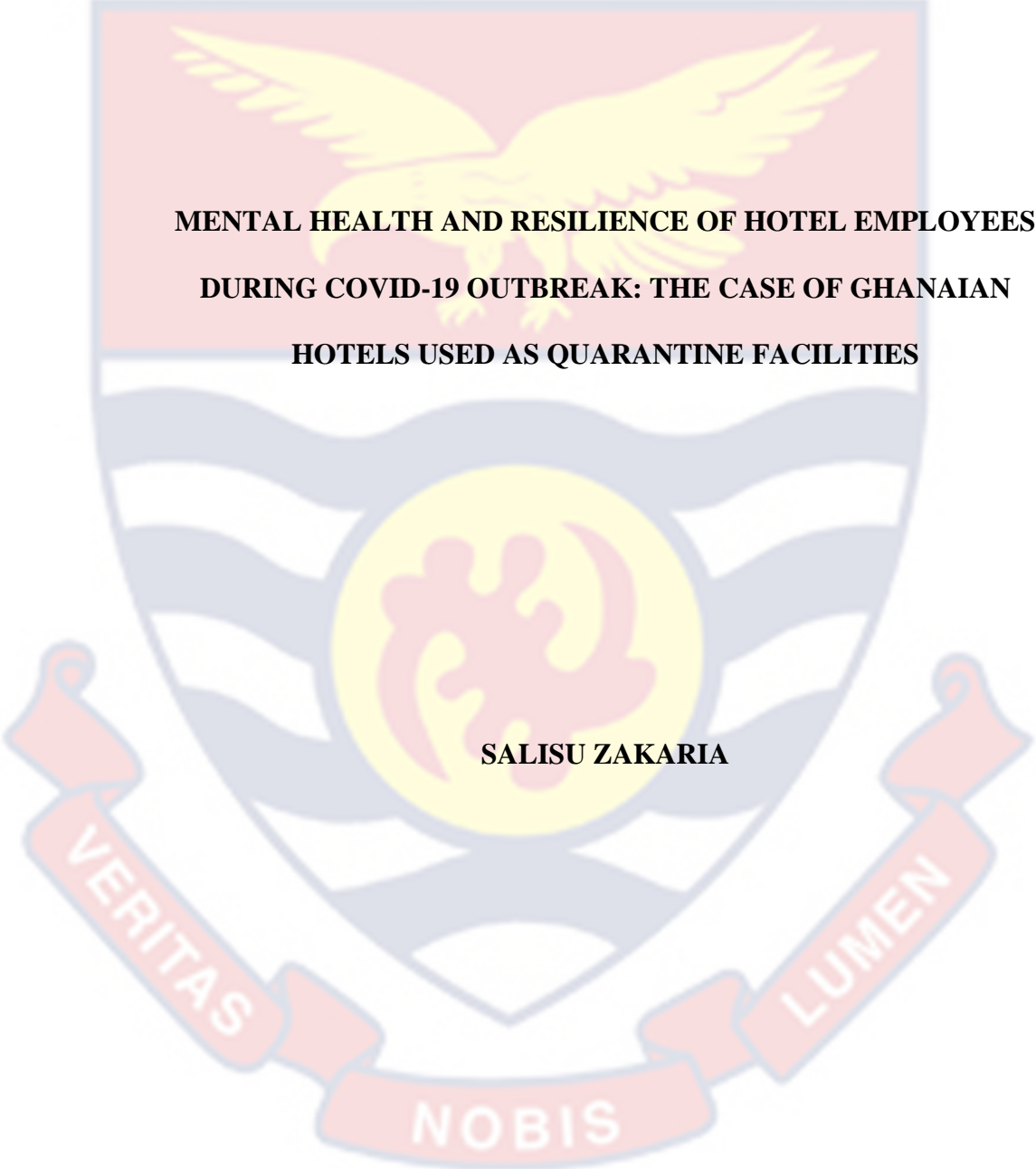


UNIVERSITY OF CAPE COAST



**MENTAL HEALTH AND RESILIENCE OF HOTEL EMPLOYEES  
DURING COVID-19 OUTBREAK: THE CASE OF GHANAIAN  
HOTELS USED AS QUARANTINE FACILITIES**

**SALISU ZAKARIA**

2022

UNIVERSITY OF CAPE COAST

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DURING COVID-19 OUTBREAK: THE CASE OF GHANAIAIAN HOTELS  
USED AS QUARANTINE FACILITIES

BY

SALISU ZAKARIA

Thesis submitted to the Department of Hospitality and Tourism Management,  
College of Humanities and Legal Studies, University of Cape Coast, in partial  
fulfillment of the requirements for the award of Master of Philosophy Degree  
in Hospitality

OCTOBER 2022

**DECLARATION****Candidate's Declaration**

I hereby declare that with the exception of references to other people's work which have been duly acknowledged, this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature.......... Date..........

Name: Salisu Zakaria

**Supervisors' Declaration**

I hereby declare that the preparation and presentation of this thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature..... Date.....

Name: Dr. Abednego Kofi Bansah

## ABSTRACT

The COVID-19 pandemic attracted some scholarly attention especially pertaining to its impact on employees' mental health in developed nations. The study sought to assess the mental health and resilience of employees at hotels used as quarantine facilities during COVID-19 outbreak in Ghana. Two hundred and fifty (250) hotel employees at work when their workplaces served as quarantine centres in Accra were conveniently sampled. Data analysis was done with descriptive statistics, Crosstabs and Correlation. The results indicated a relative adherence to COVID-19 safety protocols by hotels and employees possibly because of the preventive training sessions so most employees were not quarantined despite the seeming inadequate protocol materials and lack of motivational packages. The degree of the severity levels of COVID-19 induced mental health was high with a recorded high prevalence of depression, anxiety and stress. Employees educational levels coupled with their monthly income had significant relationship with COVID-19 induced stress. Relatively, there was low levels of resilience during the pandemic which reflected in a negative but significant relationship with the components of mental health. Ultimately, there was positive and significant relationship between the three mental health components. The study recommended that government must resource and empower more research to provide more diversified but still relevant information on employees mental health and outcomes of such researches could help formulate and design mental health policies and programmes, psychology/guidance and counselling units must be incorporated into hotels to monitor and take care of employees psychological needs to prepare them for eventualities and ultimately employees must utilise all opportunities that their workplaces and Ghana Tourism Authority (GTA) provide them in terms of mental health education.

**KEY WORDS**

COVID-19

Mental health

Resilience

Quarantine

Depression

Anxiety

Stress

Hotel



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## DEDICATION

To my late friend, Mr. Mohammed Yakubu Yussif (Mallam Yussif), rest  
eternally forever in the bosom of ALLAH (SWT)



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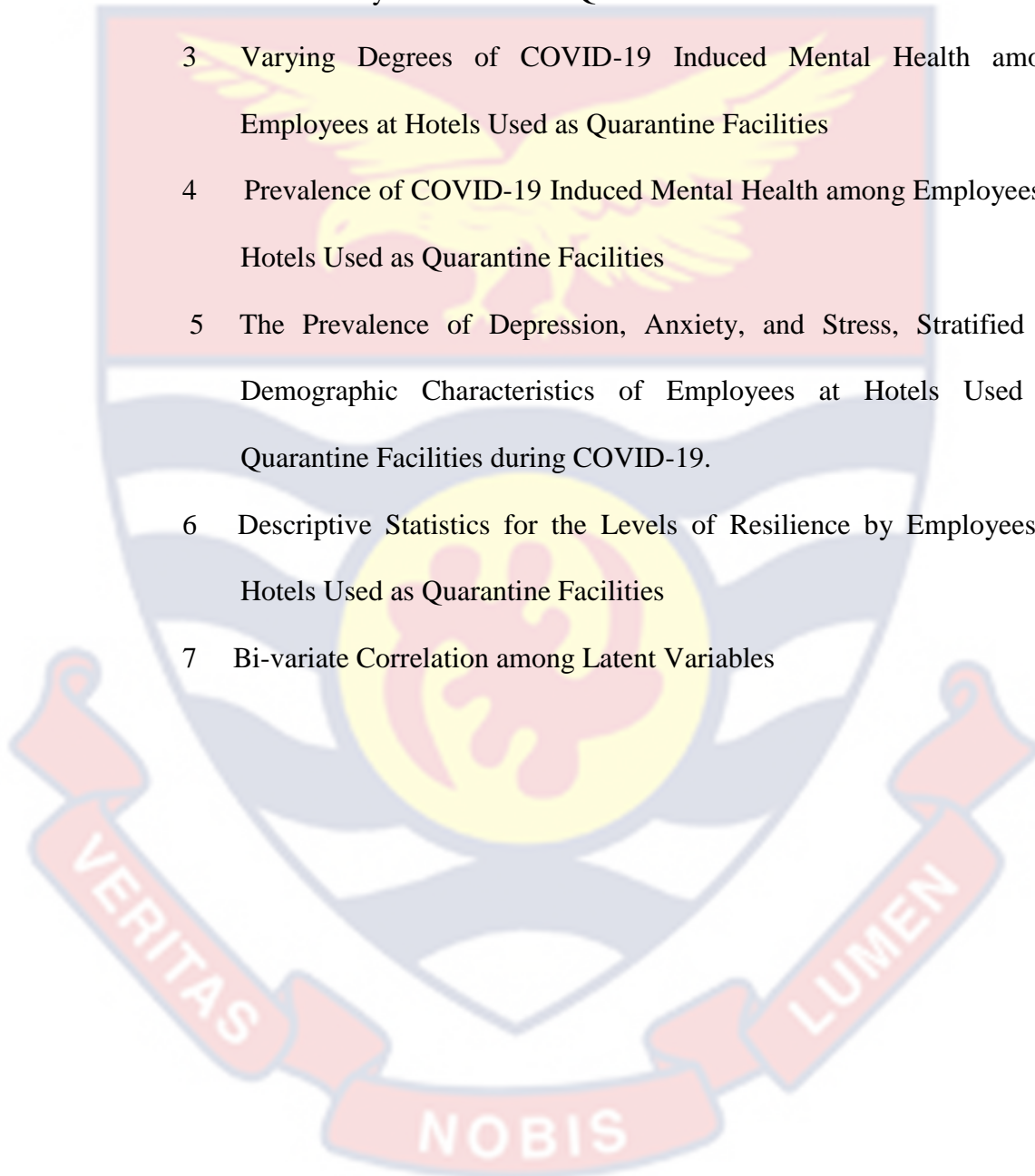
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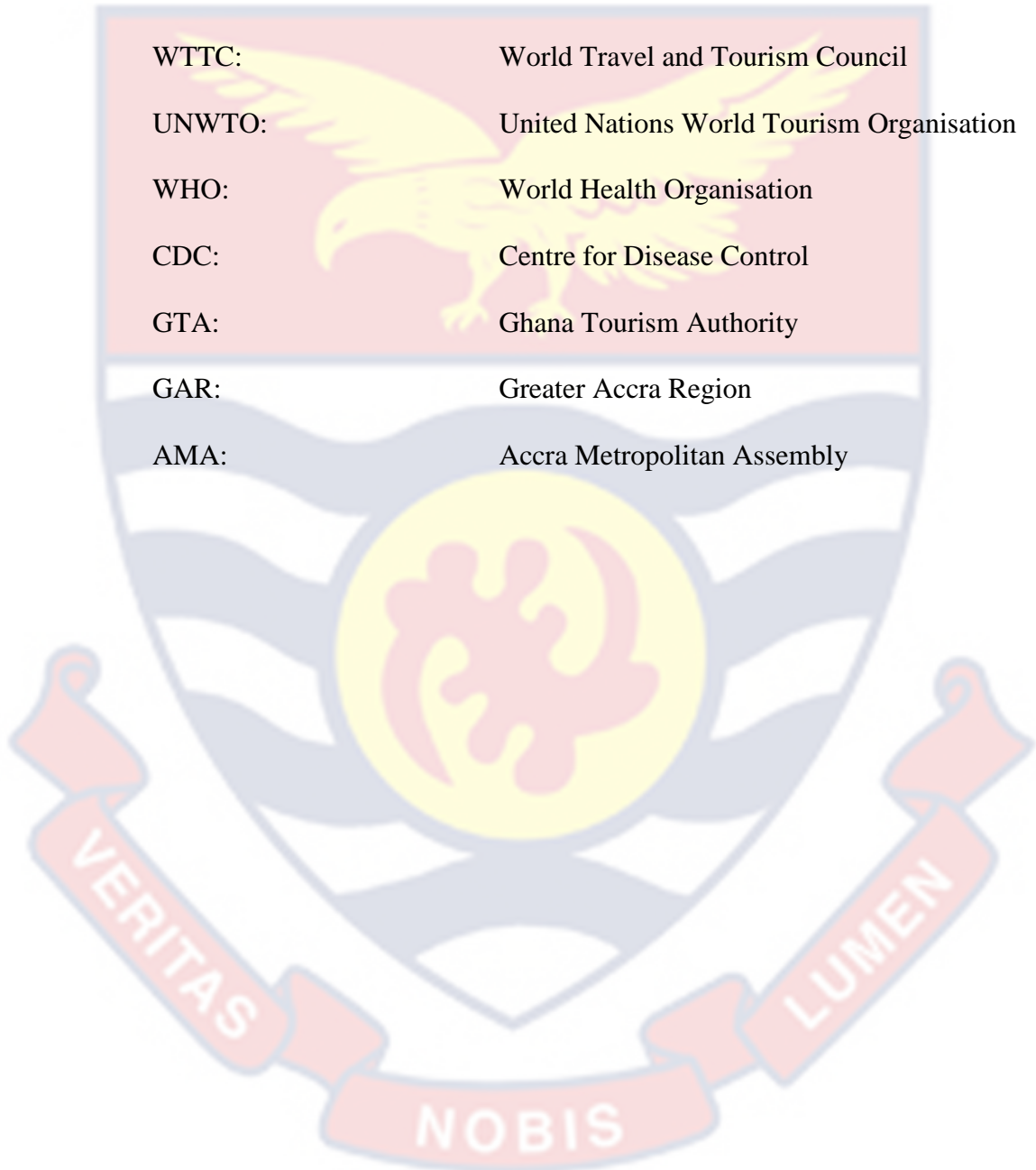
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**LIST OF ACRONYMS**

