

Research Article

The Effects of Depression and Anxiety in Business Management: Iraqi Kurdistan as A Case Study

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Article Info	Abstract
Article History	Race, ethnicity, religion, sexual orientation, gender, and disability are just a few of the many issues that fall under the umbrella of "cultural issues." We refer to a group's beliefs and practices as having a distinct culture. In several chosen supermarkets in Iraqi Kurdistan, this study focuses on the consequences of depression and anxiety on business management about one of the cultural issues' components, gender, and potential solutions. A quantitative analysis method was implemented in this study.
Received Dec 11, 2022	A literature review is also conducted to understand the obstacles and current state of knowledge while focussing on the missing knowledge gap to fill in. Therefore, the sample in this study was a collective of 200 respondents from different supermarkets in Northern Iraq from both genders. Results show that the workforce's 2-week incidence of any depressive illness in the two selected supermarkets was assessed to be very high, followed by severe depression coming in second, critical depressive disorders in incomplete recurrence or recurring (2.5%), and dysthymia (3.6%). Women were nearly twice as likely as males to have any depression, despite serious depression being significantly more regular in women. It is concluded that depression seriously damages any business management and needs to be treated to attain maximum profit gain. Business owners must include it in the business plan to provide solutions to the problems related to depression, considering gender.
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1. Introduction

The term "cultural issues" refers to various issues, including race, ethnicity, religion, sexual orientation, gender, and disability. We describe a group's unique culture when describing its beliefs and customs (Jackson, 2006). Cultural issues may affect human psychological issues (Taylor, Welch, Kim, & Sherman, 2007). Depression, as an example, can be considered a condition of extreme hopelessness and pessimism. Clinical depression, sometimes known as depression, is a severe health problem that frequently changes an

individual's emotional state, feelings, and behaviors. Gratefully, depression is treatable when identified and reported to the appropriate professionals. Sorrow, in addition to mood swings in earlier interests, remains a sign of being depressed. This might damage one's capacity to implement at home or the workplace and generate several physical and mental issues. In every particular period or era, depression is thought to afflict one in 15 adults, that is, 6.7%. In addition, 16.6% of the population will encounter depression at least once in a lifetime. Depression often first shows signs in the adolescent period to the maturity period, while it can happen at any time. Females were more likely than males to experience depression. Based on certain studies, one in three women will experience severe profound depression at some stage in one's lifetime. There is a high likelihood of inheritance if extremely close family (siblings, children, and parents) have depression, roughly 39.9% (APA, 2022). UK minister of health officials requested the Clinical Standards Advisory Group (CSAG's) on the levels of clinical care that were feasible for those who were depressed. The multifaceted British study of depression treatments presented comprised of formal patient telephone interviews in addition to the GP assessment and consultations to a selection of treatments (Telford et al., 2002). The multifaceted British study of depression treatments presented comprised formal patient telephone interviews in addition to the GP assessment and consultations to a selection of treatments (Telford et al., 2002).

Business management is the planning and directing of business operations. Managers of businesses oversee operations and assist employees in obtaining the best production levels in an enterprise. By overseeing or teaching new personnel, a manager may help a business achieve its financial and operational targets (UAC, 2022).

The significant prevalence of depression and related disabilities is acknowledged globally. Severe depressive syndromes constituted a very serious common disease in the previous years in the nations whose employees were already researched. The costs associated with diagnosing, treating, caring for, and supporting people with depression are included in the economic costs of depression. The expenses of depression's consequences on presenteeism, absenteeism, and long-term incapacity are also included (Cseh, 2008; Grazier, 2019). Places of work have a great deal of promise for avoiding depression, identifying its advanced and early phases, improving on-site or off-site, in-person or digitally, depression treatment, and enhancing the results of one of these attempts.

One of the key problems hindering effective management and reduction of incidences linked to depression is the lack of consensus among studies on depression. An article by (Ahmed and Cerkez, 2022) reported that for students, the digital world has a low positive correlation to depression or multidimensional perfectionism. Nevertheless, as shown by a significantly strong correlation, the correlation impacts of non-students were significantly higher. Other research indicates a significant positive relationship between anxiety, depression, and perfectionism (Ahmed & Cerkez, 2022). As a result, this clouds judgments on how companies can effectively reduce and manage depression in workplaces. This is of huge importance and calls for studies to explore this notion as studies linking the application of knowledge management deemed crucial in dealing with work issues (Ahmed et al., 2021) have not been significantly extended to find how they can assist in dealing with depression in workplaces.

