the observed moderate level of depression among office workers highlights the need for addressing work-life balance and implementing strategies to support the mental health of employees in Sulaymaniyah.

Participants who worked > 10 hours per day, slept 6 hours per day, and reported inadequate sleep were 37%, 43%, and 97% more likely to be sad than those who worked 6 to 8 hours per day, slept 6 to 8 hours per day, and reported sufficient sleep (P.05). Participants who worked > 10 hours per day or > 8 to 10 hours per day with 6 hours per day of sleep had a 41%-169% greater incidence of depression than those who worked 6 to 8 hours per day with 6+ hours per day of sleep (P.05). Participants reporting insufficient sleep in three work-hour groups (6 to 8, > 8 to 10, and > 10 hours per day) had a 62%-179% increase in depression compared to those working 6 to 8 hours per day and having adequate sleep (P.05). Subjects in any work-hour category with 6+ hours of sleep or subjectively sufficient sleep had no significant effects on depression. (Akinori Nakata, 2011).

### **5.2.2 Objective 2: To examine the level of employee productivity among office workers in Sulaymaniyah**

Based on the researcher's analysis of the gathered data, it has been observed that the level of employee productivity among office workers in Sulaymaniyah is evaluated as moderate. The mean scores for questions 7 and 8 provide additional insights into specific aspects of employee productivity. Question 7, with the lowest mean score of 2.56 and a standard deviation of 0.714, suggests that office workers in Sulaymaniyah may struggle with productivity-related issues, such as time management or task completion. On the other hand, question 8 demonstrates the highest mean score of 3.36, indicating a relatively higher level of productivity related to meeting deadlines or achieving work targets.

It is important to acknowledge that despite their mental state and potential obstacles, office workers in Sulaymaniyah persist in fulfilling their duties due to the fear of potential job loss. However, it is crucial to recognize the impact of fear-induced motivation on employee productivity. When employees are primarily driven by the fear of negative consequences, their productivity tends to suffer, which can subsequently affect their overall job satisfaction and well-being.

The prevalent climate of job insecurity, characterized by the fear of job loss, may hinder individuals from fully investing themselves in their work, leading to decreased levels of commitment and enthusiasm. Moreover, fear-induced motivation can undermine the development of a positive and supportive work environment, inhibiting employees from taking risks, offering creative solutions, or contributing innovative ideas.

In light of these findings, it is crucial for organizations in Sulaymaniyah and beyond to address the issue of job insecurity and its impact on employee productivity. Proactive measures should be taken to enhance job security, such as transparent communication regarding performance expectations and career advancement opportunities. By alleviating employees' fears, organizations can foster a more conducive work environment and promote intrinsic motivation. Additionally,



creating a culture that emphasizes personal growth, recognition, and a sense of fulfillment can help shift employees' focus from fear-driven productivity to a more positive and engaged approach to work. These interventions can contribute to improving employee productivity, job satisfaction, and overall well-being.

### **5.2.3 Objective 3: To examine the relationship between depression and employee productivity among office workers in Sulaymaniyah**

Based on the analysis of the data conducted by the researcher in chapter four, a negative relationship between depression and employee productivity among office workers in Sulaymaniyah has been identified. This implies that as the levels of depression increase, employee productivity decreases. The findings suggest that employees who experience higher levels of depression may face challenges in maintaining optimal productivity levels in the workplace. This negative relationship could be attributed to various factors associated with depression, such as decreased motivation, difficulty concentrating, and reduced energy levels, which can all significantly impact work performance. Therefore, addressing and managing depression among office workers in Sulaymaniyah may be crucial for enhancing employee productivity and overall well-being in the workplace.

When compared to other mental health issues, depressive disorders are rather frequent in most workplaces. The bulk of studies on mental health and productivity have been carried out as part of national surveys or in patient populations rather than in workplaces. The majority of research find links between mental health issues and absenteeism (especially shortterm disability absences). When presenteeism is examined using a standardized questionnaire, the results demonstrate that depression has a considerable influence on job productivity. According to studies, treatment costs for employees with depression may be compensated by lower absenteeism, disability, and on-the-job productivity losses. (Wayne N et al., 2008).

### **5.3 Recommendations**

This section will be further discussed regarding future recommendations pertaining to the research aspects.