|           |   |
|-----------|---|
| COVID-19: | Coronavirus 2019                          |
| CDR-SC:   | Connor and Davidson Resilience Scale      |
| DASS-21:  | Depression, Anxiety and Stress Scale      |
| PTSD      | Post Traumatic Stress Disorder            |
| WTTC:     | World Travel and Tourism Council          |
| UNWTO:    | United Nations World Tourism Organisation |
| WHO:      | World Health Organisation                 |
| CDC:      | Centre for Disease Control                |
| GTA:      | Ghana Tourism Authority                   |
| GAR:      | Greater Accra Region                      |
| AMA:      | Accra Metropolitan Assembly               |



## CHAPTER ONE

### INTRODUCTION

#### Background to the Study

Within the past couple of decades, more than 30 new diseases mostly difficult to treat had been reported (Ventola, 2015). One of such is the novel coronavirus (COVID-19), (Alam, Nazir & Bhuiyan, 2020). COVID-19 has spread to almost every country and with an estimated 188 nations and states that recorded confirmed cases around 67,132,026, also pegged total lives loss at 1,537,260 (Miller, 2020). The rapid spread of COVID-19 made nations to react by the declaration of measures such as social distancing, lockdowns etc., which brought forth damaging effects on the world's economy (Lea, 2020; Nicola et al., 2020) with structural effects on the labour market in many countries (Baert, Lippens, Moens, Weytjens & Sterkens, 2020). The effects of COVID-19 on the world's economy have been described as unprecedented and the worse after the Great Depression of 1930 (Anis, Imran & Rizvi, 2020) due to its global scope, death rates (Ma et al., 2020), with continuous economic despair especially in under developed nations usually with weak public healthcare systems (Fenollar & Mediannikov, 2018).

Per the World Bank's estimation, COVID-19 will extremely impoverished 49 million people in 2020; 23 million of which are expected in sub-Saharan Africa (Mahler, Lakner, Aguilar & Wu, 2020). The first record of two COVID-19 cases was on the 12<sup>th</sup> of March, 2020 in Ghana (Afriyie et al., 2020) and by April 19<sup>th</sup>, 2020 when the first lockdown was over, 86,000 people were traced and 68,591 tested; with 1,042 reported positive, 99 recovered and 9 died (Afriyie et al., 2020). During the early months of the advent of COVID-19 in Ghana, around 42000 employees suffered job losses

primarily, because of the partial closures and/or lockdowns of hospitality and tourism outlets; resulting in revenue loss of up to \$171 million within the first three (3) months (Aduhene & Osei-Assibey, 2021). These alarming revelations led to the government's institutionalisation and adoption of stringent measures to safeguard and enhance the wellbeing of the populace.

COVID-19 has dealt a heavy blow on several sectors of the world's economy including the hospitality and tourism industry due to the restriction and shelter-in-place orders designed to curb infection/spread (Zhang, Xie, Wang, Morrison & Coca-Stefaniak, 2020). This particularly has affected the sustainability of the hotel industry at the macro and micro levels, also contributing to reduced business and employees' confidence (Baum & Hai, 2020; Tian, Peng & Zhou, 2020; Zenker & Kock, 2020). It is estimated by the World Travel & Tourism Council (WTTC) that the hospitality and tourism industry; generates over 10% of global GDP and thus creating every fourth job produced (Gössling, Scott & Hall, 2020). The United Nations World Trade Organization (UNWTO) intimated a fall of 57% by March 2020 in touristic activities which will culminate in loss of arrivals around 67 million which is up to the tune of 80 billion dollars in revenue (Rowinski, 2020). The pandemic has the potential of eliminating about a hundred (100) to a hundred and twenty (120) million jobs in the hospitality and tourism sector alone and this could even be based on situational changes as the years go by (Rwigema & Celestin, 2020). This assertion has not been different for other African countries (Deloitte Ghana, 2020; Mensah, 2021; Rogerson & Rogerson, 2020). Job losses and positional uncertainties more likely will ignite negative psychological consequences of hotel employees (Kniffin et al., 2021).



Due to the wide spread of the COVID-19 virus and hospitals being overwhelmed globally (Cheng, 2020), it became prudent to use other facilities such as hotels in some countries to complement the hospitals (Choi, Lee & Jamal, 2021; de Courten et al., 2020; Wilson, Puloka, Baker & University of Otago, 2020). The use of these hotels was necessary to isolate returnees into a country for a period of ten days while they awaited their results before being let into the society (Yeh & Cheng, 2020). Even though the debate remained about its effectiveness in protecting the larger society, (de Courten et al., 2020), such action was a source of revenue for hotels (Rosemberg, 2020; Wilson et al., 2020). Such is the lucrative nature of using hotels as quarantine facilities (Baxter & Casady, 2020) that, many hotels took to the offer of quarantine packages as some who were already in the business in Austria, China, Malaysia, New Zealand, Taiwan, and the United States (Teng, Wu & Lin, 2020). While this initiative may be relieving for employees of hotels in terms of job security, the chances of them being exposed to the virus remained high as they undertake their daily duties. This situation might have a significant impact on their mental health (Miller, 2020; Smith, 2020; Teng, Wu & Lin, 2020).

The danger of the virus exposure to frontline workers has been well documented (Ashinyo et al., 2020; Jecker et al., 2020; Rosemberg, 2020) in the developed countries with many emphases on their mental health (Lai et al., 2020; Schubert et al., 2021; Sritharan, et al., 2020) yet, there exists paucity of data when it comes to mental health of employees of hotels used as quarantine facilities in African countries especially in Ghana. Studies conducted in Ghana, mostly centered on employees and industry sustainable prospects (Danso et al., 2020; Dwomoh, Luguterah & Duah, 2020; Hervie et al., 2022),

few with a modicum of attention on psychological effects skewed somewhat towards finances and/or employees turnover issues (Kimbu et al., 2023; Mensah et al., 2023) and the extant with information on mental health and resilience focused on the aftermath of the pandemic (Martins et al., 2021) with negligible or no amount of information on the mental health and resilience of hotel employees during COVID-19 outbreak especially in hotels that served as quarantine facilities. Furthermore, researchers have unveiled demographic risk factors as being relational to increased risk of mental health (Abdulah & Musa, 2020; Zhang et al., 2020a). Consequently, females exhibit higher depression, anxiety, and emotional devastation than their male counterparts (Barello, Palamenghi & Graffigna, 2020; Xiao et al., 2020b), because they undergo perpetual hormonal routines as part of life.

A study conducted by Teng, Wu, Lin and Xu (2020) on mental health impact of COVID-19 on quarantine hotel employees in China, found out that hotel employees with lower levels qualification are less likely stressed and depressed as compared to those with higher levels qualification; culminating into the fact that their level of information access or consumption is lower than the highly educated ones and thus the adoption of a carefree attitude leading to less depression, anxiety and stress. The young or adolescent quarantine hotel employees with higher levels of education also suffer from anxiety due to their easy access to online information and exposure to several forms of reportage on the COVID-19 pandemic; and so, it is useful to provide online psychological support services like counseling and training to enhance positive mindsets (Teng et al., 2020).

In addition, it is reported that adolescents and adults differ in the way they relate between their trait resilience and the environment, which influences

their mental health such as depression and life-satisfaction (Abolghasemi & Varaniyab, 2010; Cenat & Derivois, 2014; Cohn et al., 2009; Haddadi & Besharat, 2010). Being exposed to COVID-19 patients was found by researchers to have exacerbated stress due to isolation from loved ones (Huang et al., 2020; Kang et al., 2020; Lai et al., 2020; Lu et al., 2020; Zhang et al., 2020a; Li et al., 2020). Although there is paucity of data on mental health and resilience of hotels used as quarantine facilities employees, quite a number of researches for example, Abdulah and Musa, (2020), Abeysuriya et al., (2020) and Adam-Bagley et al., (2021) have been conducted among healthcare workers during the pandemic. Consequently, this current study investigates the mental health and resilience of employees at hotels used as quarantine facilities during COVID-19 pandemic.

### **Statement of the Problem**

The COVID-19 pandemic has severely threatened the health of millions of people globally with a huge impact on lives and livelihoods (Nkengasong, 2020; Sher, 2020). The escalation of positive cases rendered hospitals overcrowded resulting in insufficient isolation space (Cheng, 2020). In addition, frontline healthcare workers were increasingly worried about contracting the virus and contaminating their loved ones (Rosemberg, 2020). As the COVID-19 pandemic continues in several variants, almost all states require both citizens and foreign visitors from abroad to enter into a mandatory 14-day quarantine within centralized observation centres or remain at home (Yeh & Cheng, 2020). Due to the overwhelming shortage of quarantine infrastructure to accommodate confirmed as well as suspected cases, some hotels were ordered by governments to serve as quarantine hotels

(Rosemberg, 2020). The use of hotels as quarantine facilities aided in ameliorating the issues of overwhelmed health facilities (Baxter & Casady, 2020). Quarantine hotel facilities complemented hospital accommodations and as well, provided some economic relief for players of the hospitality industry (Rosemberg, 2020). Using these facilities meant some hotel employees had to provide services and as such, the mental health of the employees of these hotels cannot be overstated (Li, Yin, Qiu & Bai, 2021). The transformation of the hotels into quarantine facilities does suggest that employees had to decide on continuing to earn a living while risking their lives or do otherwise, thus making it a very difficult choice (Teng et al., 2020). It is reiterated that staff may not place premium on psychological interventions in the peak of the crisis and may even unwillingly engage with services offered to them (Chen et al., 2020). With no documented mental health interventions at these hotels, coupled with the kind of stress COVID-19 engulfed humanity with, in its hay days; and for hotel employees with no health expertise to have to be at the forefront of managing this situation, exploring the mental health needs of workers in such an environment cannot be overstated. The neglect of negative mental health can influence employee engagement and performance, paving the way for poor work quality, mistakes, and ultimately affecting a company's capacity to survive (Adhitamaa & Riyantob, 2020). The potential work challenges and experiences generated by hotel workers during the COVID-19 pandemic simply cannot be overstated as hotel workers are heavily prone to quarantined individuals as a result of their facility being used as quarantine facilities (Cruz-Milán, 2021) and as they invariably attend to these individuals as service providers (Taylor, 2019). However, the resilience shown by frontline workers during the pandemic cannot also be overstated (Nanda et al.,

2020; Setiawat et al., 2020). Resilience is found to have a negative correlation with all the components of mental health (Poole et al., 2017; Shapero et al., 2019) and resilience symptoms have relationship with lower anxiety and depression symptoms (Skrove et al., 2012).

Various researches have been conducted recently with regards to mental health care especially on health care workers during the COVID-19 pandemic (Kang et al., 2020; Walton et al., 2020). The few studies on mental health largely emanate from the developed countries (Miller, 2020; Ng et al., 2020; Smith, 2020; Teng, Wu & Lin, 2020). There is paucity of data when it comes to mental health and resilience of employees of hotels used as quarantine facilities in African countries especially in Ghana. Furthermore, studies on the COVID-19 pandemic in relation to hotel employees health are skewed towards safety considerations (Rosemberg, 2020), effects (Soehardi, 2020) and ability and willingness to work (Stergiou & Farmaki, 2021). In Ghana, similar studies are concluded with a modicum of attention on psychological effects skewed somewhat towards finances and/or employees turnover issues (Kimbu et al., 2023; Mensah et al., 2023) and as well, a focus on the aftermath of the pandemic (Martins et al., 2021); signifying a gap in literature on the mental health and resilience of hotel employees during COVID-19 outbreak especially in hotels that were used as quarantine facilities in Ghana; and as well, with a global paucity of data related to employees at hotels used as quarantine facilities. Additionally, the context differences between the developed and developing countries, and with no documented mental health interventions at these facilities in developing countries makes this study necessary. It is based on the narrative that this present study aims at

investigating the mental health and resilience of employees at hotels used as quarantine facilities during COVID-19 pandemic.