Meanwhile, Iraqi Kurdistan has several cases of depression and its management, but with limited examinations. Additionally, studies on depression are widely confined to health institutions such as hospitals (Baker et al., 2021; Fiavor et al., 2022) and with limited coverage in the non-health sector, especially supermarkets. As a result, this study contributes to the existing literature by extending knowledge management practices in dealing with depression in workplaces in some selected supermarkets in Iraqi Kurdistan, which has been sidelined in academic studies. Several studies focus on countries such USA (Kessler et al., 2006; Quinones, 2021; Stewart et al., 2003).

2. Literature review

The major ways in which a stock market fall might start a depression have been by lowering aggregate demand (via effects of wealth and potentially money shrinkage impact employing of bankers transforming to an extra cautious regarding loan making) or generating a decline of competitiveness of a company. A decline in a demand aggregate (nominal) always affects the price level under a perfect competition model, ensuing traditional distinction between the real sector and the banking markets. It is enough to enjoy excellent competition to shatter the traditional contradiction and enable the conscience to decline in confidence while maintaining an entirely simple model (Yew-Kwang, 1992). Depression is frequently viewed as having a significant negative economic and social impact on individuals and society. Depression has been linked to decreased productivity, increased absenteeism, fewer days worked, and job loss. According to

conventional thinking, depression decreases profit margin (Alexandre, Fede, & Mullings, 2004). Researchers in medicine, like social scientists and economists, have expressed interest in the degree of this effect. Use a fixed-effects framework to study the effects from a vibrant standpoint and to control unnoticed variability by longitudinal aspect utilization of the National Longitudinal Survey of Youth, conducted in 1979. It was explored and found how variations in depressed symptoms affect productivity by making use of the fact that the set of data included knowledge regarding symptoms of depression over several years. According to the findings, it's critical to include personality when assessing how depression influences salaries. Ordinary least-squares results show that depressive symptom measures have a substantial negative significant effect (particularly in the sample of men), but accounting for individual observable variables diminishes the impacts of such factors (Cseh, 2008). In their findings, Ahmed and Cerkez (2022) show a weakly positive important correlation between the digital environment and multidimensional perfectionism.

Nevertheless, a significant positive correlation shows that the correlation impacts were very large. Likewise, it reveals that perfectionism with experiencing depression and anxiety are positively and significantly related. Even though this study is not related to the digital environment and perfectionism, but it is related to anxiety and depression.

However, this strong correlation explained relating to multidimensional perfectionism shows the need to minimize the use of smartphones and social media during working hours, as it will help reduce anxiety and depression. An even more result implies that respondents had minor anxiety and depression presenting a compelling argument for other nonprofits, establishments, or the authorities to focus on this problem within the populace to avoid or lessen psychological issues across unique initiatives for families, educators, and parents (Ahmed & Cerkez, 2022).

2.1 Symptoms of Depression and Health-Related Issues at the workplace

The overwhelming majority of health-related lost work time expenses are attributed to common illnesses like migraine, low back pain, diabetes, allergic rhinitis, gastric reflux, and depression, according to mounting evidence (Stewart et al., 2003). Depression is one of the most expensive due to its high prevalence and propensity for co-occurring illnesses. Additionally, although depressed employees frequently report to work, their productivity may be noticeably affected.

