

## Exploring Potential Predictors of Psychological Distress among Employees: A Systematic Review

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### ABSTRACT

*Psychological distress is becoming more prominent among employees in various workplaces. Previous studies have reported that some forms of psychological distress such as stress, depression and anxiety, have been suffered by a significant proportion of employees globally. These conditions could lead to harmful consequences, affecting the physical, social and work functioning of the employee, if not addressed at an earlier stage. This study aims to identify the predictors of psychological distress being suffered by employees in respective of their profession. To achieve this aim, a systematic review of related literature was conducted. Various databases including Scopus, PsychINFO, MEDLINE and Google Scholar, were searched for related studies published from 2009 to 2019. Out of the 1219 studies found from the literature search, only 79 studies met the inclusion criteria to be included in this research. A total of 22 factors were collated from the studies reviewed, as potential predictors of psychological distress, which includes lack of exercise, poor time management skills, high workload and poor working relationship. These factors were further grouped into five constructs using thematic analysis, namely lifestyle choices, physiological health, job attitudes, work factors and psychosocial factors. This study, therefore, contributes to the literature on occupational psychology.*

### Keywords

Occupational Psychology, Psychological distress, Psychological Factors, Employees Wellbeing.

### Introduction

Psychological distress has been highlighted as one of the most significant contemporary problems of occupational health, with a significant growth process reaching different working groups globally [1,2]. Common psychological distress experienced by employees in various workplaces includes stress, anxiety, depression, attention deficit hyperactivity disorder (ADHD) and bipolar disorders [3,4]. The symptoms associated with psychological distress include insomnia, fatigue, irritability, forgetfulness, difficulty concentrating, and somatic complaints [2,5]. These symptoms, however, tend to manifest themselves differently in the workplace than at home or in other settings [6].

Previous researchers have reported the impact of psychological distress of employees on their various organizations, with

associated direct or indirect costs [7,8]. The consequences could be tangibly measured in terms of days of work absent and loss of work productivity [9]. Previous studies have also reported the financial consequences of psychological distress by tabulating how much companies spend on medical costs for employees' psychological wellbeing [10].

Intervening factors such as work characteristics or conditions, employees' personal factors, situational and other environmental factors may expose employees to various forms of psychological distress [6,2].

This study aims to identify potential predictors of psychological distress among employees by conducting a systematic literature review. Albeit the numerous studies on psychological health factors, the emphasis of most researchers is usually on a few factors such as work and environment factors in a single study. This study, therefore, collated a wide range of potential predictors of psychological distress from numerous studies, to achieve the

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aim of the study. Publications from 2009 to November 2019 that were relevant to this study were reviewed to make contribution to the existing literature.

### **Background of Study**

Factors associated with the psychological distress of employees stretches beyond the physical boundaries of the workplace [6,11]. Previous researchers revealed that other exogenous events and factors that cannot be found in the physical setting of the workplace also influence employees' psychological distress and associated behaviours [12,8]. These factors may emanate from other sources such as environmental influences, cultural, family background, relationship responsibilities, employment-related demands and non-working events [4,12]. Endogenous factors such as employees' personality, core beliefs or perception could also arouse the circumstances which expose individuals to the risks of psychological distress [11,13].

Psychological distress of employees can lead to impaired wellbeing such as fatigue, chronic tension, sleep problems and manifest diseases [7,14]. Indicators of psychological distress can be grouped under physical, emotional, behavioural and cognitive symptoms [2,15]. Previous studies have revealed that about 450 million persons suffer from psychological distress such as stress, depression and anxiety disorders at a time, which has led to various forms of disability and ill-health globally [10,16]. The numbers presently are sure to have increased. This is the reason why psychological health issues should be taken much seriously.

### **Common forms of psychological distress among employees Stress**

Stress has been identified globally as one of the most common psychological distress among employees [7]. Prolonged stress can contribute to physical and mental illnesses, with adverse effects on the heart, immune system, brain-acting hormones and metabolic functions [2]. Some of the behavioural and emotional indicators of stress overlap with those of other psychological distress such as anxiety or depression [15]. Stress can cause behavioural changes that cause guilt, feelings of shame, and irritation [16]. Exposure to psychological stressors can lead to post-traumatic stress in the long term, which has been linked to organic brain changes leading to neurocognitive symptoms [14]. Some symptoms of stress include worn-out, insomnia, physically exhausted or tired, increased palpitations/ perspiration/ sweaty hands and racing heartbeat [15].