### **Purpose of the Study**

To curtail the spread of COVID-19 from abroad, governments had to adopt strategies to protect their citizenry as well as visitors arriving from overseas, such strategic adaptations included the mandatory 14-day quarantine periods in hotels (Zanin et al., 2020). Ghana faced many challenges regarding the acquisition of isolation centres and quarantine facilities (Aduhene & Osei-Assibey, 2021). During the surge of COVID-19, the government of Ghana was urged to take control of hotels and use them as supplementary isolation centres (Salifu & James, 2020). The Ghanaian government took steps in catering for some social transformations such as renting hotels, churches, and erecting makeshift structures; some of which were utilized for the country's mandated 14-day quarantine of newcomers (Yankson, Gough, Esson, & Amankwaa, 2017). A concerted effort was launched to increase infrastructure by locating and turning existing facilities, into treatment centres (Amponsah, Tagoe, & Afriyie, 2021). Other issues facing Ghanaian healthcare stakeholders included a low physician-to-patient ratio, a dearth of intensive care unit (ICU) beds, and a paucity of ventilators (Amponsah et al., 2021).

Hosting quarantine guests significantly exposed hotel employees to a higher risk of infection (Teng et al., 2020). A quarantine hotel employee can be considered as similar to a healthcare worker since both may be in direct contact with quarantine guests and because of their similarities in service provision; which exposes them to the main route of transmission for COVID-19 (respiratory droplets) (Teng et al., 2020). Quarantine hotel employees are

confronted with issues of increased workloads which have the propensity of igniting psychological issues (depression, anxiety, and stress) that thrive on job insecurity, risk exposure and contagion for themselves and loved ones (Ng et al., 2020). Researchers discovered that hospitality workers are prone to emotional distress largely because of the precarious nature of their work, inordinate customer behaviours as well as work-family issues (Cheng & Yi, 2018). It has been documented that exposure to severe infectious diseases or epidemics aggravates the prevalent rates of mental health issues (Aziznejadroshan, Qalehsari & Zavardehi, 2020). While it is reported that the temporary effects of relationship between resilience and mental health could not be determined (Wu, Lu, Liu, Zhang & Luo, 2020), resilience temporarily ensures a relationship between stress, symptoms of anxiety as well as depression (Anyan & Hjemdal, 2016).

### **Objectives of the Study**

The main objective of this study was to assess the mental health and resilience of employees at hotels used as quarantine facilities during COVID-19 pandemic.

The specific objectives were to:

1. Identify COVID-19 safety measures followed by hotels used as quarantine facilities.
2. Determine the prevalent degrees of COVID-19 induced mental health among employees at hotels used as quarantine facilities.
3. Examine the prevalence of COVID-19 induced mental health stratified by demographic factors of employees at hotels used as quarantine facilities.

4. Explore the levels of resilience by employees at hotels used as quarantine facilities during COVID-19.
5. Analyse the relationship between employees' resilience and their mental health.

### **Research Questions**

The following research questions guided the study:

1. What were the COVID-19 safety protocols followed by hotels used as quarantine facilities?
2. What were the prevalent degrees of COVID-19 induced mental health among employees at hotels used as quarantine facilities?
3. How prevalent were the COVID-19 induced mental health stratified by demographic characteristics of employees at hotels used as quarantine facilities?
4. How resilient were employees in hotels used as quarantine facilities during COVID-19?
5. How related was employees resilience and their mental health?

### **Hypotheses for the study**

The following hypotheses guided this study;

H1: There is no statistically significant difference between employees demographic characteristics and their mental health.

H2: There is a statistically significant negative relationship between employees resilience and their mental health.

H3: There is a statistically significant positive relationship between the components of mental health (depression, anxiety and stress)



### Significance of the Study

Mental health issues are top-notch public health concerns for the world owing to the COVID-19 pandemic, the fear of its infection as well as deaths resulting from it nonetheless, victims of anxiety, anger, confusion and other forms of traumatic conditions abound (Mukhtar 2020; Pakpour & Griffiths 2020). A Lancet commission report estimated that a cost to the global economy of up to the tune of \$16 trillion by 2030 would be used in battling mental health challenges (The Carter Center, 2018). In the healthcare industry, key frontline personnel have exhibited excessive stress and reportedly the highest level of the other forms of mental health (depression and anxiety) as compared to low-risk personnel working in other departments; such key frontliners include doctors, nurses, first responders, paramedics and ambulance personnel (Pappa et al., 2020). The development of psychiatric symptoms including depression, confusion, stress and anxiety in people who hitherto have never experienced mental illness was due to the transmission fear of COVID-19 (Shigemura et al., 2020).

Experiences and/or lessons learnt from those directly involved in the heat of the moment with regards to COVID-19 pandemic can inform practice such that necessary adjustments could be made to deal decisively with subsequent COVID-19 variants and/or any other future pandemic. Outcome of this current study could proffer valuable suggestions on employees' mental health within hotels in Ghana. Furthermore, this study will encourage the documentation through system level changes to promote mental health support services or screening for employees; such as the promotion of health and safety policies, adequate resourcing including increased pay and so on. Outcome from this study could also promote the design and implementation of

a framework to serve as a guide to hotel operators to occasionally bring in healthcare personnel to assist in health related or disease outbreak workshops. This education could adequately promote disease protocols and coping strategies for hotel workers.

### **Delimitations of the Study**

Geographically, the research was targeted at hotels in Accra used as COVID-19 quarantine facilities. Although Accra Metropolitan Area (AMA) serves as regional capital of Greater Accra Region (GAR) and also doubles as Ghana's national capital and seat of government and undoubtedly has the largest number of hotels in Ghana; using Accra as the study area coupled with the used of luxurious hotels therein, could hinder generalising the results to the entire country eventhough Accra recorded the greatest number of COVID-19 active and suspected cases as well as led in the number of quarantined spaces in Ghana.

### **Limitations of the study**

Only nine (9) out of the sixteen (16) facilities that were used as quarantine facilities participated in the survey because some out rightly refused to partake in the survey bordering on management directives and security issues leading to a lower number of total responses obtained and this hinders generalisation. The sensitive nature of the COVID-19 pandemic which is clouded with a lot of political and health concerns and the high rate of infection characterising it make access to information from health and/or political authorities as well as from respondents also a

constraint as they shy away from recognition and/or infection and these can affect the results as obtained.

### **Definition of Terms**

**Quarantine:** Restricting movement and activity levels of people exposed to or confirmed of being infected with a contagious disease so that treatment and/or spread is curtailed; this is usually time-bound (Doke & Doke, 2021).

**Hotel:** Business entity rendering accommodation and other services including rooms and ticketing, valet, housekeeping, laundry, specialty shops for souvenirs, public dining, banquets and so on depending on the hotel price, function, location and market segment (Rutherford, 2021).

**Resilience:** A multidimensional concept characterised by the ability to have the strength to persist and perform emotionally, physically and behaviourally even in dire circumstances with an aim of bouncing back or recovering from the shackles of a particular situation (Connor & Davidson, 2003)

**Mental Health:** A wellness state at a point in time that has to do with proper and/or efficient functioning of a person in relation to coping strategies for the challenges of life to benefit oneself and his/her immediate environment or society (Di Emidio, 2021).

**Anxiety:** The feeling of uneasiness, such as worry or fear. It could be mild or severe depending on the situation at hand (Rickels & Rynn, 2001).

**Depression:** Also known as Major Depressive Disorder (MDD), has to do with symptoms and moods that decrease interests and feelings with regards to how an individual thinks or reacts to his/her immediate setting or happenings in the immediate environment (American Psychiatric Association, 2013; Coryell & Young, 2005).

***Stress:*** Any change that overwhelms a person physically, emotionally, or psychologically. It is the body's reaction towards an attention or action (Mahoney, 1991).

***Positive Mental Health:*** A wellness of mind depicting how one can potentially achieve work productivity, strategically face life's challenges and meaningfully make desired contributions for society's development (Barry, 2009).

### **Organization of the Study**

This study is organised into five main chapters. Chapter one; background to the study, statement of the problem, study's hypotheses, study's objectives, research questions, significance of the study, delimitations and limitation of the study, definition of terms and organisation of the study. Chapter two; theoretical and empirical literature reviews in relationship to the study. Chapter three; primarily explains research methods used in the study's analyses, including: the research design, the study area, the population, the sampling procedure, the data collection instruments, the data collection procedures, the data processing and analysis, and discussion of results of pilot study. Chapter four; discusses the research results/findings. Chapter five; the study's summary, conclusions drawn and recommendations given to enhance future studies are presented.

## CHAPTER TWO

### LITERATURE REVIEW

This chapter reviewed previous related literature on the study in line with these headings:

1. The coronavirus pandemic
2. The impact of coronavirus pandemic on businesses.
3. The impact of coronavirus pandemic on hospitality and tourism industry.
4. The conversion of hotels to quarantine facilities
5. Mental health
6. COVID-19 induced mental health of service providers amid the pandemic
7. Theoretical and conceptual frameworks.

#### **The Coronavirus Pandemic**

In the later months of 2019, China experienced one of the deadliest epidemics in the City of Wuhan. It was reported that the City of Wuhan recorded a number of an unknown sickness which was believed to be a symptom of respiratory inflammations disease or Pneumonia (Zhou et al., 2020). People who were infected showed signs of difficulty breathing, fever, lethargy, and a dry cough (Liu et al., 2020). Two main factors triggered peoples believe that the sickness was Pneumonia; the presence of the unhygienic animal market closer to the city and the fact that Pneumonia was a common sickness in the area and the new disease had similar symptoms. Little did they know was the beginning of a pandemic that was going to take the lives of millions of people. It was eventually discovered to be a novel form of coronavirus by the authorities. The virus is said to have originated from the family of viruses, which have been the cause of several diseases in both

humans and animals. Zhou et al., (2020), reiterated that the virus was later discovered as a rare noble virus caused by the Coronavirus with a high capacity of spreading. The World Health Organisation (WHO) on January 12<sup>th</sup>, 2020, upon investigating this newly discovered virus momentarily named it 2019-nCoV. Rasmussen et al., (2020), postulates that the virus was later referred to as COVID-19, derived from Corona Virus Disease 2019. As symptoms, the virus causes trouble breathing, a cough, persistent muscle discomfort or chest pressure, and confusion (Centre for Disease Control, 2020). The cause of the virus is yet to be determined, as different versions of the findings have emerged. Murugesan et al., (2020) among other scholars deduced that the spread of the virus was caused by the unhygienic standards at the food markets at Wuhan. The presence of bats at the market is also believed to be a contributory factor to the cause of the virus. It is proven that bats are organisms which can host various virus; they have the ability to carry virus including Ebola, HIV and Rabies (Li et al., 2020).

On March 11, 2020 the World Health Organisation (WHO) globally, declared the outbreak of coronavirus a pandemic (Tariku, 2020). Seddighi (2020) describes COVID-19 as man's worst disaster since the World War II. Within the first quarter of the outbreak of the disease, the WHO, reported that it had spread to so many countries, infected 2.5million people across the globe (Bhatti & Akram, 2020; Vellingiri et al., 2020) and killed over 307,395 people (WHO, 2020). However, the number of infected persons and countries tripled within two weeks after this report. Countries like South Africa, Spain, Italy, Germany, India, United States of America, Iran, and China and so on, were severely affected by the COVID-19 (Ozili & Arun, 2020). Ghana, a day after the WHO's declaration - March 12, 2020, recorded an infection (Afriyie,

Asare, Amponsah & Godman, 2020). The nation had announced its first two cases in Accra, the capital city. People who had returned to the nation from Norway and Turkey were recognized in both cases (Odikro et al., 2020). As at December 2021, Ghana had confirmed over 131,911 cases and 1255 cumulative deaths (Odikro et al., 2020) At this stage, all aspects of life around the globe have been harshly affected (Workie, Mackolil, Nyika & Ramadas, 2020). It had a dreadful impact on the economy of countries; it affected political, social and financial strength of several countries (Ozili & Arun, 2020).

### **The Impact of the Coronavirus on Businesses**

The COVID-19 pandemic's original focus was on clinical and epidemiological elements, but the focus is gradually shifting to the global economy (Rădulescu, Williams & Cavanagh, 2020). The burden of the COVID-19 pandemic was dire for underdeveloped countries, particularly African nations that rely significantly on wealthy nations (Gift, Raimi, Owobi, Oluwakemi, Anu & Funmilayo, 2020). The first effects on most countries' economies, according to Seetharaman (2020), were rapid declines in both aggregate demand and supply. A loss in aggregate supply has occurred from widespread company closures to address the pandemic, while a drop in demand stemmed from reductions in consumption and investment (Barua, 2020). The impact of coronavirus on businesses are examined on the global, African and Ghanaian perspectives in this study.