#### **5.3.1 Recommendations for Future Research**

The relationship between depression and employee productivity is a topic of great significance in the field of occupational health and well-being. The case study conducted on Sulaymaniyah office workers provides valuable insights into this complex relationship, shedding light on the challenges faced by individuals and organizations. However, further research is necessary to deepen our understanding and address several key aspects that were beyond the scope of this study. The following recommendations outline potential avenues for future research on this topic:

To gain a comprehensive understanding of the relationship between depression and employee productivity, several key points should be considered. Longitudinal studies provide valuable insights by tracking individuals' mental health and productivity over an extended period, establishing a causal relationship between depression and work outcomes. Exploring underlying mechanisms and potential moderators is crucial, as factors like workplace stressors, social support, and coping strategies can mediate or moderate the impact of depression on productivity. Designing and evaluating effective intervention strategies, such as cognitive-behavioral therapy and workplace accommodations, is important for improving mental health and productivity. Organizational factors, including culture, leadership, and support systems, must be investigated to create healthy work environments and implement evidence-based interventions. Considering the impact of technology on mental health and productivity, especially in digital workplaces, is essential. Finally, conducting cross-cultural studies will contribute to understanding cultural factors and developing culturally sensitive interventions, ensuring research findings apply to diverse settings. By addressing these points, researchers can enhance knowledge on

the relationship between depression and productivity and support the well-being of employees in the workplace.

In conclusion, the relationship between depression and employee productivity is a multifaceted issue that requires continued research and attention. The recommendations provided above offer potential avenues for future research, ranging from longitudinal studies to examining organizational factors and leveraging technology. By addressing these gaps in knowledge, researchers can contribute to the development of evidence-based interventions, policies, and practices that enhance the well-being and productivity of employees in the workplace.

### **5.3.2 Recommendations for office workers**

To promote a healthier work environment in Sulaymaniyah and similar settings, several key strategies can be implemented. First, it is crucial to promote work-life balance among office workers. This can be achieved by providing resources and information on effective time management, setting boundaries between work and personal life, and engaging in activities that promote relaxation and well-being. Encouraging employees to maintain a healthy work-life balance reduces the risk of depression and enhances productivity.

Creating a supportive work environment is equally important. This can be achieved by fostering open communication, promoting teamwork, and providing opportunities for social interaction among colleagues. Implementing policies that address workplace stressors and ensuring employees feel comfortable seeking help when needed are vital steps in valuing employee mental health and well-being.

To raise awareness about mental health issues, including depression, among office workers, it is essential to implement mental health awareness programs. Workshops, seminars, or training sessions can educate employees about recognizing the signs of depression, managing stress, and seeking appropriate support. Inviting mental health professionals to provide guidance and support can also be beneficial.

Encouraging regular physical activity among office workers is another key aspect. Employees should be encouraged to engage in regular exercise or physical activities during breaks or outside of work hours. Providing facilities such as fitness centers, sports clubs, or wellness programs can support employees in maintaining an active lifestyle and contribute to their overall well-being.

Offering flexible work arrangements, such as flexible hours or remote work options, where feasible, can greatly contribute to a healthier work environment. This flexibility helps employees manage personal commitments, reduces commuting stress, and creates a work environment that supports mental well-being.

Establishing employee assistance programs (EAPs) is another valuable initiative. These programs offer confidential counseling services and mental health resources, providing employees with professional support and guidance. EAPs make it easier for employees to address and manage mental health issues like depression.

To ensure managers and supervisors are equipped to support their teams, it is crucial to provide them with training on recognizing the signs of depression and creating a supportive work environment. Communication skills, empathy, and appropriate responses to employees experiencing mental health challenges should be emphasized.

Addressing workloads and improving job design is another important consideration. Assessing and addressing workloads ensures they are manageable and aligned with employees' capabilities and resources. Reviewing job design and restructuring tasks or responsibilities can minimize stress and optimize productivity. Seeking employee feedback and involving them in decision-making processes creates a more balanced and meaningful work experience.

Encouraging the formation of peer support networks within the workplace is beneficial. These networks provide a sense of community and support, allowing employees to share experiences, offer advice, and lend a listening ear to their colleagues who may be dealing with depression or related challenges.

It is crucial to regularly monitor and evaluate the effectiveness of implemented initiatives and programs. This helps gauge their impact on employee mental health and productivity. Collecting feedback from office workers and using it to refine and improve existing strategies is vital. Staying updated with the latest research and best practices in the field ensures continuous enhancement of employee well-being.

By implementing these recommendations, office workers in Sulaymaniyah and similar settings can be better supported in managing depression, promoting mental health, and improving overall productivity.

## **5.4 Conclusion**

In conclusion, the findings of this study shed light on the relationship between depression and employee productivity among Sulaymaniyah office workers. The results clearly indicate a negative association between depression and productivity levels. These findings suggest that employees who experience higher levels of depression may face challenges in maintaining their productivity at work.