### **Depression**

Depression is a common psychological distress that causes people to experience loss of interest or pleasure, feelings of guilt, low self-esteem, poor sleep, loss of appetite, low energy and lack of concentration [17]. Depression as a mental disorder can affect everything a person does in daily life and every aspect of one's life [18]. Depression can thus have a truly stressful and debilitating impact on a person's life and on their physical and mental health [1,12]. Persons who are depressed usually magnify issues such as injury and hurt, exaggerate unfairness, brood on previous harm or insults and label or blame others for their problems [19].

Depression also arises when the expectations of one have not been met, the requirements of the job do not match one's capabilities, or there is lack of or limited resources needed by the employee to do a job [17,18].

### **Anxiety**

Anxiety as a psychological disorder is characterised by an emotional response usually to a perceived risk or danger [20]. Everyone is occasionally scared, but chronic anxiety reduces a person's effective cognitive functioning and can affect one's quality of life [17]. Although anxiety is best known for behavioural changes, it can also have serious consequences on one's physical health [21]. People are anxious usually experience acute fear, tension, discomfort, mood swings, nervous ticks, stage fright, trembling, butterflies in the stomach and frequently urinate [20,22]. Anxiety is, therefore, a negative psychological state which is incongruent with a person's conscious reality [21].

It is imperative to identify the potential predictors of psychological distress to reduce employees' vulnerability and to enhance their psychological wellbeing.

### **Research Methods**

#### **Search strategies and articles selection**

A systematic review was conducted employing the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Guidelines adopted from Moher, et al. [23]. The search for related literature was performed from July to November 2019 and included articles published from 2009 to November 2019 that were indexed in the following databases: Scopus, Google Scholar, PsychINFO and Medline. The focus was on publications related to occupational psychology. Selection of the research articles for the systematic review was conducted in several stages. First, an extensive literature search was conducted using the following keywords: "Occupational psychological factors, Psychological risk factors". Boolean operators (example; AND, OR) and symbols such as (\*) were used in each database search.

The search resulted in a total of 1,219 papers (Scopus 510, Google Scholar 405, Medline 109 and PsycINFO 195) from 2009 to November 2019. Secondly, duplicates were eliminated by employing EndNote (X8) "find duplicate" feature, and titles and abstracts were also screened for required content. Only 79 research publications that met the inclusion criteria of psychological factors, personal factors, work factors, situational factors and psychological risk factors, were retained for the study. Thirdly, the full-text of all the remaining 79 research articles were systematically reviewed for this study.

#### **Results of the study**

The systematic review of the 79 research articles resulted in a total of twenty-two (22) factors, identified as potential predictors of employees' psychological distress. The 22 factors were then grouped under five major constructs of psychological indicators namely: lifestyle choices, physiological health, job attitudes, work factors and psychosocial factors, as presented in Table 1.