### *Global Perspective*

Public health had its fair share of the effects of COVID-19 which also brought about a huge economic shock in the shortest possible time with several nations having experienced unfavourable/unprecedented economic losses, closure of companies, gargantuan layoffs and worsened forms of liquidity (Loayza & Pennings, 2020). COVID-19 had an international influence, as it resulted in the closure of several firms. For instance, in the United States, a study by Bartik et al., (2020) revealed that small businesses significantly closed down a couple of weeks after the inception of the pandemic. COVID-19 accounted for nearly every short-term closure of businesses in a study of 6000 small businesses. Apedo-Amah et al. (2020) further claimed that the probability of an entity being in business in the first four weeks of the pandemic is less than 30% but sharply rises to about 75% or more in the sixth week. China's quarantine efforts led to widespread manufacturing closures, resulting in a 6.8% decline in GDP in the first quarter of 2020 compared to the same period the previous year (Fu & Shen, 2020).

The pandemic also resulted in a rise in unemployment around the world. In the United States, for example, most businesses decline in active employment records by 39 percent as at January 2020. Most noticeable reports were within the Mid-Atlantic region; as in New York City, where firm closures were at 54 percent with jobs disappearance at 47% (Bartik et al., 2020). Businesses were seeing a loss in labour supply; this assertion was supported by Korankye (2020) who reported that people health deteriorated and extra or quality time was needed for children and others whose movements were curtailed due to measures instituted to control spread. Baker et al., (2020) pointed out that in the course of the pandemic, unprecedented



uncertainties reign among businesses or firms leading to drastic reduction in sales and expenditures on innovative and overall management practices improvements, as well as cutting done on employees to save cost.

The tourism sector is said to be affected the most. Apedo-Amah et al., (2020) postulates that the hospitality and tourism industry like other small enterprises in general, were more prone to close down. The World Travel and Tourism Council recently warned that the travel and tourism industry could lose 50 million jobs (Folinas & Metaxas 2020). This led to the inquisition into ways countries could control the increasing rate of unemployment in countries within Europe; prompting the European Tourist Manifesto nurturing several public and private European enterprises within the travel and tourism organisations to introduce Unemployment Reinsurance Schemes (Resnick, 2020). Sectors including lodging, food services sector and any foreseeable certainty to bounce back to full operation hovers around 75% six weeks into the deadliest COVID-19 outbreak, representing the smallest chance of remaining open (Uğur & Akbıyık, 2020). In the first four weeks, Apedo-Amah et al. (2020), reported that sales often plummet by 60% to 75% however, sales drop in week 8 to 47%, remains so at week 12, and by week 16 dipped to 43%. The impact on businesses in Africa was also severe as presented in the ensuing writeup.

### ***The African Perspective***

The global outbreak of COVID-19 led several nations of African descent to adopt policies similar to nations of the developed world including the institutionalisation of drastic measures such as lockdown to curtail infection/spread (Christie, Fernandes, Messerli & Twining-Ward, 2013). Some

governments shut down commercial ventures and some restricted transport avenues while some went as far as closing of borders (Ozili & Arun, 2020). Almost 55% of businesses in Sub Saharan Africa was forced to close down due to the COVID-19 (Teachout & Zipfill, 2020). The COVID-19 might affect Africa's GDP between 3 to 8% with resultant increases in worsening economic conditions of about US\$90 to US\$200 billion just for year 2020 alone, as established by conservative estimates (Jayaram et al., 2020). The United Nations Development Programme (UNDP) estimates that, COVID-19 has the potential to bring about job losses in Africa to almost half of existing jobs exacerbating an already unemployment-stricken economy; and this certainly will aggravate Africa's volatile structural economies where estimates of people living below \$1.90 per day is hovering around 422 million (Yaya, Otu & Labonté, 2020).

Velde (2020) argued that the pandemic has also generated a decrease in Foreign Direct Investment flows, an increase in capital flight, a tightening of local financial markets, and a slowdown in investment. Various international organizations forecast a drop in output in Africa. Moreover, reports from the World Bank (2020) suggest that the regional economic growth would slow from 2.4 percent in 2019 to 2.1 to 5.1 percent in 2020. According to a recent rapid survey of Ugandan businesses, lockdown measures lowered economic activity by more than half, with micro- and small enterprises seeing a bigger drop-in activity than medium and large-sized businesses (Lakuma & Sunday, 2020). Real-time survey data predicts that by the end of April 2020, one out of every four workers in Senegal, Mali, and Burkina Faso will have lost their jobs, and one in every two workers experiencing a decline in wages (Balde, Boly & Avenyo, 2020). The

conclusions drawn indicate that the informal sector employees will gravely be affected since their daily sales determine their income, have no collective bargaining ability and are prone to working in industries that require their physical presence such as restaurants, tourism, mini retail shops, hairdressing and driving - often more vulnerable to pandemic response measures (Balde et al., 2020). Africa's oil-related earnings will predictably diminish by over US\$101 billion in 2020 (Stanley & Fernández, 2018). Ghanaian businesses as below were not left out of the nemesis of COVID-19.

### *Ghanaian Perspective*

Korankye (2020) argues that doom saying has eclipsed the good news with low level ventures as well as large multilateral companies gasping for breath and in very rare instances, shutting down. Commodities have been held at ports for weeks, and hundreds of cities throughout the world are locked out, with cuts to civil and industrial transportation and unprecedented aircraft cancellations (Rwigema, & Celestin, 2020). The majority of small and medium businesses are struggling to stay afloat. During the early months of the advent of COVID-19 in Ghana, around forty-two thousand (42,000) employees suffered job losses primarily, because of the partial closures and/or lockdowns of hospitality and tourism outlets; resulting in revenue loss of up to \$171 million within the first three (3) months (Aduhene & Osei-Assibey, 2021). These alarming revelations led to the government's institutionalisation and adoption of stringent measures to safeguard and enhance the wellbeing of the populace and businesses (Afriyie et al., 2020). Most lower-level ventures accordingly battled uncontrollable job losses, closures, undue operational loss incurred because of client inability to effectively consume products and

services being offered based on inability to produce at full capacity as well as loss of capital (Doe & Emmanuel, 2014). Mensah and Boakye (2021) insinuates that low scale ventures battling financial loan packages encountered difficulties of repayment at sky-rocketing rates. As a result, the pandemic has effectively crippled Ghana's small and medium industries (Mensah & Boakye, 2021). Shafi, Liu and Ren (2020) reports that low scale ventures are bending their backs to mobilise resources, cut down labour cost usually by trimming down the size or employee numbers. Stemming from the fact that consumers are not patronising products produced, leading to ballooning operation cost without any returns (Stock, Speh & Shear, 2006). Some low capital ventures are repositioning to be effective in order to still be in business when the storm of COVID-19 is eventually over (Sarkar & Clegg, 2021).

Babuna et al., (2020) further mentioned that the travel industry, particularly aviation, has come to a halt owing to COVID-19. As the infection spread, Ghana imposed a travel ban and shut down its airports (Ozili, 2020). With an average of 56 aircraft per day, Ghana has the second busiest airport in West Africa (Babuna et al., 2020). Due to the restriction on travelling during the temporary closure, there were reimbursements owing to travel policy cancellations due to unused travel days because the insured could not utilise their annual vacation plans (Moroz, Shrestha & Testaverde, 2020). Insurers examine the reason for the purchase of travel insurance in order to defend the customer's interests (Babuna et al., 2020). Some insurance companies began laying off staff and converting full-time personnel to part-time positions as well (Lambert, 2008).

## Impact of the Coronavirus Pandemic on Hospitality and Tourism Industries

### *Global Perspective*

The advent of COVID-19 brought to the fore devastating effects bordering on lives and livelihoods of individuals, groups, organisations and nations around the globe, leading to untoward experiences that haphazardly dismantled nations politically, economically and socially (Bandi, Klein, Madon, Monteiro & Ranjini, 2020) With respect to the tourism market, consumers right to travel was greatly curtailed especially among people of the Global North (Baum & Hai, 2020). There continued to be travel restrictions in many countries resulting in border closures, restricted transportation options or absolute cancellations of approved means (Hall, Scott & Gössling, 2020). Even airlines were not spared in this regard; whether for local or international schedules or services (Baum & Hai, 2020).

Noticeable however, is the fact that the shutdown of facilities was uneven across the globe and different governments adopted different approaches for containment; for instance, while some close down all businesses, some left them in operation for a longer period of time (Franks & Vihola, 2020). The pandemic nonetheless, left some tourists stranded at destinations they travelled to and could not return immediately to their home nations (Uğur & Akbıyık, 2020). Typically, cruise ships detained in Japan and California, as well as people restricted in resorts in Spain and Peru are high-profile examples. This type of confinement also increased the prevalence of COVID-19 infection among those who were exposed, particularly on cruise ships (López-Bueno et al., 2020). Moreover, there were general layoffs and this affected many households. For instance, Marriott International, with

employees' strength around 174,000, expectedly will render multitudes of their staff unemployed (Abuelnasr, 2020). March 5, 2020 saw Hilton Worldwide, declare an intention of preserving resources and keeping form by lending out a \$1.75 billion revolving loan "in view of global market uncertainties" (Kumar, 2020). In these trying moments, drop-in volume of travels of around 30% in February was duly recorded by Airport Malaysia (Kumar, 2020). Airlines for America recently sought a financial package from the government; consisting of \$25 billion bailout, \$25 billion subsidies, \$25 billion loans and a huge relief in tax, in order to assure their existence (Kumar, 2020). The UNWTO (2020) further reported that unemployment had risen dramatically, with 100–120 million direct tourism jobs under jeopardy, posing a serious threat to people's livelihoods. The hospitality industry, which includes hotels and restaurants, were severely impacted. For example, hotel revenue plummeted in the last week of March, 2020 by 11.6 percent in America, China's rate of room occupancy fell by 89 percent by the end of January, 2020 (Aigbedo, 2021) Some US firms sought roughly around \$150 billion direct employees aid to curb the extraordinary business decline and estimated loss of about \$1.5 billion by the middle of February (Kumar, 2020).

### ***Regional Perspective***

Tourism continues to be the backbone of many economies in Africa especially southern Africa (Christie et al., 2013). Leonard (2016) reiterated that tourism offers employment and generates income for most people as well as integrating people. Baum and Hai (2020) argued that as COVID-19 shortened the right of people to travel, so has it affected the economies of many countries and this is evident in many countries across the African

continent. In general, tourism relies on people's capacity to travel from one location to another (UNWTO, 2020). The various forms of travel restrictions caused by the pandemic affected national economies including the tourism systems (Gössling, Scott & Hall, 2020). Africa already was recording less numbers when it came to the tourism sector and it became worst with the outbreak of the pandemic (Dieke, 2020). This is reiterated by Walton (2009) who argued that domestic tourism and Africa already had a poor relationship.

In 2018, Africa's tourism industry increased by 5.6 % within a global average of 3.9 percent and in a larger African economy of 3.2% increase (Mkwizu, 2019). The tourism industry brought into the economy of southern Africa, the sum of USD 194.2 billion accounting for 8.5 percent of Africa's GDP; contributing 6.7% (24.3 million) in terms of employment in Africa. However, due to the pandemic's visitation orders worldwide, UNWTO (2020) predicted a dip in visitor numbers by about 20% - 30% in 2020 in juxtaposition to 2019.

### *National Perspective*

Africa as a continent is inappropriately usually viewed as a country and as a result, a general review of its air transport systems to attract more airlines within the jurisdiction of Africa would not be out of place in demystifying such negative perception about Africa; since the touristic prowess of the continent is enormous (Wang et al., 2021). Contributing approximately one hundred and nineteen (\$119) US dollars to Africa's Gross Domestic Product (GDP) for the year 2021, the travel and tourism industry are worthy of the right attention throughout the states of Africa (Wang et al., 2021). Most indigenous African settlements situated near tourism destinations

do unequivocally come to believe that watching and appreciating wildlife is reserved for outsiders and the few wealthy locals (Soliku, Kyiire, Mahama, & Kubio, 2021). As though to bolster this point, several nations of African descent, Ghana inclusive, tourism facilities and/or amenities are targeted at outsiders' interests rather than natives' (Scheyvens, 2007). Since 1992, Ghana's tourism industry has prioritised luring foreign tourists over native tourists. Initiatives like the "Pan African Historical Theatre Festival (PANAFEST)", "Year of Return", "Beyond the Return" are intended to entice incoming visitors; particularly those from the diaspora, to be drawn in to appreciate their roots and to market the various tourism destinations (Aduhene & Osei-Assibey, 2021). Owing to the over-dependence of Ghana's eco-tourism consumption on foreigners, the instance of the outbreak of COVID-19, made it hit a rock (Soliku et al., 2021). This is because several governments around the world have implemented air travel bans, lockdowns, and social distancing policies. Evidences abound of almost all aspects of the industry being closed down in Ghana, either as a result of government mandates or at the initiative of facility managers (Soliku et al., 2021). Typically, of COVID-19 was the conversion of some existing facilities such as schools, hotels and so on into quarantine centres as supplements to overwhelmed hospitals and/or health outlets.