The study contributes to the existing literature on mental health and workplace performance by highlighting the specific context of Sulaymaniyah and its office workers. The negative relationship between depression and employee productivity emphasizes the importance of addressing mental health concerns within the workplace.

Understanding the impact of depression on productivity has significant implications for organizations and employers. It emphasizes the need for proactive measures to promote employee well-being and mental health support systems. By prioritizing mental health initiatives and creating a supportive work environment, employers can potentially mitigate the negative effects of depression on employee productivity.

It is essential for organizations to recognize the potential consequences of mental health issues on productivity and invest in appropriate resources, such as counseling services and stress management programs, to assist employees in coping with and managing depression. By doing so, employers can foster a healthier and more productive work environment for their employees, ultimately benefiting both the individual and the organization as a whole.

Further research in this area could explore additional factors that may influence the relationship between depression and employee productivity. Additionally, investigating potential interventions and strategies that can effectively mitigate the impact of depression on workplace performance would provide valuable insights for organizations seeking to enhance employee well-being and productivity.

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## Appendix A RESEARCH QUESTIONNAIRE



### THE RELATIONSHIP BETWEEN DEPRESSION AND EMPLOYEE PRODUCTIVITY: THE CASE OF SULAYMANIYAH OFFICE WORKERS

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Dear Participants,

We are conducting a survey as part of a final year project on "The Relationship Between Depression and Employee Productivity: The Case of Sulaymaniyah Office Workers". This research aims to investigate the extent to which depression affects the productivity of office workers in Sulaymaniyah.

Your participation in this survey is entirely voluntary and confidential. We will only use the information you provide for the purposes of this research project, and your responses will be anonymous.

The survey will take approximately 5 minutes to complete and will include questions about your demographics, work-related variables, depression symptoms, and productivity. We encourage you to answer all questions honestly and to the best of your knowledge.

Thank you for your time and participation in this important research project.

پەيوەندى نىۋان خەمۆكى و چالاكى فەرمانبەر: دۆسىيى كارمەندانى فەرمانگە كانى سلىمانى  
ئىمە ئىم نامارە كۆدەكەينەمە وەكەشنىك لە پىرۇجىكتى سالى كۆتاي خويندن لەسەر بابەتى (پەيوەندى نىۋان خەمۆكى و  
چالاكى فەرمانبەر: دۆسىيى كارمەندانى فەرمانگە كانى سلىمانى). ئامانجى ئىم تويۇنەمەيە بۆلىكەدانەمەيە رادەي  
كارىگەرى خەمۆكى لەسەر چالاكى فەرمانبەرانى فەرمانگەكانى شارى سلىمانى.  
بەشدارى كردنى تو لەم راپرسىيە خۇبەخشانە و نەئىنيە. ئەو زانىيارىانە تۆبە ئىمەي دەبەخشىت تەنھا بۆ تويۇنەمەيە  
بەكار دەهينىزىت، ھەر وەھا وەلامەكانت شار او دەبن.

وہ لَام دانہوی ئم راپرسیہ نزیکہی پینچ خولہک دمخایمنیت؛ پرسیارہکان دمریارہی دیموگرافیکی توی بہژدابوہ،  
گورانکاری سہربہکار، نیشانہکانی خمۆکی، ہروہا چالای. ئیمہ ہاندہرتدہبین بۆوہ لَام دانوہی ہموپرسیارمکان  
بہر استگۆی و باشترین زانیاریت.

سویاس بۆ کات و بەشداریکردنت لہم توئیزینہوہ گرینگہ.

### SECTION A: Demographic Questionnaire

Please read the following statements and TICK (✓)

#### 1. Age - تەمەن :

- 20-25 ☐  
26-31 ☐  
32-37 ☐  
38-44 ☐  
45 or above 45 ☐

#### 2. Gender - ڕەگەز -

Male - نێر ☐ Female - مێ ☐

#### 3. Work state - دۆخی کار -

Part time - کاتی بەش ☐ Full time - کاتی تہواو ☐

#### 4. Education level - ناستی خویندن -

- Associate degree - پلہی ھاوبەش ☐  
Bachelor's degree - بیروانامہی بەکالۆریۆس ☐  
Master degree - بیروانامہی ماستەر ☐  
Ph. D or higher - بیروانامہی دکتۆرا یان بەرزتر ☐

## **SECTION B: DEPRESSION**

Please indicate the degrees of your agreement or disagreement toward the statements below by placing the (X) upon your response according to the following options:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Statements related to Depression	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
1. I'm depressed and blue. 1- من هست به‌خه‌موکی ده‌کهم.					