	No.	Factors	No. of Sources	Authors
Construct 1: Lifestyle Choices	1.	Lack of Exercise	4	Field (2012); Knapen, et. al. (2015); Den Heijer, et. al. (2017); Alhalel, et. al. (2018).
	2.	Poor Eating habits	4	Huppert (2009); Oellingrath, et. al. (2014); El Ansari, et. al. (2014); Lorem, et. al. (2017).
	3.	Underweight or overweight	5	Zhao, et. al. (2009); Garipey, et. al. (2010); Knapen, et. al. (2015); Lorem, et. al. (2017); Alhalel, et. al. (2018).
	4.	Alcohol Intake	4	Wang, et. al. (2010); Sterling, et. al. (2011); Hjorthøj, et. al. (2015); Lewis (2017).
	5.	Substance Abuse	5	Bender, et. al. (2015); Koob and Volkow (2016); Lewis (2017); Barnett, et. al. (2018); Heinbockel and Csoka (2018).
	6.	Poor Sleep Pattern	3	Eugene and Masiak (2015); Kecklund and Axelsson (2016); Scott, et. al. (2017).
	7.	Changes in Behaviour	5	Faghhi and Allameh (2012); Masood (2013); Sydney-Agbor, et. al. (2014); Hjorthøj, et. al. (2015); Fonzo, et. al. (2015).
Construct 3: Job Attitudes	8.	Cardiovascular diseases	5	Sutcliffe, et. al. (2013); Moran, et. al. (2014); Chaddha, et. al. (2016); Bai, et. al. (2016); Chauvet-Gelinier and Bonin (2017).
	9.	Musculoskeletal disorders	5	Jacobsen, et. al. (2013); Vargas-Prada and Coggon (2015); Antwi-Afari, et. al. (2017); Shazzad, et. al. (2018); Fordjour and Chan (2019).
	10.	General Health	8	Pollak and Miller (2011); Hjorthøj, et. al. (2015); Kecklund and Axelsson (2016); Magotra (2016); Enshassi, et. al. (2016); Lewis (2017); Hassard, et. al. (2018).
	11.	Medical History	5	Carson, et. al. (2010); Pollak and Miller (2011); Chaddha, et. al. (2016); Magotra (2016); Chauvet-Gelinier and Bonin (2017).
Construct 3: Job Attitudes	12.	Job dissatisfaction	6	Nadinloyi, et. al. (2013); Aazami, et. al. (2015); Schultz, et. al. (2015); Tabaj, et. al. (2015); Wesarat, et. al. (2015); Kabir, et. al. (2019).
	13.	Lack of Job commitment	5	Meyer and Maltin (2010); Azeez, et. al. (2016); Chordiya, et. al. (2017); Wersebe, et. al. (2018); Yavas, et. al. (2018).
	14.	Poor Time management skills	4	Harris, et. al. (2009); Grissom, et. al. (2015); Zheng, et. al. (2015); Sirgy and Lee (2018).
	15.	Lack of Advocacy	4	Obar, et. al. (2012); Shier and Handy (2015); Clear, et. al. (2018); Hassard, et. al. (2018).
	16.	Lack of Resilience	3	Srivastava (2011); Gao, et. al. (2017); Tabibnia and Radecki (2018).
Construct 4: Work Factors	17.	Organisational factors	7	Andrews, et. al. (2009); Leung and Chan (2012); Bowen, et. al. (2014); Leung, et. al. (2016); Enshassi, et. al. (2016); Chordiya, et. al. (2017); Johari and Omar (2019).
	18.	High workload	6	Abbe, et. al. (2011); Leung and Chan (2012); Bowen, et. al. (2014); Leung, et. al. (2016); Sirgy and Lee (2018); Hassard, et. al. (2018).
	19.	Poor working conditions	7	Javernick-Will and Scott (2010); Abbe, et. al. (2011); Leung and Chan (2012); Jacobsen, et. al. (2013); Bowen, et. al. (2014); Enshassi, et. al. (2016); Kabir, et. al. (2019).
Construct 5: Psychosocial Factors	20.	Poor working relationship	6	Landry and Mercurio (2009); Lin and Lin (2011); Masood (2013); Azeez, et. al. (2016); Martin, et. al. (2016).
	21.	Harassment / Violent	5	Pollak and Miller (2011); Pompeii, et. al. (2015); Foshee, et. al. (2016); Kelly, et. al. (2016); Hamburger (2017).
	22.	Abusiveness	6	Lachs and Pillemer (2015); Pompeii, et. al. (2015); Bender, et. al. (2015); Meinck, et. al. (2016); O' Donoghue, et. al. (2016); Penfold, et. al. (2016).

**Table 1:** Results of the literature review on predictors of employees' psychological distress.

## Discussions

It was advocated by the World Health Organisation (WHO) that the psychological distress of employees should be assessed by considering all aspects of a person including their complete mental, physical, emotional and social well-being, and not merely on the absence of a particular ailment, disease, condition, or infirmity [5]. The literature search was conducted from various databases for publications on potential predictors of psychological distress. A total of 79 articles were selected for this study from the period of 2009 to November 2019.

The systematic review of the 79 relevant studies revealed twenty-two (22) factors associated with the psychological health conditions of employees. These factors were grouped under lifestyle choices, physiological health, job attitudes, work factors and psychosocial factors, as detailed below.

## Construct 1: Lifestyle Choices

Lifestyle choices can be directly linked with psychological health conditions such as anxiety, depression, Attention deficit hyperactivity disorder (ADHD), and more [19,24]. The consequences of a poor lifestyle of employees can have both direct and indirect cost to the organisation, such as sick leave and poor employee morale [9]. Lifestyle as a construct of potential predictors of psychological disorders was based on seven factors namely: exercise, sleep pattern, eating habits, weight management, substance abuse, alcohol intake, and changes in behaviour.

### Lack of Exercise

Regular exercise has been proven to have a profound positive impact on psychological health conditions such as depression, anxiety, stress, and the likes [25]. A 30-minute exercise with moderate intensity, such as walking briskly 3 days a week is sufficient for

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ones' psychological well-being [26]. Regular exercise can also boost overall mood, improve memory, relieve stress and help a person sleep better [27]. Physical exercise, therefore, has both psychological and cognitive effects with associated benefits such as the decrease in stress hormones and increase in anti-depression and anti-pain neurotransmitters [25,27]. Employees who hardly exercise can be predicted to be in a negative state of occupational psychology, as they could be more prone to the conditions of stress, depression and anxiety [28,26].