2.2 Treatment of depression and its effects at workplaces

Treatment for depression may incur additional expenditures in the form of co-payments or charges for office visits, pharmaceutical costs, and treatment time (Cseh, 2008). A major global contributor to depression disease trauma, which is particularly troublesome for those who have serious diseases. While antidepressant medications and psychological therapies might successfully cure depression among the public, various treatments might simultaneously possess diverse advantages and disadvantages. This subject has not been sufficiently covered in earlier evaluations. To ascertain which treatments, if any, are successful for patients with a diagnosis of depression, this lack of trials could be due to many factors. Although the necessity of discovering cancer treatments cannot be overstated, it is debatably equally important to treat the problems of depression. Volunteers in therapeutic interventions have been enrolled who either had a variety of psychiatric diseases or had psychological issues that were not identified as reported by several scholars since it is a harmless assessment. Walker et al., (2013) the notion that non-drug therapies were risk-free and seriously disputed, especially in light of the clear financial consequences or hardship upon patients for receiving relatively useless treatments (Nutt & Sharpe, 2008). What should doctors do to assist their depressed patients, given the scant evidence? Clinical staff must be conscious that this treatment's efficacy and possible risks are still mainly unclear. even though it is probably reasonable for them to continue using the usual pharmacological cures administered to sick persons until improved data is obtainable. We desperately require more evidence from robust clinical trials (Walker et al., 2013). Persistent depression is an important societal well-being problem. It is currently of utmost medical significance to effectively cure those who know recurring episodes of depression over the long term.

Many persons with recurring depression require constant pharmacologic care in order to receive effective preventative treatment. Even though the effectiveness of lithium carbonate or tricyclic medications in preventative treatment is well established, the evidence for monoamine oxidase (MAO) inhibitors and the new medications is less certain. More extensive research on the new substances is required, but there is also a need to clarify the function of psychotherapy in combined treatments (Blier & Claude, 1994; Kupfer, 1991). Major depressive disorder's pathogenesis is poorly known. However, several lines of clinical and preclinical facts show that the therapeutic impact of most antidepressant medications may be due to an

improvement in 5-HT-mediated neurotransmission. But many strategies would be used to achieve this overall result (Zeebaree et al., 2020). Developing techniques to quicken the serotonin reaction results from greater knowledge of the neurological underpinnings of antidepressant medications' delayed action onset (Blier & Claude, 1994).

Quinones's (2021) examination of knowledge awareness of depression screening in individuals with chronic liver disease in Florida uncovered that limited knowledge of awareness of depression screening restricts attempts to reduce depression among healthcare providers. With knowledge awareness being an essential component of knowledge management, it can be uncovered and proposed that both current and future initiatives to deal with depression should focus on providing information to enhance awareness among affected individuals.

Baker et al. (2021) conducted a qualitative study that examines health professionals' management of depression after post-stroke aphasia. Their findings point to a common problem associated with the lack of understanding of existing practices essential for improving psychological. Similar to Quinones's (2021), enhancing the availability of information will be vital for improving awareness of possible remedies for dealing with depression in workplaces. In that regard, a study by Thevathasan, Fairley, and Phillips (2022) highlighted the importance of medical education on European psychiatrists' knowledge in managing major depressive disorder. As a result, companies should structure their depression management strategies around knowledge gathering, management and awareness.

Sadeghniaat-Haghighi et al. (2021) explored depression, insomnia, and shift work disorder, among offshore oil rig workers. Cases of depression, insomnia, and shift work disorder were discovered to adversely affect job satisfaction. Amid such discoveries, the importance of this study and other initiatives aimed at dealing with depression in workplaces is, thus, justified. Therefore, it is crucial at this juncture to acknowledge that target aspects that boost job satisfaction are an important strategy to incorporate in knowledge management when dealing with depression in workplaces.

Fiavor et al. (2022) cited the importance of nurses' and midwives' knowledge, attitudes, and practices on postpartum depression identification and management. Their observations focus on recognising that knowledge management best yields effective results when integrated with other strategies, such as those aimed at inducing the right attitudes and practices towards depression. Recognizing such observations, the study recommendations will be structured around such discoveries.

3. Methodology

The study employed the quantitative method. It utilized questionnaires as a research instrument. Quantitative data was sought through surveys which are a primary source of data. The researcher used the quantitative method as it can easily be verified and replicated. In addition, primary data sources offer authentic data that has not been used for any other purposes. The researcher also utilized secondary data sources in the form of peer-reviewed journals for the literature review and also for comparison purposes with the empirical study. Secondary data was used to understand the obstacles and the current state of knowledge while focusing on the missing gap of knowledge to fill in. The literature review was done electronically using a computer and the internet, searching Google Scholar with keywords like "cultural issues, depression, and workplace, the effects of depression, depression in business management, problems of depression in business management, ergonomics, and depression, treatment of depression, solutions to depression in business management, depression issues in Iraqi Kurdistan, etc." The results of this search keywords displayed relevant articles, which were sorted and reviewed only the parts related to this research topic. The following research questions are also addressed:

- 1) Is an employee's age-related to MSDs, depression, and anxiety in business?
- 2) Can the depression and anxiety of employees collapse or declines a business?