### **The Conversion of Hotels to Quarantine Facilities**

Globally, the coronavirus pandemic presented pressure on the already existing health care facilities and many countries were forced to use hotels as quarantine facilities (Hoang, Truong & Nguyen, 2021). There were also news reports of many countries including Pakistan converting hotels into quarantine



facilities (Kazmi & Shah, 2020). Adversely, the massive devastation caused by COVID-19 in wrecking the tourism industry, left the hotel business in an economic downturn; however, the use of the facilities gave the hotels hope of survival (Kumar et al., 2020). Several nations across the world including China, India, and Australia asked travellers to self-isolate for at least a period of fourteen (14) days by isolating at their homes or at a government-run observation centre (Mehrotra et al., 2021). Travellers were tested and those with positive COVID-19 results were classified; those who were acute (in need of continuous health care) were directed for their appropriate accommodations (specialized centres) and the rest to quarantine centres or hotels (Mehrotra et al., 2021).

The lack of quarantine-specific government facilities made governments fall on hotels, which served as quarantine facilities by providing transient lodging in guestrooms. In certain places, like China, hotels also accommodated health workers and COVID-19 patients who were having moderate symptoms (Hao et al., 2020). New Zealand and some states in Australia for instance are said to have eliminated the community transmission of the COVID-19 through the primary use of hotels as quarantined zones (Baker et al., 2020). The government of Australia regulated the hotels and everything about the facility at which guests were sent happened at the blind side of the guests until they arrived, or are very close to it. Cost of quarantine hotel accommodation was levied to each traveller by the government (Dincer & Gocer, 2021). Goh and Baum (2021) reports that since the outbreak, 63,000 passengers remained quarantined in Australian hotels, costing government an estimated USD 118 million. In Sydney, all people who arrived in the city after March 16, 2020 were housed in 30 makeshift or repurposed facilities or hotels

in its inner city and business areas to control the process and reduce the risk of community transmission. Those with acute or in need of continuous health care inclusive of those who positively tested for the severe acute respiratory syndrome (SARS), went to the Royal Prince Alfred (RPA), a Virtual Hospital housing three Special Health Accommodation hotels which facilitate renown monitoring of signs and symptoms as per the facility's model of care (Hutchings et al., 2020).

Adapting hotels for quarantine purposes makes advantage of a resource that was previously underutilised at the initial stage of the COVID-19 outbreak due to a drop in foreign travel (Sigala, 2020). However, the main problem of quarantine at a hotel is the crowded spaces and inadequate ventilation and it is likely to be less effective than purpose-built facilities (Duvendack & Sonne, 2021). In Australia for instance, there was a shortage of information about user experiences in the quarantine system, according to a report by its national institution responsible for quarantine hotels review. While many individuals recounted of a pleasant stay, some had issues pertaining to fresh air insufficiency, substandard lodging, small room size, poor cuisine, and substandard health care, employees of the hotels on the other hand were pleased to contribute to making the world a safer place, however, they were concerned with their facilities after-effect when COVID-19 is over; thus experiencing stress as a result of the constant thought about the disease and its infection rate (Teng et al., 2021). Hotel workers were at risk of contracting the disease in the midst of their affected clients with whom they share common facilities or environment. Zimmerman et al., (2020) reports instances where workers test positive to COVID-19 in several cases in this hazardous work setting. In June 2020, quarantine hotel employees in the coast

of Australia, Melbourne, Victoria were infected unwittingly on the job, but the virus was later linked to 90 percent infection due to the pandemic second wave (Goh & Baum, 2021). In the United States, there were 50 positive cases recorded among hotel workers (Boyer-Davis, 2020). Furthermore, given the larger population density in the urban regions where the hotels are located, the repercussions of the virus escaping quarantine (e.g., via infected facility personnel) may be more severe (Grout et al., 2021). There were also news reports of many countries including Pakistan, Sweden, Spain, France and the United States converting hotels into quarantine facilities (Kazmi & Shah, 2020; Hayward et al., 2021). Adversely, because of its massive devastating effects, the new coronavirus illness on the tourism industry and the hotel business has seen an economic downturn (Kumar et al., 2020).

Like other continents across the globe, Africa also had to fall on converting some of its hotels into quarantine facilities. In as much as Africa was not much affected by the coronavirus pandemic compared to the United States and the Asian continent, it saw pressure on its existing health facilities and had to result to other ways of containing the pandemic (Kuguyo, Kengne & Dandara, 2020). Sports stadiums, hotels and schools were transformed into quarantine zones for infected individuals and people awaiting to be tested or awaiting test results (Abey Suriya et al., 2020). Hostels were preferred quarantine facilities by most governments; and as such in South Africa, the public works department and infrastructure committees of the national assembly and national councils of province advised for the use of public facilities to quarantining patients infected with the pandemic (Bozkurt et al., 2020)

Ghana faced a lot of challenges regarding the acquisition of isolation centres and quarantine facilities (Aduhene & Osei-Assibey, 2021). During the surge of the COVID-19, the government of Ghana was urged to take control of hotels and use them as supplementary isolation centres (Salifu & James, 2020). The Ghanaian government took steps in catering for some social transformations such as renting hotels, churches, and erecting makeshift structures; some of which were utilized for the country's mandated 14-day quarantine of newcomers (Yankson, Gough, Esson, & Amankwaa, 2017). A concerted effort was launched to increase infrastructure by locating and turning existing facilities, into treatment centres (Amponsah, Tagoe, & Afriyie, 2021). Other issues facing Ghanaian healthcare stakeholders included a low physician-to-patient ratio, a dearth of intensive care unit (ICU) beds, and a paucity of ventilators (Amponsah et al., 2021). Although there is not much literature on the use of hotels in Ghana as quarantine facilities, the present study nonetheless sought to determine the relevance of converting hotels into quarantine facilities and the resulting mental health issues and resilience of the employees.

### **Mental Health**

Studerus, Gamma and Vollenweider (2010) define mental health to mean the capacity of an individual to be able to judiciously use and realised goals as expected of him/her physically, psychologically, socially and so on by exhibiting standardized or normal behaviour in all situations that will rake in fruitful outcomes to oneself, the immediate society and possibly, the whole of humanity. How one perceives him/herself coupled with how you interact and function with the immediate society and the larger society, paints an exact

picture of the actual health status of one's mind. Mental health is considered positive when it falls exactly in line with psychological demand; and is considered negative when it falls to the polar opposite (denoting inordinate mental functions), (Pilgrim, 2019). The World Health Organization (WHO) accordingly defines mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO, 2004). Mention is made that being sad or unhappy, furious or ill is a normal part of life and that humans are expected to experience such feelings as it completes life (WHO, 2004). However, there is the argument that the WHO's definition of mental health views it as a wholly positive emotion but the definition of mental is relative to different cultures (Galderisi et al., 2015). Galderisi et al., (2015) moreover suggest, that mental health should be defined as, "Mental health is a dynamic state of internal equilibrium which enables individuals to use their abilities in harmony with universal values of society. Basic cognitive and social skills; ability to recognize, express and modulate one's own emotions, as well as empathize with others; flexibility and ability to cope with adverse life events and function in social roles; and harmonious relationship between body and mind represent important components of mental health which contribute, to varying degrees, to the state of internal equilibrium." They stipulate that mental health should focus on significant values like self-care and respect, fellow feelings; cordiality and good rapport between people; appreciation for the environment and recognition of individual and collective freedom.

Keyes (2006; 2014) explains that mental health comprises three components which include emotional, psychological and social components.

Being happy, interested and satisfied about life constitute the emotional component; the psychological component comprises of appreciating one's personality, efficient handling of daily routines, effective interpersonal relationship, and contentment with life; and the social component is in relation to valuable resourcefulness as thus valuable societal impact (social contribution), community belongingness (social integration), believing and appreciating societal improvements (social actualization) as well as believing the functioning of society makes sense (social coherence). It is believed that these are very diverse, depending on a variety of circumstances such as pre-existing vulnerabilities or resilience, the severity of the illness, and the availability of treatment, social support and caregiving experience (Rolland, 2020).

### *Depression*

Depression refers to the feelings of one or more people often expressed through low self-esteem and an inability to fully appreciate the joy of life (Sowislo & Orth, 2013). It is also linked to a persistent, self-inflicting reaction that thrives on premeditated systemic occurrences that hinder proper functioning (Berk et al., 2013). Therefore, emotional expression of a sense of ego-helplessness and ego-powerlessness in the face of overwhelming narcissistic desires are referred to as depression. A depressed person experiences negative behaviours including sadness and unhappiness. Depression may occur as a result of losing a job, failing in an exam among others. Murray and Lopez (1996) mentions that depression has become prevalent among all psychiatric disorders and due to this, under the WHO's rankings, depression is considered as most burdensome among diseases in the entire universe.

Depression affects individual productivity and this may impact the economies of many states. The United States of America have experienced a shortfall in some sector of its economy due to issues of depression. According to Kessler et al. (2006), the United States of America incurred annual salary-equivalent cost of USD 36 billion as a result of depression at the work space. Some scholars believe this is underestimated since depressed individuals may have a significant impact on their co-workers. Depression may also affect interpersonal relationships. Depression has caused divorces in marriages, have broken family ties, destroyed relationships between parents and their children, and moreover, it has caused conflict at the work area (Wade & Cairney, 2000).

### *Anxiety*

The concept of health anxiety can help you understand the most common challenges that occur in the general population during a pandemic (Taylor, 2019). Hart (2013) believes that anxiety is symptomatic to tensed moods, uneasiness, being scared and other conditions that may be quite physical e.g., shivering, high blood pressure (hbp) and tensed muscles. Situations including unemployment may cause people to feel worried and uncertain. Anxiety is also described as a normal behavior of humans. It can also be considered basically as an emotion which is negative, along with disgust feelings, sad moods, unwarranted anger and sometimes correspond to a state of uncertainty. Anxiety usually is inclined to nature or futuristic; thrives so well in an atmosphere of adversity or the anticipation of such; as in the various unpleasant consequences of a tragedy happening. Individuals in this state may experience both physical and mental symptoms. The feeling of nervousness, tension, worries, and intrinsic thoughts are inevitable among the symptoms of anxiety.

Anxiety assessment is extremely contextualized (Easton et al., 2016). As a result, different sorts of scales exist, each with its own set of goals. In the hospital setting, anxiety has been routinely quantified (Easton et al., 2016). Anxiety about one's health can be described as a modest to severe tendency (Paluska & Schwenk, 2000). High levels of concern over one's health can lead to undesirable behaviours such as stockpiling essential commodities like hygiene products, food, and medical supplies, putting an additional burden on others (Nadkarni, Kapoor & Pathare, 2020).

### *Stress*

Stress is defined as the feeling of being overtaken by the tenure of events under uncontrollable circumstances (Sriharan et al., 2020). An individual's response to a change due to situations or a potentially dangerous scenario is referred to as stress. It is the individual's characteristics in responding to forces in situations outside one's control such as writing a test or an exam. It is worth emphasizing that when there is a danger of not being able to handle the situation at hand, stress levels grow. Shahsavarani et al (2013) defined stress as, "Any influence of the internal and/or surrounding environment on a living entity that disrupts its homeostasis." An individual's reaction to circumstances with hazardous underpinnings; cognitively, behaviourally and physically, especially when such circumstances have the propensity to linger on for a long period of time (Linden, 2005).

Stress is associated with many complications including respiratory problems. Acute trauma, loss of a relative and asthmatic attack (Moton et al., 2010). Furthermore, stress exacerbates the health conditions of people with respiratory malfunctions such as hyperpnea. Post-traumatic stress disorder (PTSD), a stress disorder characterised by extreme stress reactions to stress do



exist in people (Shahsavarani et al., 2015). Stress can also cause unrest and discomfort to individuals however; it is a part of the human existence. Stress has been measured in the setting of viral disorders including the severe acute respiratory syndrome (SARS) and the coronavirus disease, with which the Depression Anxiety Stress Scale's seven items are the most often used scale (Zhang et al., 2019).