### **Poor Eating Habits**

Previous studies have revealed that good eating habit is as essential to ones' psychological well-being as it is to one's general health [29,30]. A healthy, balanced diet includes healthy amounts of protein, essential fats, complex carbohydrates, vitamins, minerals, and water [22]. The foods we eat can influence the development, management, and prevention of many psychological conditions such as depression, anxiety and Alzheimer's disease [29]. Poor eating habits can be a risk factor for psychological conditions, as nutrition is a crucial factor in influencing one's feelings [22]. A study by Oellingrath et al. [31] also revealed that a diverse diet rich in unrefined plant foods, fish and regular meals were associated with better psychological health, while high-energy, low-nutrient diets and irregular meals were associated with poorer psychological health. A nutritious meal, therefore, is not only beneficial for the body but the psychological health [29].

### **Underweight or Overweight**

Excess or lower body weight can be linked with psychological disorders which can further lead to higher risks of the development of a variety of chronic diseases [28]. Numerous researches have shown that common mental health problems, such as depression, anxiety, and stress, are associated with obesity or underweight [26,30]. Aside the negative effects of obesity or lower body weight on health and quality of life, obese and underweight individuals are often prevalent to stigma and weight-related discrimination which can be deeply distressing [24,26]. Obesity or underweight is, therefore, a major health risk with psychological implications that should not be overlooked [30].

A study by Zhao, et al. [32] revealed that the prevalence of psychological disorders such as stress, depression and anxiety were significantly lower in both men and women with a normal Body Mass Index (BMI) between the range of 18.5 to 25 kg/m<sup>2</sup> as compared to persons who were either obese with BMI over 30 kg/m<sup>2</sup>, overweight with BMI of 25 to 30 kg/m<sup>2</sup> or underweight with BMI less than 18.5 kg/m<sup>2</sup>. Persons with higher BMI of more than 30 kg/m<sup>2</sup> or lower BMI of less than 18.5 kg/m<sup>2</sup> are, therefore, significantly more likely to have current depression or lifetime diagnosed anxiety and depression [32].

### **Alcohol Intake**

Alcohol consumption undoubtedly has an effect on the key biological systems of the physical and mental health of the consumer [33]. Alcohol is known to interfere with the communication channels of the brain and act as a depressant of the

central nervous system [34]. Some of the effects people who drink alcohol experience are: altered language, dull thinking, slowed reaction time, muted hearing, impaired vision, weakened muscles, and misty memory [33,35]. In the long term, the effect of alcohol can lead to damage of the brain tissue [34]. Persons who drink alcohol are likely to be exposed to psychological disorders as their mood and behaviour changes, making it harder for them to think clearly and to coordinate [36].

The extent to which a person is affected by alcohol usually depends on how much and how quickly a person drink [33]. Persons who drink a lot are particularly vulnerable, and alcohol is influential in a number of ailments, including anxiety, depression, psychotic disorders and suicide [36]. Alcohol addiction also delays recovery from critical medical conditions [35].

### **Substance Abuse**

When any form of substance such as drugs or pills enter the brain, they change how the brain does its work, and these changes can lead to dependency [37]. Abusing drugs or other substance can affect the functionality of brain circuits, as it impedes the brain circuits and also interferes with other bodily functions [38]. People usually take a certain substance because they like the way they feel afterwards [35]. An employee who is addicted to drugs or other forms of substance cannot resist the urge to use them, no matter how much harm these drugs or pills can do [39]. The person loses self-control on how often to use the substance, and this can lead to harmful behaviours [37,40]. Over time, the drugs or substance change the way the brain works, as chemicals invade the brain and begin to alter the chemical composition of the brain [35,38]. Addiction is thus a disease that affects one's brain and behaviour, leading to psychological disorders such as anxiety, depression, dysphoria and irritability [39,40].

### **Poor Sleep Pattern**

Sleep deprivation affects a person's physical and mental health [41]. Poor sleep is proven to be linked with physical conditions such as a weakened immune system and mental health conditions such as stress and depression [41,42]. People who have insomnia or other sleep disorders are usually vulnerable to psychological ill-being conditions [43]. Sleep disorders are, therefore, common in patients with anxiety, depression, bipolar disorder, and attention deficit hyperactivity disorder (ADHD) [42]. Some effects of insufficient sleep on employees can be difficulty relaxing, accident-prone, poor self-care, and difficult to think clearly, make decisions or remember things [41,43].