The researcher has no access to the population; therefore, a sample of the target population is used for the study. Several supermarkets were selected in Duhok; both secondary and primary data were fetched from the respective supermarkets and analysed. The study focused on Small and Medium Enterprises (SMEs), most of which employ less than 20 employees; therefore, the sample in this study was a collective of 200 respondents from different supermarkets in Duhok, Iraqi Kurdistan.

The random sampling technique was used as it gives every element a chance of being successfully selected. The personnel were selected from each supermarket and examined based on the criteria of depression and anxiety during working hours. Both genders were given equal chances of selection because this research will give depression results based on gender differences also. Therefore, 100 women and 100 men workers were selected, making up 200 respondents in the selected supermarkets. Information like working hours, break time, and workload. Muscular Skeletal Disorder (MSD) was fetched. The results were explained and discussed, which will be compared with the standards of the Occupational Safety and Health

Administration (OSHA) and the Ministry of Labour and Social Affairs (MLSA) of Iraqi Kurdistan (MLSA, 2022; OSHA, 2022).

The researcher adhered to social sciences ethics. Supermarket staff in Iraqi Kurdistan involved in this study were the participants. The survey was conducted anonymously, and respondents could leave the study at any point. Their consent was sought to ensure that they participated in the study freely. They were also informed that their responses would be anonymous and confidential and to explain common queries regarding the survey's disposition and targets. The researcher also made it clear there were no monetary gains from participation in the study. The survey was conducted for three weeks according to employees who chose supermarket businesses.

The Statistical Package for the Social Science (SPSS) of the USA and Microsoft Excel software was used to analyze the data based on statistical analysis. At the same time, secondary sources will be properly referenced.

4. Findings

There are 200 respondents, shared half male and half female employees' samples which both were tested with a regular 8 hours working period, approved by the labour department of the Ministry of Labour and Social Affairs (MLSA), Kurdistan region (MLSA, 2022). Also, a break of 30 minutes (0.5 hr) was the same for all the staff, but other parameters were unevenly distributed. The respondents stated workload perception. Female respondents reported the workload is excessive for them despite their workload being a little bit less compared to the workload of male employees. However, two respondents said the supermarket's workload was less and very low, totaling four respondents. Six (6) respondents said the workload was fair and high, and the excess workload was 8 and 20, respectively. This shows that the workload was excessive and higher than the capacity of employees' ability to carry out the task activities of the supermarket. This can also lead to depression and anxiety because pushing the staff to do tasks that are beyond their capability will make them depressed and may cause any kind of MSDs. Some of the staff reported incidences of overtime which were sometimes paid and sometimes not paid. The hours of overtime in the supermarkets surveyed range from 0–5hrs. The staffs that reported 0hrs were 2. Also, those with 2 hours of overtime were two respondents, three reported three overtime hours, and 4 and 5 hours were reported to be 1 and 1 respondent, respectively. According to the standards of overtime payment

rules of both OSHA and MLSA (MLSA, 2022; OSHA, 2022), each hour of overtime should be paid three times the normal wage per hour. These staffs were usually paid normal hours of 2,500.00 Iraq Dinar (IQD) instead of the approved 7,500.00 IQD overtime payment per hour. This will also cause depression and anxiety because the overtime payment was not properly paid to the workers in the supermarkets examined in this study.

The following formula was used in calculating the overtime hours of the supermarket employees:

$$Overtime (\alpha) = \left(\frac{Workload\ hours}{Total\ working\ hours\ for\ the\ day} \right) 100 \quad (1)$$

MSDs reported by the employees also show that female staffs were twice more exposed to work-place injuries than males. In the table below (Table 1), males mainly encounter backbone (3), arm (2), knee (2), and neck (2) pains. Only one worker among the males indicated no pains at all. On the other hand, females have a backbone (4), all body (2), arm (1), chest (1), knee (1), and neck (1) pains. This indicated that all the employees suffer MSDs, but females suffer more body part pains, making them more depressed.