### **Resilience**

Resilience has also been regarded as a measure of stress-coping abilities (Connor & Davidson, 2003), with Werner (1995) emphasizing sustained competence under stress. The Organisation for Economic Co-operation and Development (OECD) hints of resilience as the ability of a system, community, or society to adapt to challenges by resisting or adapting in order to achieve and sustain an acceptable degree of functioning and structure (OECD, 2013). The effectiveness with which a social system organises and builds capacity in order to learn and make improvements on foregone adversities so that future pandemics can adequately be prepared for and to institute appropriate risk reduction measures is crucial whenever a pandemic strike (O'Brien, 2008). This valuable attribute is always required in the process of dealing with crises. Walker and Salt (2012) stipulates that the prevalent resilience paradigm demand that portions of a system be optimized in order for it to be more resilient. Therefore, there is a need for the development of a general resilience thinking approach.

## **COVID-19 Induced Mental Health among Service Providers during the Pandemic**

Coronavirus infection has a far greater psychological impact on the world than the 1918 influenza pandemic (DiMaio, Enquist & Dermody, 2020). The COVID-19 pandemic, according to Qiu et al., (2020) has caused panic, hyper alertness, sleep disturbance, anxiety, and melancholy in people all over the world. According to reports, the onset of widespread sickness raises levels of uncertainty, concern, anxiety, and stress, depleting coping mechanisms and contributing to trauma (Chew et al., 2020). Pandemics have been linked to increased stress, worry, contamination fears, health concerns, Post Traumatic Stress Disorder (PTSD) and suicides (Wheaton et al., 2012). In the absence of focused therapy or a cure for COVID-19, several countries have responded by implementing strict quarantine and isolation measures to decrease transmission rates; nonetheless, these efforts have raised the risk of mental health consequences (Loayza & Pennings, 2020).

Work-related stress can have severe consequences for people, businesses, and organisations, it is a key issue in a number of academic and business studies (Caligiuri, De Cieri, Minbaeva, Verbeke & Zimmermann, 2020). Stress was found to be a strong factor of organisational trust for those who work for government institutions in Iran (Kang, Park, Lee & Lee, 2021). Goldberg et al., (2020) argues that a similar finding has been seen in the hospitality industry, where front-desk personnel satisfaction is worse as a result of work-related stress. Many staff dealing with abusive and thoughtless clients experienced more job stress and decreased job satisfaction (Kim et al., 2020). Teng et al., (2020) also explains that the issue of concern to employees in facilities used for quarantine far exceeds just the COVID-19 induced

excessive workloads to include; job insecurity and its associated psychological stress; high rate of exposure to infection and the possibility of contracting the infection to infect others such as close relatives. There was stress associated with working at the quarantine zones as hotels staffs will lack the necessary education on ways to handle certain cases, especially in extreme cases, and this, Kim (2019) argues causes low level of life satisfaction. Moreover, there is another factor that causes stress in employees and this includes non-negotiable and efficiently hazardous circumstances at the place of work. McCoy and Evans (2005) stipulate that a major hindrance to employees' inability to fully realise their performance capability is the physical environment which places on them unrealistic expectations that drastically reduces their productive outcomes and causes stress amongst them.

Hoteliers adopted a variety of tactics to stay in business during and after the pandemic as a result of the pandemic. While customers reconsidered their travel and accommodation plans, hotels were forced to compromise and discover new methods to stay relevant (Jiang & Wen, 2020). The hotel staffs were made to follow all the COVID-19 protocols including the wearing of nose mask, washing of hands frequently, social distancing among others. This reduced the chances of contracting the COVID-19 virus. Some scholars and relevant organisations have also continued their efforts to comprehend the pandemic in order to sustain tourism capacity at various levels in an attempt to prepare the tourism and hospitality industry post-COVID-19 (Noorashid & Chin, 2021). For example, a discovery by Abbas et al., (2020), Persson-Fischer, and Liu (2019) showed that the tourism and hospitality sectors must adapt to changes such as increasing domestic market share. These studies also show that such a plan is feasible, taking into account cooperative resilience

management and developing social values among tourism's major participants during the pandemic.

### **Theoretical Framework**

The theoretical framework for this research work was centered on mental health theory (Watson, 1924), Lazarus theory (Lazarus & Folkman, 1986) and the resilience theory (Flach, 1988). For this study's purpose, the research focus will be on behaviourism.

#### ***Behavioural Theory***

Watson (1924) popularized behaviourism theory and was one of the earliest comprehensive attempts to describe behavioural theory. Developing themes from his "behaviourist manifesto," he expands on them (Watson, 1913). Watson (1924) goes on to say that behaviourism should focus on observable elements rather than consciousness. What the organism does, including overt acts like speaking aloud and even covert behaviors like thinking, is said to be an example of observable reactions. Watson's description of human behaviour includes cognitions, and he believes that thinking is silent speech that may be observed, at least in principle, by the thinker (Watson, 1924). Depressive symptoms are developed and indeed maintained by the alteration of certain avoidant environmental exigencies that obstruct the attainment of environmental reward and reinforcement (Carvalho & Hopko, 2011).

Depression refers to a group of behaviours that have been documented in descriptive studies of sad people and are characterized by a persistently depressed mood (Grinker, et al., 1961). Dysphoria (an uncomfortable feeling),

self-depreciation, remorse, material load, social isolation, bodily pain, and a decline in a variety of behaviors are all part of it. Depression is supposed to be a continuous variable that may be thought of as both a state that changes over time and a trait (some people are more prone to becoming depressed than others may). If a person (patient) satisfies specific experimental criteria and some interview elements outlined by Grinker, he or she is classified as depressed (Grinker et al., 1961).

Most hospitality employees are facing difficult times as nations all over the globe impose restrictions on travelling and ban mass groupings in order that COVID-19 rapid spread to some extent is curtailed (Aduhene & Osei-Assibey, 2021). This new disturbance leaves the hotel employees' mental health at jeopardy and raising concerns about their career expectations (Alonso et al., 2020; Filimonau, Derqui and Matute, 2020). Of major concern in the sector of hospitality, is the employee mental health (Teoh et al., 2019). Emotional constraints are dominant among hospitality staff owing to the unstable nature of their jobs, customer ill treatments, and conflicts between work and family (Cheng & Yi, 2018). Individuals' perceptions of the risk of COVID-19 tend significantly to impact greatly on depression (Ding et al., 2020; Georgiou, Delfabbro and Balzan, 2020), influencing profoundly on depressive outcomes or behaviours irrespective of the real implications (Ding et al., 2020; Georgiou et al., 2020). In the Ghanaian setting as an example, contracting the coronavirus infection is worrisome to most people but others are lackadaisical or actually careless with wanton disregard to being contracted.

### *Cognitive Theory*

Cognitive theory focuses on thought rather than action (Rachman, 1998). There is a feedback loop between a person's assumptions and attitudes, their perceptions, and the conclusions drawn from them (Kunda, 1990). These therapists assist individuals in changing their ideas. As a result, feelings and behaviour change (Khan-Bourne & Brown, 2003). Earlier pandemic research reveals a link between anxiety and disgust reactions, as well as the dread of being attacked by diseases in times of adversities, albeit the distinguished levels of accountability for each has insignificant outcomes in recent studies (McKay, Yang, Elhai & Asmundson, 2020).

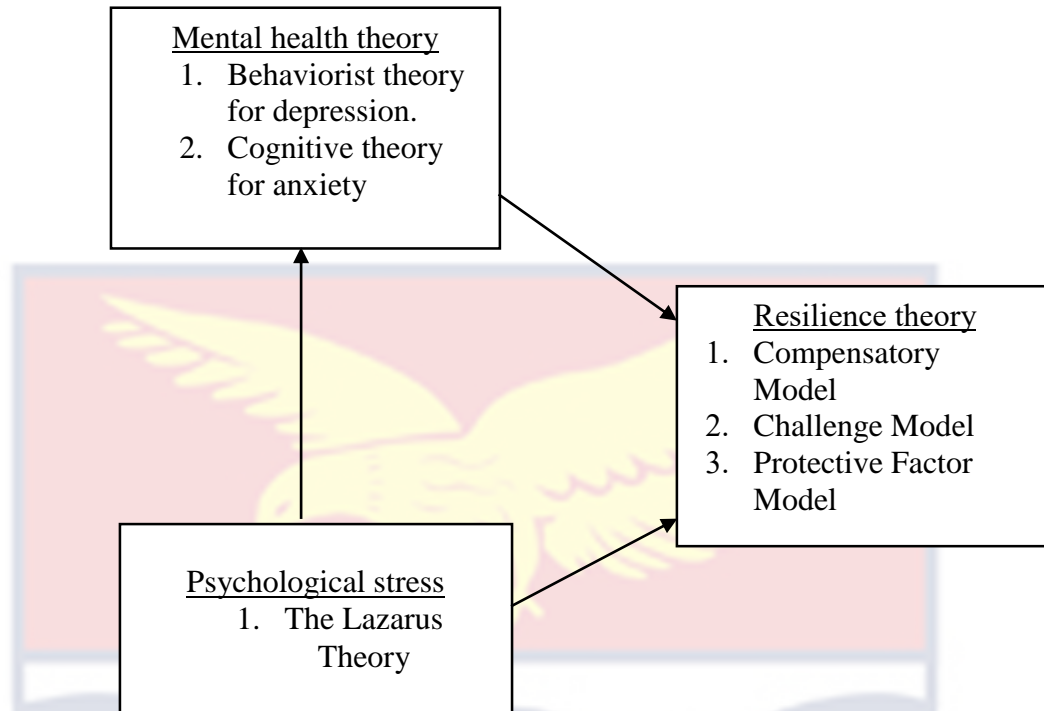
### *The Lazarus Theory: Psychological Stress*

Stress is defined as the interaction that occurs in-between individuals and their immediate environment. It is viewed substantially in the lens of a social construct. Lazarus (1991) believes that stress cannot be explained with a single outward trigger or an embodiment of mental, emotional, or constructive reaction. Psychologically it refers to a person's interaction with his or her environment that s/he regards as critical towards survival; but the forces of this source of survival far outweighs the accoutrements with which to cope (Lazarus & Folkman, 1986). Considering the transaction between person and environment, two processes are identified as central negotiators - Individuals' mental appraisals of the importance of what is happening for their well-being, and their efforts in thought and behaviour to manage specific demands, are referred to as coping (Lazarus, 1993). The notion of emotional research evaluation was first introduced by Arnold (1960) in his research work and

Lazarus (1966, Lazarus and Launier 1978) expatiated it to include mechanisms and/or processes of stress.

### *Resilience Theory*

Resiliency theory in the medical parlance is viewed as being able to give recognition to pain and appreciating its functionality by accepting it momentarily until such periods when things normalised (Flach, 1988; O'Leary and Ickovics, 1995). Several scholars have varied nomenclature for the three resilience models with all depicting similar mechanisms for influencing quality adaptation of stress. The proposition by the challenge model is that there is improvement in an individual's adaptation in a circumstance of a weak risk factor and the experience acquired adequately strengthen such an individual for proceeding challenges (O'Leary, Alday & Ickovics, (1998). For protective factor model, an interaction of protection and risk factors are proposed where there is a reduced possibility in the result being negative whilst moderating risk exposure effect (O'Leary et al., 1998). Protective factors encompass the ability to manage emotions, intrapersonal skills, academic and career skills, repairing of self-esteem, planning and life skills, as well as the ability to solve problems (Ungar, 2004). Resilience mitigates risk as proposed by the compensatory model; where risk and compensating factors determine the outcome of an entity exposed to risk. A study of resilient young adults by Werner and Smith (2001) discovered; problem-solving activism, perception of experiences in a positive light, audacity for others positive attention and strong faith for positive living as essentials for resilience.