### **Changes in Behaviour**

Attitude or behaviour is considered by psychologists as a person's mental tendency to react in a certain manner, be it favourable or unfavourable, towards a certain aspect of reality [44]. Psychological distress can result in sudden changes in employees' behaviour, leading to unhealthy habits such as isolation, increase addiction to smoking and alcohol intake [36]. Behaviour changes can also result from depersonalization or dehumanization [45]. Antisocial or withdrawal from social activities is usually the

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common behaviour indicator of psychological distress, which can destroy the person's relationships with co-workers, friends, family, or even strangers [20,44]. Diminished personal accomplishment or excessive negative evaluations of oneself can give rise to insensitive behaviours of the person toward others [45]. Some of the behaviour changes depicting an employee is experiencing psychological health conditions also include: neglecting or procrastinating responsibilities, workplace or domestic violence, overreaction, increased arguments, impulsive behaviours, sleeping too little or too much and eating disorders [20,44].

### **Construct 2: Physiological Health**

Previous researchers revealed that psychological distress can be manifested in the physical health of the employee, with associated symptoms such as chest pain, chronic fatigue, weakness, aches or pains, muscular tension, dizziness, diarrhoea or constipation, nausea, breathlessness, rapid heartbeats, weight gain or loss, frequent colds, sweaty palms, tiredness, loss of sex drive, jaw clenching or teeth grinding [2,15,19]. Physiological health conditions as a construct of potential predictors of psychological distress of employees were based on four factors, namely: cardiovascular diseases, musculoskeletal disorders, general health, and medical history.

#### **Cardiovascular diseases**

A heart problem can lead to psychological distress such as anxiety and depression [17]. Some symptoms of cardiovascular diseases include: chest tightness, increased rate of heartbeat, palpitations, shortness of breath, shallow and rapid breathing, these can also be linked to psychological distress [17,46]. The relationship between cardiovascular disease and depression or anxiety is bidirectional, that is depression, and anxiety can increase the risk of cardiovascular diseases [47]. Cardiovascular diseases can also increase the patient's risk of developing depression and anxiety disorders, and both can lead to a worse outcome [17]. Other studies also revealed that the prevalence of depression in persons with cardiovascular diseases is three times higher than in the general population [46,48].

Other studies also advocated that the risks of developing new or worsening cardiovascular diseases, that is increased complications or hospitalization and death from cardiovascular disease is increased by approximately 80% in adults with depression with or without a previous cardiovascular disease [49]. The most common fears of persons with cardiovascular diseases are heart attacks, strokes or cardiac arrest, especially in people who already experienced one and fear of dying [17]. The feelings and emotions of the patient can be greatly affected; there is, therefore, a direct link between psychological distress and cardiovascular disease [49].

#### **Musculoskeletal disorders**

Musculoskeletal disorder or back pain is among the major causes of disability in the working population [50]. Back pain, chronic complaints, back problems, muscle aches, and joint complaints are very common musculoskeletal disorders among the workforce

[51,52]. Physical work requirements such as compulsory posture, lifting, repetitive movements and psychosocial working conditions such as the fast pace of work, limited time for relaxation and role conflicts have all been linked with musculoskeletal disorders [52,53]. Some of the effects of employees with musculoskeletal disorders experience include: poor performance at work, increased sick leave, lower productivity, and concerns about the potential of losing the job [50,53]. Temporary incapacity to work and the inability to fully realise one's potential due to a musculoskeletal disorder also increase the risk of leaving work, which leads to a partial or total loss of earnings [51,52]. Employees with musculoskeletal disorders are, therefore predicted to be suffering from some form of psychological distress [3].

#### **General Health**

Poor physical or general health can increase the risk of mental health problems [15]. Similarly, poor mental health can harm a person's physical health, leading to an increased risk of certain diseases [43]. Physical health also affects the continuing mental health and well-being of people suffering from some form of psychological distress [9]. People with psychological distress or poor mental health may have impaired physical health for a variety of reasons [14]. For instance, persons experiencing psychological distress can be vulnerable to negative behavioural factors such as excess smoking, poor nutrition, lack of self-sufficiency, excess alcohol intake, use of harmful drugs and obesity [36,35]. The effect of these conditions can make persons in the negative psychological state susceptible to physical disorders or general health problems [9].