Table 1. Pilot Study Questionnaire Report

S/N	Gender	Working Hours (hrs)	Break Time (hr)	Workload Perception	Overtime (hrs/day)	Overtime Paid (IQD/hrs)	Reported MSDs	α (%)
1.	Male	8	0.5	Less	2	2,500.00	Backbone	75.00
2.	Male	8	0.5	High	3	2,500.00	Arm	68.18
3.	Male	8	0.5	Excessive	1	2,500.00	Knee	83.33
4.	Male	8	0.5	Very less	0	2,500.00	Knee	93.75
5.	Male	8	0.5	Excessive	0	2,500.00	Backbone	93.75
6.	Male	8	0.5	High	5	2,500.00	Neck	57.69
7.	Male	8	0.5	High	3	2,500.00	None	68.18
8.	Male	8	0.5	Fair	4	2,500.00	Backbone	62.50
9.	Male	8	0.5	Excessive	2	2,500.00	Arm	75.00
10.	Male	8	0.5	Fair	1	2,500.00	Neck	83.33
11.	Female	8	0.5	Excessive	1	2,500.00	Backbone	83.33
12.	Female	8	0.5	Fair	3	2,500.00	Backbone	68.18
13.	Female	8	0.5	Excessive	2	2,500.00	Chest	75.00
14.	Female	8	0.5	Excessive	2	2,500.00	All body	75.00
15.	Female	8	0.5	High	3	2,500.00	Backbone	68.18

16.	Female	8	0.5	Excessive	1	2,500.00	Knee	83.33
17.	Female	8	0.5	Excessive	0	2,500.00	Neck	93.75
18.	Female	8	0.5	Excessive	0	2,500.00	Backbone	93.75
19.	Female	8	0.5	Excessive	0	2,500.00	All body	93.75
20.	Female	8	0.5	Excessive	1	2,500.00	Arm	83.33

While α is referred to the total overtime percentage observed in the workers, found using equation (i). In table 1 above workload is calculated by subtracting the break time from the total working hours, divided by total working hours plus overtime hours; all multiplied by 100. Mathematically expressed as:

$$\text{Overtime } (\alpha) = \left(\frac{(\text{Workload hours}) - (\text{breaktime})}{(\text{Total working hours}) + (\text{overtime})} \right) 100 \quad (2)$$

The α was above 62.5% (be it the minimum percentage) of all the work, which is very high.

4.1 Age Distribution

The age group of the staff working in the restaurant is presented in Table 2. These records were for males and females and were fetched to make the relationship between age groups and MSDs at the workplace. The age groups were designed to give intervals of 10 years between each other in the questionnaire. One hundred (100) respondents from 17 to 28 years reported they experience mostly ankle and wrist pains. 50 respondents of 29 to 38 years say they have mostly backbone, muscle, and arm pains; the 39 to 48 age group with 30 reported backbone, ankle, wrist, knee, neck, and arm pains. While the last age group (20 respondents) of 49 years and above experiences all body pains. These results show that the age is increasing the rate of getting multiple injuries is also increasing. The body pains were felt less by the younger ages, while the older ages highly felt it.

Table 2. The age distribution of the respondents

S/N	Age group	Frequency	Related MSDs
1)	17-28	100	Wrist, ankle
2)	29-38	50	Backbone, muscle, arm
3)	39-48	30	Backbone, arm, ankle, wrist, knee, neck
4)	49 and above	20	All body parts
	Total	200	

4.2 Productive Average Time Lost of depression and anxiety in the selected supermarkets

Iraqi Kurdistan's workforce's 2-week incidence of any depressive illness in the two selected supermarkets was 9.5%. Severe depression came in second (3.5%), followed by severe depressive disorders in incomplete recurrence or recurring (2.5%) and dysthymia (3.6%). Women were nearly twice as likely as men to have any depression, despite serious depression being significantly more regular in women (5.4% women vs. 1.7% men).