**Figure 1: Theoretical Framework**

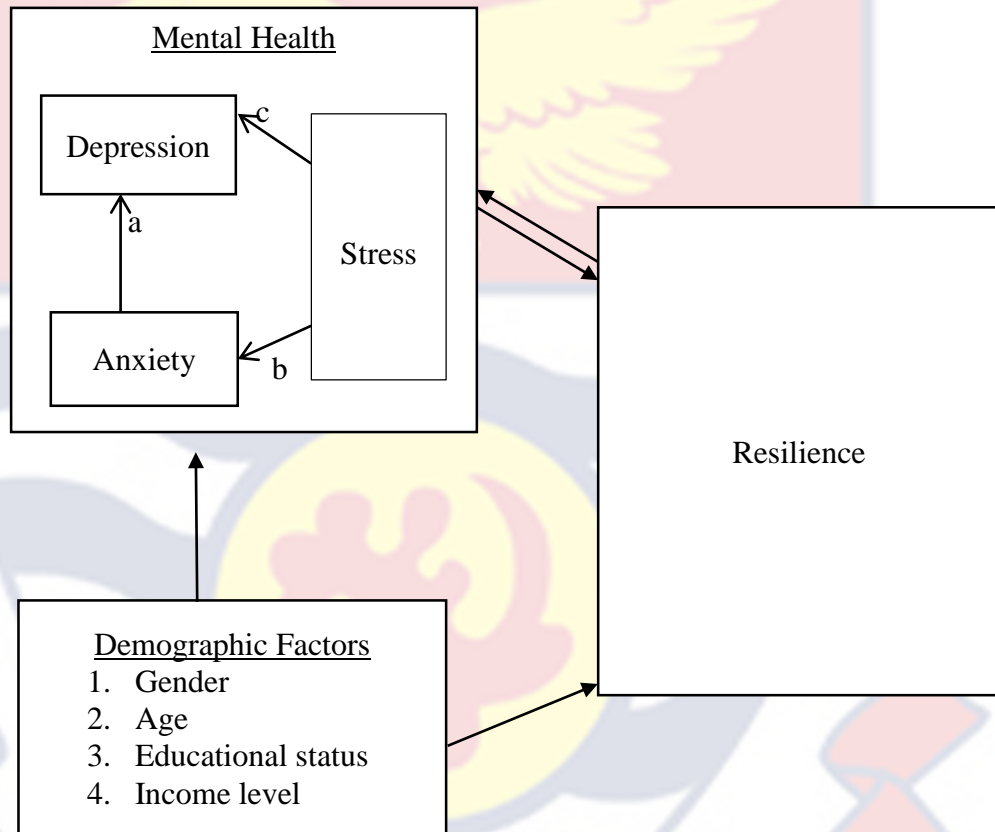
Source: Author's construct

### **Conceptual framework**

The conceptual framework indicates as per literature and thus hypothesised that; employees' demographic characteristics (age, gender, education and income) affect their positive mental health (Teng et al., 2020). Studies established that employees positive mental health has a negative effect on their mental health components (depression, anxiety and stress), because mental health issues are negligible when employees exude positive state of minds in any uncomfortable situation (Keyes & Waterman, 2003; Peterson et al., 2008; Warr, 1994; Warr, Jackson and Banks, 1988). It is also insinuated that employees positive mental health has a positive effect on their resilience (Brooks, Amlot, Rubin & Greenberg, 2020; Flanders et al., 2020) as well; employees resilience significantly reduces the effect of the components of



mental health based on established researches (Hendriks et al., 2020; McCormac, et al., 2018; Millear, 2008). It has also been established that the components of mental health positively affect one another (Brown, Chorpita, Korotitsch & Barlow, 1997; Headey, Kelley & Wearing, 1993; Wang, Tsay & Bond, 2005) and thus hypothesised: anxiety positively effect depression, stress positively effect anxiety and stress positively effect depression.



**Figure 2: Conceptual Framework**

Source: Author's Construct

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### Introduction

This chapter spelt out the study's research methodological context. Research methodology refers to how processes and procedures are systematically and scientifically followed to obtain data for analysis to inform findings, test research objectives and/or provide answers to research questions (Patten & Newhart, 2017). The section focused on philosophical foundation, approach, design, study population, study sample and sampling procedures, collection of data and analysis of data.

#### Research Paradigm

A paradigm is a basic set of beliefs with the intention of guiding action, known otherwise as worldview, epistemologies or ontologies (Creswell, 2014; Lincoln, Lynham & Guba, 2011). Varied social science research paradigms exist; inclusive of the positivist, constructivist, critical theory, feminism and pragmatic paradigms (Jarvie & Zamora-Bonilla, 2011). Of these, three paradigms are frequently being used; the positivist, constructivist or interpretivist and pragmatic (Cartwright & Montuschi, 2014).

Every paradigm has a way of interpreting social reality and thus fashion out appropriate methodologies (Patten & Newhart, 2017). Each paradigm follows a particular pattern for the truth, for the interpretation of reality and the most appropriate way of researching about reality (Tashakkori & Teddlie, 2008).

For the purposes of this study, the Positivist paradigm was used to assess the mental health and resilience of hotel employees who were at work

when their workplaces were used as quarantine centres during the COVID-19 outbreak in Ghana.

Positivism establishes the relationship between cause and effect in nature. It has been the preferable worldview for researchers whose interpretation is based on observing factual and/or measurable entities (Fadhel, 2002). A study based on this paradigm emphasises logical deductions, hypotheses formulation and testing, definition of key concepts and mathematical operations, and generalisable information upon which conclusions are drawn (Kivunja & Kuyini, 2017). Assessing the mental health and resilience of hotel employees at work during the COVID-19 outbreak in Ghana especially among hotel employees with no background on health issues who were at the forefront of caregiving to suspected and/or infected persons who were quarantined at their workplaces, the set objectives can adequately be met with a positivist philosophy and thus rightly adapted.

### **Research Approach**

Quantitative approaches were employed in this study. The quantitative approach is broadly associated with deductive logic, premiering on proven theories and then examining these theories holistically (Yu, 2006).

Quantitatively; numbers, statistical and/or mathematical equations based on data from sampled populations are used to enable the appreciation of huge constructs or large data (Smith, Denzin & Lincoln, 1994).

The foundation of a quantitative study is usually premised on deductive logic with emphasis on acceptable scientific theories that ought to be tested and approved or otherwise, without any bias (Yu, 2006), as this study seeks to. Developing and validating a quantitative study is quite simple and

the extrapolations and rigidity with regards to limiting levels of investigations enables a better external validation of the research work (Letaifa, Choukair & Tabbane, 2006; Newman and Benz, 1998). Again, in the fields of tourism and hospitality, quantitative research is famous and essential as it usually adopts a perspective that is management oriented, thus reflecting an organizational way of life that has links with natural science since it usually involves huge statistical data (Pansiri 2005: 192). Other reasons informed the decision to go quantitative for this study, including; in the era of COVID-19, for the safety of both the researcher and the research participants, and to facilitate research works, administering questionnaires are surest way of infection prevention as compared to face-to-face interviews and so, the quicker and faster the information required is gathered and used the safer the situation can be salvaged for health reasons. Additionally, a large number of responses are needed across all the facilities that were used as quarantine centres and once again, because of the continuous prevalence of the coronavirus, a quantitative approach is deemed suitable. The quantitative approach thus, is considered fit for this research work as it seeks to collect and analyse data quantitatively on mental health and resilience of hotel employees who were at work when their workplaces were used as quarantine centres during the COVID-19 outbreak in Ghana.

### **Research Design**

Research design refers to specific methods for the collection and analysis of data depending on the chosen approach for a particular research work (Dawson, 2019). This means a design guides the researcher throughout the study from data collection through to interpretation. Green and Tull (2009)

explained research design as specified processes for the acquisition of valuable information necessary for research work; an overall guide or scheme of a study which spells out the kind of information to look out for and from where and how; and it is a scheme of work or a workplan that enables the smooth and efficient way of carrying out and meeting the demands of a research work.

This study made use of the descriptive and the correlational research design.

The descriptive design was used in describing research participants' nature and characteristics based on the data quantitatively collected for the study.

Sekeran (2003) states that descriptive research design is used in gathering data on current status of a phenomenon to enable the description of what exists per

the variables considered for a particular study. Kothari (2003) description of

descriptive research encompasses surveys of all kinds and fact-finding investigations; additionally, descriptive design is useful in describing the

affairs of a given state for a study. Correlation research design is useful in

determining the relationship between two variables in a study. This design

efficiently makes use of the correlation coefficient in measuring a linear relationship strength and direction of variables understudied. It aims

to discover hidden or possible relationships between variables and points to exigencies in other variables that are similar (Bourdieu, 1987). It as

well, presents a clearer image of a phenomenon on an issue that had been

explored or disclosed by descriptive research (Sobhani, Amran & Zainuddin,

2009). It is non-experimental and so the variables are not prone to the

researcher's bias, however there should exist some form of knowledge about

the possible prediction (Sauer, Brookhart, Roy & VanderWeele, 2013).

## Study Area

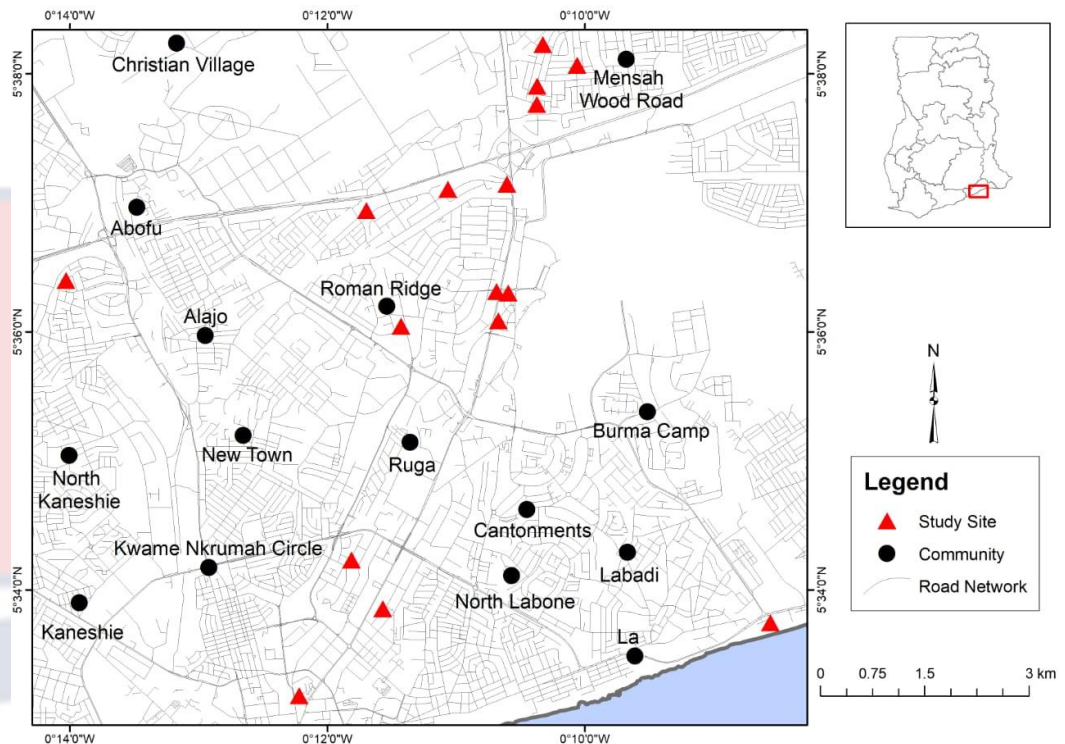
This study was conducted in the Accra Metropolis within luxurious hotels that were used as quarantine facilities. Established in 1898, the Accra Metropolitan Area (AMA) remains the Greater Accra Regional capital and Ghana's national capital as well. Accra is boarded northwards by the Ga West Municipal, westwards by the Ga South Municipal, southwards by the Gulf of Guinea, and eastwards by the La Dadekotopon Municipal. Accra has a land area of 139.674 Km<sup>2</sup> in total. Ghana consists of 216 Municipal and District Assemblies (MMDAs) with Accra Metropolitan Area (AMA) existing among the 16 MMDAs of Greater Accra. Established in 1993 per the Local Government Act (Act 462) with the Legislative Instrument 1615; six (6) Sub-Metropolitan District Councils were also established in 1898. The AMA has evolved in size and number with respect to its Sub Metros and so as existing now, the AMA was established in 2012 with L.I. 2034 upon the establishment of La Dadekotopon Municipality.

The Accra Metropolitan Area functions as the business centre for Greater Accra and for the entirety of Ghana. It plays host to several establishments, institutions and industrial outlets such as educational and health institutions like schools and hospitals; financial institutions like banks, credit unions and lending companies; manufacturing companies; oil companies; telecommunication; and tourism among others. These outlets offer jobs for the City's inhabitants as well as for those from other parts of the country as thus, the presence of these establishments keep attracting people from all over Ghana or in transcendence for the transaction of businesses of all forms.

The primary, secondary and tertiary sectors attract most inhabitants into the city for the realisation of their economic dreams and aspirations; and so income generating activities such as construction works, manufacturing, the services sector, trading, fishing, farming and many more have people thronging into them.

Hotels have been in operation in Ghana during the colonial era and have gone through some levels of evolution. Ghana's hotel industry has rapidly grown and expanded in order to accommodate the soaring numbers in respect of the touristic demands and good economic management policies being implemented in the foregone years. The City of Accra experienced its growth in hotel development primarily to respond to the sustained increase in tourist arrivals which soared from 583,821 in 2004 to 698,069 in 2008 necessitating a throng in number of registered hotels in the Greater Accra Region to 23.2% from 1,295 to 1,595. The hospitality and tourism industry is the fourth income earner for Ghana, yielding about GHS3.9 billion, approximately \$640.9 million to Ghana's Gross Domestic Product (GDP) in the year 2020; this was a decrease however, due to COVID-19 as nearly GHS6 billion, about \$985.8 million was recorded in 2019 (Ampofo, Ameza-Xemalordzo, Ampofo, & Nkrumah, 2022). Primarily, because of its positioning and economic importance, Accra can authoritatively boast of more hotels than any other Ghanaian City. Ghana's hotel industry has a lot of prospects for growth but saddled with hiccups such as expensive hotels and flight tickets, unskilled staff and poor maintenance (Mathers, 2003). Hotels in Ghana are classified into luxury, first class, second class and third class, based on the quality of service delivered as well as standard infrastructure and facilities within an outfit. It is worthy to note that about 34% of the various

room types were available since 2001 in the Greater Accra Region; all four and five star-rated hotels inclusive.