Many forms of general health problems or ailments have been linked with psychological distress [15]. Some common health problems associated with psychological distress which are usually reported by employees include chronic headaches and stomach problems such as feeling nauseous, stomach ache, diarrhoea, and indigestion [2,15]. Persons with poor health are, therefore, predicted to be experiencing some form of psychological distress.

#### **Medical History**

Personal medical history can be a sufficient cause of an employees' psychological ill-being conditions [54]. Depression and anxiety are known to be major risk factors for medical conditions such as diabetes, hypertension, asthma and coronary heart diseases such as hyperlipidemia [17,46]. Medical conditions that are severe and persistent can negatively affect the patient's mental health [14]. Chronic pain and epilepsy have been revealed to increase the risk of suicide among patients [54]. Persons with past or present medical condition may experience a broad spectrum of apathy, irritability, fatigue, poor cognitive abilities, pain and other somatic complaints, reflecting the effects of one or more illnesses [14,15,54]. For example, a history of the life-threatening medical condition is often considered to be responsive to the traumatic circumstances of the medical condition and its treatment [54].

### **Construct 3: Job Attitudes**

Job attitudes of employees can depict their psychological health

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state [55]. Employees who are committed, happy, and advocate are usually intrinsically driven to work hard and are likely to enjoy their work [6,56]. Poor job attitude has a direct link with various employees' emotional psychological health conditions, including low self-esteem, feelings of helplessness, anxiety, depression, and irritability [13,57]. Employees who have poor job attitudes can be vulnerable to the psychological distress which can further deplete the emotional resources needed for the employee's work [9]. Employees job attitudes of happiness, commitment and dedication are essential for every organisation [58,59].

### **Job Dissatisfaction**

Job dissatisfaction or unhappiness can act as a determinant of an employee's psychological health and well-being [57]. Employees' happiness can positively affect their level of productivity and lead to good company outcomes [60]. Previous studies have shown that happiness of employees can have an influence on their mental health conditions and social interactions [61,62]. Happiness can be lower among employees with severe psychological health conditions of stress [55]. Previous studies have revealed a direct relationship between job satisfaction or happiness and various psychosomatic complaints such as back pain, headache, sleep disorders, fatigue, and gastrointestinal problems [60,62].

Employees who are happy with their work often feel content, tranquil, relaxed, fulfilled and gratified [57,63]. These positive feelings can enhance the psychological well-being of the individual employee. On the other hand, negative feelings of agitation, irritation, and being upset as associated with employees who are unhappy or dissatisfied with their work [61]. Unhappiness at the workplace can, therefore, jeopardize an employee's mental health, well-being and can seriously affect the quality of life of the employee [63].

### **Lack of Job Commitment**

Employees' level of commitment to their work can have a direct link to their psychological well-being and general health [59]. A strong commitment can give employees a sense of their work and is a resource that buffers the harmful effects of stressors at the workplace [64]. Previous researchers like Lazarus and Folkman, however, recognised the "double-edged" nature of job commitment, pointing out that strong engagement may, in certain circumstances, motivate active coping, but may also lead to a person being particularly vulnerable to psychological ill-being conditions [65]. In other words, high work engagement due to increased commitment can also increase the vulnerability of employees on the experiences of the adverse effects of work stressors [58,59].

The moderating effects of commitment are usually demonstrated with the use of moderated multiple regression [66]. If commitment acts as a buffer, the positive relationship between stress and strain diminishes as the commitment to the organisation increases [64]. In contrast, if the commitment worsens the stressor's effect on the stress, the results will be the opposite [66]. Commitment is however essential to employees' psychological well-being, as

persons who are committed to their work are often in the positive state of excitement, happiness and feel energised to work hard [59]. Employees who are low in job commitment are more vulnerable to psychological conditions of emotional distress, fatigue and in some sort of pain due to work [58].

### **Poor Time Management Skills**

Time management skills can have an impact on an employee's work and life balance [67]. The skills adopted by employees to self-manage their time daily is a major area of concern for the occupational psychologist, as the effect of work and family life imbalance could be tremendous on the employee's life [68]. Studies have revealed that work and life imbalance due to poor time management can expose employees to psychological health conditions such as stress, and anxiety [69]. Effective time management skills can on the other hand help to reduce stress and other psychological health conditions significantly [68]. Harris, et al. [70] also advocated that employees with effective time management skills mitigate all kinds of workplace stressors, thereby enhancing the employees' psychological health and well-being.