Table 3. PATL in hour/employee/weekly among depressed supermarket employees

Types of PATL	All Dep. (mean SE)	Main Dep.	Dysthymias	Recurrences of Dep.	PATL with no Dep.
Absence at work	01.1 (0.3)	01.3 (0.5)	0.6 (0.3)	01.6 (0.6)	00.5
Presence at work	04.7 (0.6)	07.3 (1.4)	02.8 (0.7)	03.9 (0.8)	01.2
Total PATL	05.7 (0.7)	08.5 (1.4)	03.4 (0.7)	05.4 (1.2)	01.6
Ache, tiredness, or exhaustion	07.9 (0.8)	10.1 (1.3)	04.7 (1.1)	07.5 (1.9)	05.2
Stomach pains	07.2 (0.91)	10.8 (1.6)	02.9 (1.1)	05.9 (2.3)	02.1
Anxiety or fear	07.0 (1.4)	09.4 (1.8)	03.8 (2.0)	03.3 (0.9)	04.2
Hallucination	06.2 (1.4)	09.0 (2.5)	03.0 (1.9)	06.2 (2.0)	04.6
Nervous system dysfunction	08.1 (1.2)	09.6 (2.0)	03.3 (1.7)	07.9 (3.2)	06.6
Blockheaded, nose and ears blockage	05.6 (0.9)	08.2 (1.3)	04.2 (1.1)	03.7 (0.9)	02.9
Nervous system dysfunction	06.9 (0.8)	10.1 (1.5)	04.2 (1.2)	04.6 (1.1)	03.3
Null	4.1 (1.4)	05.9 (3.7)	03.1 (1.3)	05.3 (3.1)	00.9

A significant inverse slope with greater educational levels and an overall increase in the incidence of any depression in connection to reduced yearly pay levels were two other noticeable subjects (refer to Table 3). In comparison to those who work more (9.6%) or less (11.0%) hours per week, the incidence seems to be lower (6.8%) for those who work 20 to 30 hours on average weekly. Concerning bodily signs, the incidence of depression varied the most. Individuals experiencing signs of parasympathetic disturbance (19.7%), pain, weakness, or exhaustion (14.8%), and fear or worry (14.2%) had a higher prevalence of serious depression.

4.3 PATL and Nationwide Estimated Costs

The average amount of time lost from work was calculated for all people who satisfied the criteria for depression (Table 2). Compared to those with less depression, employees with depression indicated

considerably greater overall related-health Productive Average Time Lost (PATL) on average (mean, 5.7h/week vs. an anticipated value of 1.6h/week). Through the two weeks of follow-up calls, 77.1% of depressed people reported experiencing PATL in some capacity. Comparing the percentages of PATL for individuals without depression across particular sexes' age groupings to the identical demography groupings of individuals who matched the criteria for a depressive condition allowed us to predict the approximate amount of PATL hours. Consequently, PATL at work (82.1%) accounted for the majority of PATL among depressed people. Severe depression had a significantly greater average total PATL/wk (mean [SE], 8.5 [1.4] h/week), while dysthymia and partly recurrence of severe depression had lower average total PATL (5.4 [1.2] h/week and 3.4 [0.7] h/week, respectively).

Clusters of physical symptoms were frequent among depressed people. The most frequent cluster was pain, weakness, or exhaustion (49.2%), following nerve or sensory impairment (40.2%), with banging ears or heaviness of the head (38%). Specifically, whenever it re-occurred with pains, tiredness, or exhaustion (mean [S.E.], 10.1 [1.3] h/week), stomach issues (11.0 [01.6] hr/week), then nerve and sensory deficiency issues (10.0 [1.4] hr/week), those with significant depression repeatedly found foremost PATL (refer to Table 1). In the exclusion of gastrointestinal and depression, problems were related to the least Lost Productive Time (LPT) (2.1 hr/week) and sympathetic dysfunction (06.5 hr/week). The cluster of obvious symptoms was a significantly connected and partial correlation. To account for depression, age, and sex, normal regression least-squares were performed to quantify the association amongst each symptom cluster or PATL concurrently. Therefore, the model only shows three symptom clusters showed significant relationships, with pain, weakness, or exhaustion being the most prevalent ($\beta=3.0$; SE= 0.5); light-headedness or dizziness being the lowest prevalent ($\beta=2.1$; SE= 0.7); and parasympathetic imbalance becoming the most prevalent ($\beta=2.9$; SE=0.5).

The remaining disorder clusters had extremely low correlations. Managers in Iraqi Kurdistan are predicted to pay employees with depression \$44.01 billion in PATL annually, a \$30.94 billion surplus above what is anticipated for workers lacking depression. Decreased productivity at the workplace accounts for a total of 81.1% of the PATL expenses. Severe depression constitutes more than half (48.5%) of the PATL amongst depressed employees, with diminished work performance once more accounting for the major costs.