<p>2. I feel the best in the morning.</p> <p>2- باشتريں ههستم ههيه لهبهياناندا.</p>					
<p>3. I get weeping bouts or feel like it.</p> <p>3. لهپير توشي گريان دهم، يان دهموښت بگريم.</p>					
<p>4. I have difficulties sleeping at night.</p> <p>4. شهوان كښههه خهوتتم ههيه.</p>					
<p>5. I eat as much as I used to.</p> <p>5 به ههمان ريزه خواردن دمخوم كهراهاوم . لهسهرى</p>					

<p>6. I'm noticing that I'm losing weight.</p> <p>تیبینی ئەرە دەكەم كۆشەم دادەبەزیت.6</p>					
<p>7. My heart is beating faster than normal.</p> <p>7.دَلَم خیراتر له ئاسایی لێدەدات.</p>					
<p>8. I become weary for no reason.</p> <p>8- بەبێ هۆکار هیلاک دەبم.</p>					
<p>9. My thinking is as clear as it was before.</p> <p>9.بیرکردنەوه‌کانم وه‌ك پێشتر ڕون.</p>					
<p>10. I find it simple to accomplish the things I used to do.</p> <p>10.بەئاسانی دەتوانم هەمانکاری پێشوو ئەنجام بدەم.</p>					
<p>11. I'm restless and can't sit still.</p> <p>11.بێئارام و ناتوانم بەهێمنی دابنیشم.</p>					
<p>12. I am optimistic about the future.</p> <p>12.گەژبینم بەداهاتوو.</p>					



13. I'm a little more irritable than usual. 13. که مېک زياتر له کاتي ئاسايي توږه ترم.					
14. Making decisions comes naturally to me. 14. بږياردان شتيکي ئاساييه بومن.					
15. I believe I am useful and required. 15. باوهرم وايه به سوود و پټويستم.					
16. My life is quite full. 16. ژيانم به ته وای پره.					
17. Others would be better off if I died, in my opinion. 17. به پروای من، نه وانيتر باشترده بن نه گهر من بمرم.					
18. I still like the activities I used to adore. 18. هيشتا همز بهو چالاکیانه ده کم که پيشتر زورم پخوشبوون.					

### **SECTION C: EMPLOYEE PRODUCTIVITY**

Please indicate the degrees of your agreement or disagreement toward the statements below by placing the (X) upon your response according to the following options:

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Statements related to Employee Productivity	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
1. I usually do my task on time. 1. زۆربهی کات نیشهکانم لهکاتی خۆی تهواو دهکهم.					

<p>2. I am capable of devising innovative solutions to work-related challenges.</p> <p>2. توانای داهینانی چار مسیری تازم هیه بو نو ناسته نگیانه ی په یو هستن به کار.</p>					
<p>3. I am pleased with the volume of output that I create.</p> <p>3. دلخو شم به قه بار هی ئیش کر دنم.</p>					
<p>4. My company output goal is within my grasp.</p> <p>4. نامانجی بهر هم مه نانی کو مپانیا که م لهدستی منداپه</p>					
<p>5. I work without wasting raw materials.</p> <p>5. بهی بهیر و دانی که ره سته ی خا و کار ده که م</p>					
<p>6. I prefer to work carefully without engaging in talking with others.</p> <p>6. من پیم باشتره بهر یاییه وه کار به که م بهی نو هی سرفالی قسه کر دن له گمل که سانیتز بیم.</p>					
<p>7. I am pleased with the standard of my work.</p> <p>7. دلخو شم به ستانداردی کار کر دنم.</p>					
<p>8. I am capable of meeting the technical requirements of the job.</p> <p>8. توانای دابین کر دنی پیداویستی به ته کنیکیه کانی کار که م هیه.</p>					

**Any suggestion or comments please indicate below.**

.....


.....

.....

.....

**THANK YOU VERY MUCH FOR YOUR  
TIME AND EFFORT, IT IS GREATLY  
APPRECIATED.**

زۆر سوپاس بۇ كات و ھەولەكەت، زۆر سوپاسگوزارە.

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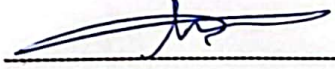
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Student Name: Ali Raad Shahab

Department: Management Technology

Signature: 

Date: 2024/July 18<sup>th</sup>

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### Section 2 (To be completed by Main Supervisor)

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Department:	Management (Technology)
I have examined the thesis of Mr. /Mrs. /Ms.:	Ali Raad Shahab

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Signature of Student: .....  .....

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Date: ..... 2024 / July 18<sup>th</sup> .....