### **Lack of Advocacy**

Advocacy can be described as attitude or action of an individual or group with the aim to influence decisions regarding political, economic and social issues within the institution [71]. Some activities undertaken by persons who are advocates may include media campaign, public speaking, conducting polls, commissioning and seeking judicial justice [72,73]. Advocacy is therefore characterized by a series of actions taken with issues highlighted that could bring about certain changes [72]. Employees who exhibit some level of advocacy are usually mentally alert, engaging, inclusive and enthusiastic about everything regarding their work [9,71]. On the contrast, employees who are low in advocacy usually experience psychological ill-being conditions such as lethargic, gloomy, tension and hostility [73]. As persons who lack advocacy usually do not express their views and concerns on issues important to them and thus do not defend and safeguard their personal rights [71]. Advocacy can, therefore, predict an employees' psychological state.

### **Lack of Resilience**

Resilience can be described as a coping strategy that has an influence on a person's psychological health conditions and is paramount in adverse circumstances [74]. Employees who are resilient can be less prone to psychological ill-being conditions, as they have a positive attitude to adversity [75]. On the contrary, persons who are not resilient are usually frustrated, discouraged and depressed, when faced with challenging circumstances [74]. Resilience serves as a buffer to mitigate the relationship between overall well-being and mental health [76]. Resilience is, therefore, a positive mental health condition and ability necessary to adaptively withstand and manage stressful situations [75].

### **Construct 4: Work factors**

Work factors associated with employees' psychological health

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can also include: job insecurity, high working pace, quantitative work overload, qualitative work overload, unclear roles in the organization, inflexible working schedules, unpredictable or irregular working hours, poor communication, lack of team participation, poor interpersonal working relationships, home and work conflicting demands and poor career development [2,8,22]. Aside from these factors, other work factors may be significant predictors of psychological distress of employees. The adverse work factors can cause psychological and physiological health problems for employees if not managed well [6,69].

### **Organisational factors**

The transient nature of most organisations and the 'hire and fire' work culture, can affect the psychological health of employees [77]. Psychological health risk factors emanating from organisations include factors such as lack of organisational support, organisational formalisation, organisational complexity and organisational centralisation [78,79]. Organisational support including task and financial support are essential for employees' psychological well-being [6] with benefits such as work engagement, total commitment and job satisfaction [58].

Other organisational factors that lead to employees' psychological health conditions include low recognition of workers effort, lack of job security, job redundancy, non-commensurate wages and under participation in decision making [2,8]. Organisational policies that do not consider the opinions and feelings of employees could also lead to the psychological health conditions of the employees [58]. For instance, the level of autonomy given to employees over their work can have a direct influence on their psychological well-being [78].

### **High Workload**

Major tasks of most employees involve high-speed, some level of complications and are usually crisis-ridden [77]. Task factors are the quantifiable aspects of the employees' work and include excess workload and time pressures, which can affect the psychological well-being and health of employees [8,69]. Excessive workload can cause employees psychological distress such as stress, depression and anxiety, these are aggravated when required to work within limited time frame [79,80]. Work underload, however, can also lead to psychological ill-being conditions such as boredom, depression and job dissatisfaction [9]. Task factors that lead to employees' psychological health conditions also include vague task requirements, lack of relevant information and difficult tasks beyond workers abilities or experience [8,79].

### **Poor Working Conditions**

Managers of various organisations are responsible for controlling the project costs and time and often adopts complicated working procedures, leaving the employees s limited time for relaxation [6,51]. Where the resources needed to work efficiently are inadequate, these can affect the psychological health of employees [79]. Physical factors are significant predictors of the occupational psychological health and well-being of the employees and relate to the workplace setting and design as well as the environmental

conditions of the work [51,80]. Employees whose works are usually done in extreme temperatures and environmental conditions can be subsequently to psychological or physiological health problems [8,55]. Other previous studies also revealed work factors that relate to environmental conditions including poor general living and poor site environment [2]. Poor environmental working conditions can lead to employees' low productivity and unsatisfactory job performance, which can also lead to project failure and delays, with additional costs to the organisation [8,55,79].

### **Construct 5: Psychosocial factors**

Psychosocial factors such as resilience, harassment or violent and abusiveness can influence the occupational psychological state of employees [4]. Emotional indicators of psychological health conditions such as mood swings, discouragement and rage are usually associated with the psychosocial factors such as poor working relationship [15,16]. Emotional problems are also seen as the major indicators of psychosocial conditions [13].