5. Discussion

The results of this research show a huge loss recorded in the selected supermarkets resulting from a high rate of depression and anxiety among the employees. This mostly affects women workers more than men, as stated in the results section of this research. It also shows that MSDs have a strong relationship with age, i.e., as age increases, the risk of MSD also increases, which causes depression and anxiety to the employees. Several authors also reported similar results found in this study regarding the effects of depression and anxiety in business management. For instance, Stewart et al. (2003), in their research titled "Cost of Lost Productive Work Time Among US Workers With Depression," reported that in comparison to the employees without depression, most of the employees having depression indicated considerably greater overall Lost Productive Time (LPT) was linked to depression. Most of the LPT expenses that firms incur due to employees' depression are hidden and may be attributed to diminished performance at work. However, this extends to affect other corporate activities and indicators. For instance, Sadeghniaat-Haghighi et al. (2021) found that depression, insomnia, and shift work disorder adversely affect offshore oil rig workers' job satisfaction.

It seems that comparatively few people use depression therapies. There may be chances for enhancing depression-related results within the US workplace at a reasonable cost, given the combination of LPT cost between people suffering from depression and the minimal rate of treatments. The fact that depression and anxiety are sicknesses the employees suffer is not enough to collapse a business. Still, when care is not taken, it damages the entire business. However, Grazier (2019) also agrees that depression reduces the performance of employees, thereby affecting the business at a remarkably negative cost. In his research, he also believes that depression is treatable and curable. When the problems of depression and anxiety are taken into control, it will yield positive results in the firm. This also was among the findings in the literature review of this study which a specific treatment method was stated and the treatment was effective. These treatment methods were related to physical and psychological aspects of life. Psychological issues do not necessarily require drug administration to the patient.

In contrast, physical treatment requires physiotherapy by a specialist and the administration of anti-depressants. However, creating a proper working plan will also yield a positive result in any business. This might be information on work circulation or rotation of posts, regular break hours, encouragements, etc.

Similarly, Baker et al. (2021) advocate for measures to enhance the understanding of existing practices essential for improving psychological care among depressed individuals and affected companies. Similarly, as Quinones's (2021) suggested, enhancing the availability of information will be vital for improving awareness of possible remedies for dealing with depression in workplaces. These strategies should include education and awareness programs that align with Thevathasan, Fairley, and Phillips' (2022) propositions.

This paper finds a gap of knowledge to fill in, as no other article has been published on this topic in Iraqi Kurdistan. Similarly, Ali Jadoo et al. (2018), in their research titled "Impact of Conflict-Related and Workplace-Related Violence on Job Satisfaction Among Physicians from Iraq - a Descriptive Cross-Sectional Multicentre Study" reported incidences of workplace violence, which resulted in poor performance of employees in a medical health environment. Work violence is rapidly common in almost every firm nowadays; supermarket workplace violence is very high in Iraq. This results from managerial problems like improper business management from the superior officers to the lowest ranked staff and customer violence, which even reached the robbery stage and made the staff feel unsafe in their workplace. The use of abusive words by customers may likely reduce staff performance due to depression and anxiety trauma. It will also affect any business negatively, causing profit loss and a state of business decline. Letvak, Ruhm and McCoy (2012), in their research article, also reported similar medical workers' depression in the United States of America (USA). Their study uses linear regression, which reported that the variation in the 9-item Patient Health Questionnaire depression scores was 60.6%, explained by the linear regression model. This shows that depression exists even amongst health workers, pointing out that depression and anxiety may also exist in every business establishment, including the supermarket business. Sadeghniaat-Haghighi et al. (2021) found that depression, insomnia, and shift work disorder exist among oil rig workers. Reported by Bender and Farvolden (2008) that depression and anxiety disorders are quite common in the workplace with a terrible influence on productivity, absenteeism, performance, and impairment expenses.

As a result, there is now a greater understanding of the intersection between anxiety and depression and more established organizational psychology and occupational health models like burnout, stress, and quality of work life. From the viewpoint of the employer, depression's effects are still largely unabated because of stigma, doubts about the cost-effectiveness of therapy, and a dearth of successful treatments

provided. This can also result from a lack of information and awareness of depression reduction and management practices (Baker et al., 2021; Fiavor et al., 2022; Quinones, 2021; Thevathasan, Fairley & Phillips, 2022). Murray and Lopez, (1997) found that in developed market economies, like in North America, depression rises to 15% of the total illness burden. This shows that the disease called depression has existed since before 1997 and has been causing damage to business establishments in the past. Kessler et al., (2006) reported severe depressive occurrences had received much attention in research on the consequences of mood disorders in the workplace. The inability to differentiate between severe depression and bipolar disorder and the failure to consider the effects of mania/hypomania during work has contributed to the underreporting of bipolar illness. Severe depressive illness was linked to 27.2 missed working days and bipolar disorder to 65.5 sick days per sick worker annually. According to a secondary study, the greater job loss linked with bipolar disorder compared to major depressive disorder was caused by more chronic and severe depression dysthymia in people living with bipolar disorders compared to major depressive disorders sufferers rather than by strong effects impacts of mania/hypomania compared to depression. This is also in line with the findings of this article that depression and anxiety cause loss of working hours, negative outcomes and increase the chances of losing job or an employee getting fired. However, no direct publication regarding employee's depression in supermarkets makes this research unique and calls the attention of the organizational and governmental bodies in Iraqi Kurdistan to use this research as a guide to deal with any depression issues in the region.

6. Conclusion

This research could relate depression and business management related to gender and the various problems encountered when depression and anxiety problems were not considered in any business firm. Improper management can lead to depression among the employees in any firm, which will cause a decline in the business's productivity. This means that there will be remarkable loss experienced when the employees are affected by depression and psychologically unstable in the businesses. This issue of depression, when neglected, will cause a collapse of the business establishment, and the business will not be able to perform profitably. Among the sources of depression in workplaces is no time for breaks, including short and long breaks, heavy weight lifting, and psychological issues, including violence at the workplace and

the oppression of workers, etc. some sources might not be related to the workplace; they might be personal and private problems related with each employee. These personal issues should also be treated and confers a solution to maximize the profit of the business enterprise.

It is, therefore, concluded that depression seriously damages any business management and needs to be treated to attain maximum profit gain in any business. The business owners must include it in the business plan to provide solutions to the problems related to depression. Regarding supermarket business in Iraqi Kurdistan, all the measures stated in this research should be considered to create a profiting environment for the shoppers and the staff.

7. Recommendations

This study recommends ways that will reduce anxiety and depression in the workplace in the following points.

- Behavioural Cognitive Therapy (BCT) is a highly successful type of psychotherapy regarding depression and anxiety problems. BCT, often a short-term therapy, aims to teach certain methods to reduce signs and eventually resume the things you've put off due to depression and anxiety.
- Most depressed employees encounter less painful signs when administered medications and therapy. A basic care psychiatrist or physician may recommend treatment drugs for the problems. Seeing a psychologist, psychiatrist, and so many related to depression and skilled anxiety personnel may benefit many people with depression.
- Understanding depression and anxiety, mindfulness psychological, physical exercises, dietary changes, exercise, developing assertiveness, increasing exposure therapy, cognitive therapy, self-esteem, medication, organized problem-solving, and support groups are some methods for managing depression and anxiety disorders.
- Other recommendations for resolving depression and anxiety disorders are staying active physically; job rotation and circulation of posts; quitting alcoholic drinks and recreational pills; stopping smoking tobacco and coffee drinks; practicing effective management of stress or relaxation skills; prioritizing sleeping on time, etc.

With these items listed above, depression and anxiety at the several supermarkets mentioned in Erbil, Iraq, will be reduced. However, the government of the Kurdistan region should empower new rules into the

labour sector that will provide guidelines and preventive measures to alleviate depression and anxiety issues or eliminate them if possible.

8. Limitations and suggestions for further studies

The study findings are restricted to examining supermarkets in Duhok Iraqi Kurdistan. As a result, the findings cannot be generalised to other business entities, sectors and cities. Consequently, detailed insight into the challenges limiting the effective use of knowledge management in dealing with depression can be obtained by having future studies to incorporate various business entities, sectors and regional participants. Additionally, robust data analysis methods may be called for in future examinations to explore the various forms of structural connections linking knowledge management with depression.

Declaration of Competing Interest The authors declare that they have no known competing of interest.

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