### **Poor Working Relationship**

Most organisations rely heavily on teamwork for its outputs and therefore requires good interpersonal working relationship for successful outcomes [56]. Poor interpersonal working relationship has been regarded as a significant predictor of psychological distress, as it threatens one's personal goals and sense of value [81]. Poor relationships at the workplace can emanate from diverse beliefs and interest among individuals, with associated mistrust, discrimination and lack of support among workgroups [16,65]. The consequences of a poor working relationship can lead to severe psychological health conditions affecting the employees' physical and mental well-being [4,16]. The effects of poor working relationship can also lead to both direct and indirect cost to the organisation, with consequences such as poor job performance, poor communication, errors in work, low employee morale, job dissatisfaction and high employee turnover [56].

### **Harassment / Violent**

Negative actions such as yelling at people and being physically aggressive can cause the victim to experience psychological ill-being conditions [82]. Negative actions of harassment or violence can have physical and emotional consequences [83]. Harassment, whether physical or not, can lead to psychological harm, with associated symptoms such as bitterness, rage, resentment and physical aggression [84,85]. Some victims of violence have reported problems with attention, concentration, thinking, and daily memory [14,83]. These psychological health indicators can easily be traced back to the emotionally traumatic influence of the violence [85]. Such complaints or symptoms may also reflect the effects of subtle cognitive changes related to repeated lash and minor head trauma [14]. Harassment or violent in the workplace thus affects the victim's mental health and emotional well-being [82].

### **Abusiveness**

Abuse can take many forms. Screaming, calling names, spitting, insulting or otherwise ridiculing names are some of the means

of abusing [86]. Invading others privacy, given subtle or obvious threats, being hostile to people and given sarcastic comments are also considered as abusive [13]. Studies have shown that emotional abuse is as severe as physical abuse and often precedes it [87]. Abuse does not automatically lead to psychological or medical illness. However, abuse makes it much more likely for the victim to experience one or more mental or medical illnesses occur [82]. The victim often develops emotional or psychological problems as a result of the abuse, such as low self-esteem, anxiety disorders and other forms of depression [13,86].

If the abuse was severe, the abused victim can be traumatised leading to post-traumatic stress disorder such as post-traumatic stress disorder (PTSD) or acute stress disorder [40]. A disorder in one's personality can also occur such as narcissistic, marginal or histrionic personality disorders and for some a severe dissociative disorder such as multiple personality disorder which is also known as dissociative identity disorder [82,88]. Some researchers suggest that abuse may contribute to the development of conditions such as chronic fatigue syndrome and fibromyalgia [88]. Effects of emotional or physical abuse can be short-term or long-term. Some of the short-term effects include confusion, fear, hopelessness and shame [86,87]. Some of the long-term effects include chronic pain, feelings of guilt, insomnia and social withdrawal or loneliness [40,82]. Abuse can, therefore, lead to behavioural and physical side effects [86].

## Conclusion

Previous studies have revealed that psychological disorders can have adverse consequences on the individual employee's physical, mental and social well-being. Psychological distress of employees can lead to consequences for the organisation, such as poor job performance, general deterioration in employees' level of productivity, decreases in job satisfaction, and increases in turnover rate. These devastating consequences of occupational psychological disorders made it imperative that the research aimed to identify the potential predictors of employees' psychological distress through a systematic review.

The literature search was extended to related literature works in occupational psychology published from 2009 to November 2019. The systematic review of the 79 relevant studies resulted in the collation of 22 factors as potential predictors of psychological distress. The 22 factors were further grouped into five constructs such as (1) lifestyle choices (such as lack of exercise, poor eating habits, underweight or overweight, alcohol intake, substance abuse, poor sleeping patterns and changes in behaviour); (2) physiological health (such as cardiovascular diseases, musculoskeletal disorders, general health and medical history); (3) poor job attitudes (such as job dissatisfaction, lack of job commitment, poor time management skills, lack of advocacy and lack of resilience); (4) poor work factors (such as organisational factors, high workload and poor working conditions); (5) psychosocial factors (such as poor working relationship, harassment/violent and abusiveness). These factors revealed from the systematic review as predictors of psychological distress could have consequences undoubtedly on

the ability of employees to carry out their works efficiently, with other adverse consequences on the organisation.

This study recommends that stakeholders of organisations should provide psychological interventions for employees such as the establishment of welfare committee, provision of occupational psychological support systems (for example: offering free counselling services and paying medical bills for employees) and increasing psychological health awareness. These measures will enhance the well-being of all employees, reduce their vulnerability to the risks of psychological distress and promote a psychologically safe and healthy workplace globally. Further research could conduct a meta-analysis of previous studies on the predictors of psychological distress and preventive strategies.

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