**Figure 3: Map of Hotels used as Quarantine Centres in Greater Accra Region**

Source: GIS Remote Sensing and Cartography Unit, University of Cape Coast, 2022.

### Population

A population is considered as an identifiable set of subjects extracted from a larger group with similar attributes like gender, age, education, income, work conditions among others of the respondents or subjects which are considered relevant in finding answers to research question(s) in a study (Plonsky, 2017). Creswell (2013) also defined population in respect of a unified set of people with identifiable features capable of enabling a researcher(s) realised a study's objective(s). According to April 11, 2020 edition of Graphic.com, sixteen (16) facilities were used for quarantine within Accra Metropolis. The selection was done upon the willingness of a facility to



operate at a discount rate as well as adequate space and facilities available (Ghana High Commission UK, 2020). Population for this study was employees who were at work during the COVID-19 outbreak when their workplaces (hotels) served as quarantine facilities. Data was collected from these employees because they were directly involved in the provision of services to people infected and/or suspected to be infected with coronavirus and thus have the needed experiences for the realisation of the study's objectives.

### **Sample and Sampling Procedure**

The sample for a study is considered as an extraction from a population that a researcher has interest in and chosen for a particular research work (Patten & Newhart, 2017). Sampling procedure encompasses all the steps that are followed in choosing respondents out of a pool within a given population, in order that a good reflection of the larger population views or responses can adequately be obtained and leaned on, to draw conclusions (Plonsky, 2017). This current research work primarily sampled employees of hotels who were at work when their workplaces were used as medicalized quarantine facilities during the COVID-19 outbreak and this was because they were directly involved in the provision of services to people infected and/or suspected to be infected with coronavirus and thus with the needed experience to realised the study's objectives. The study adopted a convenience sampling technique. Convenience sampling (Selective or subjective sampling) is somewhat restrictive and dependent on an individual's own view in choosing participants of a given population for a study (Black, 2010). This saves time and money, may be the possible and sole way out in acquiring the needed data especially

in cases where primary sources of data are almost non-existent; and data too is needed badly for research work (Black, 2010) as in this current study. However, it may be vulnerable to errors as it depends on the researcher's judgment, reliability may be low as it is prone to incalculable level of bias and so limits generalizability (Black, 2010). The researcher decided on the use of convenience sampling method because of the study's sensitive nature as some hotels were not willing to allow their employees to part-take in the study as well as not disclose the employees' lists. The decision to employ convenience sampling was made during the researcher's initial visit to the listed hotels to inform them of his intention to collect data from the staff. The difficulty in obtaining permission from management of hotels informed the number in the sample used for the study.

A total of sixteen (16) facilities listed as quarantine facilities were visited with seven (7) outrightly refusing to participate in the survey; with reasons bordering on operational norms or directives or security, although the researcher had assured confidentiality, honesty and integrity based on IRB approval by the University of Cape Coast. The nine (9) facilities accepted to participate with some reservations without agreeing to provide any further information related to the hotel or employees, especially regarding the number of employees within the hotels. As a result, forty (40) questionnaires were submitted to each hotel manager who was to administer the questionnaires to their staff. A total of three hundred and sixty (360) questionnaires were given out.

## Instrumentation

Data collection instrument is the tool through which data is objectively and systematically gathered for a study (Kothari, 2004). The present study used questionnaire. Questionnaires because conclusions by Dempsey et al (2003) indicated that for data to be properly gathered by making room for participants to freely volunteer the right information, to effectively and efficiently meet the demands of a research work, questionnaires are the ultimate. Accordingly, Kothari (2003) explained that questionnaires present precise and legitimate data that is devoid of the researcher's bias; as well, it allows for high rate of responsiveness and not difficult to administer especially, when the questions are simple, well-structured and easily administrable (O'Sullivan et al., 2016).

The instrument was designed sectionally into four. The first was section A with five items mirroring the demographical records of the respondents. The second was section B, that had six items on COVID-19 safety measures with participants indicating Yes or No to the items. Section C contained The Connor-Davidson Resilience scale (Connor & Davidson, 2003). which was made up of 10 items. Responses to these 10 items were based on 5-point scale (0-4). Respondents were to respond to the statement by selecting either Not true at all =0 or Rarely true=1 or Sometimes true=2 or Often true=3 or True nearly all the time=4. The higher the scores, the greater the resilience. Section D of this questionnaire had twenty-one items from the Depression, Anxiety and Stress Scale (DASS 21) (Lovibond & Lovibond, 1995; Teng et al., 2021). Seven items of DASS measured Depression (Questions 24, 26, 31, 34, 37, 38, 42). With a cutoff of 14 for DASS Depression subscale, a sum of all responses for the seven (7) questions per respondent falls into a particular

range, indicating the level of depression thus; 0-14(Normal), 15-18(Mild), 19-25(Moderate), 26-33(Severe) and 34+(Extremely severe). Another 7 measured Anxiety (Questions 23, 25, 28, 30, 36, 40, 41). With a cutoff of 10 for DASS Anxiety subscale, a sum of all responses for the seven (7) questions per respondent falls into a particular range, indicating the level of anxiety thus; 0-10(Normal), 10-11(Mild), 12-14(Moderate), 15-19(Severe) and 20+(Extremely severe). The last 7 measured Stress (Questions 22, 27, 29, 32, 33, 35, 39). With a cutoff of 19 for DASS Stress subscale, a sum of all responses for the seven (7) questions per respondent falls into a particular range, indicating the level of stress thus; 0-19(Normal), 20-25(Mild), 26-29(Moderate), 30-33(Severe) and 34+(Extremely severe). Each question was rated on a 4-point scale (0-3). Respondents indicated how often the item statement applied to them during the quarantine period. Responses were either 0=Did not apply to me at all as NEVER, or 1=Applied to me to some degree, or some of the time as SOMETIMES, or 2= Applied to me to a considerable degree, or a good part of time as OFTEN, or 3= Applied to me very much, or most of the time as ALMOST ALWAYS.

### **Data Collection**

The researcher initially visited the listed hotels used as quarantine facilities to inform managers about the research. Furthermore, the researcher obtained ethical clearance before research commenced. The researcher collected ethical clearance and an introductory letter from Institution Review Board (IRB) and the Department of Hospitality and Tourism Management of the University of Cape Coast respectively. Upon the approval from these authorities, the researcher then proceeded to seek the consent from the managers of the selected hotels before data collection. Data was obtained from

employees at work during the COVID-19 outbreak in the front office, housekeeping, and food and beverage sections of the various hotels that served as quarantine centres. These three groups were contacted because they were in direct contact with quarantined guests and provided services such as cleaning of their rooms, doing their beds and beddings, offering food and drinks and maintaining their upkeep during the quarantine and thus, were exposed to and had the experiences that will help realised the study's objectives.

### **Results of Pilot Study**

A pilot study was carried out from 1st to 9th September, 2021 in two facilities that were used as quarantine centres in Tamale. Fifteen questionnaires were used to pre-test the instrument. Information gathered after the piloting led to the reshaping of some questions that were ambiguous, repetitive and lengthy. For some scales, that seem boring because of the number of questions involved, shorter versions were adopted to make the instrument a bit smarter while meeting desired objectives and study's aim perfectly. The Cronbach's alpha measures consistency across every singular construct as a result ensures an overall rate of consistency in the test (Tuckman, 1999; Warner, 2013), as well its very useful in ensuring reliability (Warner, 2013) thus was employed for the pretest.

As presented in table 1 below, there was an overall Cronbach alpha of .79 for mental health (.74 for depression, .75 respectively for anxiety and stress) also, there was an overall Cronbach alpha of .75 for resilience and as concluded by Tuckman, 1999; a Cronbach's alpha of 0.6, 0.7 or possibly close to 0.9 are considered useful proof for reliability of a test. Although standardized scales have been adopted for the study, the pretest safeguarded reliability as well, of the components in each case as reiterated by Tuckman,

1999. The piloting therefore aided in ensuring a well-designed instrument that is valid without compromising the study's objectives and/or aim.

### **Data Analysis**

Analysis of data refers to the step-by-step procedures that are followed in order to inform sound statistical reasoning which will ensure perfect description or illustration of condensed but verifiably established data so that it can be evaluated (Kothari, 2004). The main purpose is to derive meaning from data so that knowledge obtained can be useful in making informed decisions (Lee, Kao & Yang, 2014). In a quantitative study, data analysis provides substantial statistical information through logical reasoning or careful examination of the figures obtained from the field (Niu, Behar-Horenstein & Garvan, 2013).

Quantitative data analysis includes but not limited to, establishing variables frequencies as well as establishing distinctions amongst them (Niu, Behar-Horenstein & Garvan, 2013). Data analysis aid in organising the data in a logical way and helps in analysing the data from different outlooks and a variety of statistical perspectives (Newton & Rudestam, 2013). For this study, IBM Statistics 25.0 was used for the analysis. Objectives one, two and four were analysed with descriptive statistics such as percentages and mean scores. Objective three was analysed with descriptive statistics and crosstabs. Objective five was analysed with correlation.

### **Chapter Summary**

The chapter examined the research method of the study. Also considered, was paradigm within which it is situated, approach adopted, the research design and its importance to the study, study area and its importance

in meeting the study's aim, target population, sample and sampling procedure observed in getting the requisite respondents for the study was attended to. The research instrument and sections within it were discussed. Ultimately, data collection, processing and analysis per each objective were done as well, ethical clearance was sought.



## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### Introduction

The main purpose of this study was to assess the mental health and resilience of employees at hotels used as quarantine facilities during COVID-19 pandemic. Specifically, the purpose of the study was to:

1. Identify COVID-19 safety measures followed by hotels used as quarantine facilities.
2. Determine the prevalent degrees of COVID-19 induced mental health among employees at hotels used as quarantine facilities.
3. Examine the prevalence of COVID-19 induced mental health stratified by demographic factors of employees at hotels used as quarantine facilities.
4. Explore the levels of resilience by employees at hotels used as quarantine facilities during COVID-19.
5. Analyse the relationship between employees' resilience and their COVID-19 induced mental health.

#### Demographic Information

Items for this section consisted of participants gender, age, educational qualification as well as income. Respondents in the majority (n=129, 51.6%) were males. Even though this current study did not seek respondents job positions' it is reported that the hotel and tourism industry remain male-dominated, particularly in the upper management role (Masadeh, 2013). However, Baum (2013) reported an average female involvement of almost 56 percent at the global level and an estimated 70 per cent at regional levels. This current study however reported male dominance, which affirmed Pinar, McCuddy, Birkan and Kozak (2011) study which reported more males than



females work in Turkish hotels. One hundred and thirty-nine (55.6%) were within the age bracket of (27-45), also referred to as the millennials (born between 1977-1995) while people within the age bracket of (46-57) who are also known as generation X (born between 1965-1976) were the least (n= 43, 17.2 %).

**Table 1: Demographic Characteristics of Respondents**

| Demographics                          | Frequency<br>(N=250) | Percentage<br>(%) |
|---------------------------------------|----------------------|-------------------|
| <b>Gender</b>                         |                      |                   |
| <i>Male</i>                           | 129                  | 51.6              |
| <i>Female</i>                         | 121                  | 48.4              |
| <b>Age</b>                            |                      |                   |
| <i>18-26(Generation Z)</i>            | 68                   | 27.2              |
| <i>27-45(Millennials)</i>             | 139                  | 55.6              |
| <i>46-57(Generation X)</i>            | 43                   | 17.2              |
| <b>Educational qualification</b>      |                      |                   |
| <i>Master's degree</i>                | 42                   | 16.8              |
| <i>Bachelor's degree</i>              | 73                   | 29.2              |
| <i>Diploma/vocational</i>             | 78                   | 31.2              |
| <i>GCE "O"/"A" level/SSSCE/WASSCE</i> | 51                   | 20.4              |
| <i>Others</i>                         | 6                    | 2.4               |
| <b>Monthly Income</b>                 |                      |                   |
| <i>1000 and below</i>                 | 82                   | 32.8              |
| <i>1001-2000</i>                      | 128                  | 51.2              |
| <i>2001 and above</i>                 | 40                   | 16.0              |

Source: Fieldwork, Zakaria (2021) <sup>1</sup>Ghana Cedis: At the time of data collection \$1=6.5 Ghana Cedis

This current study affirmed (Njenga, Gichuhi & Koome, 2021) study which reported that millennials are currently entering the workforce in large numbers. With regard to participants' responses to educational qualifications, majority of the respondents had Diploma/Vocational (n=78, 31.2%) and Bachelor's (n=73, 29.2. %) qualifications, supporting the view that most sections of the hotel industry require skill training and/or unskilled labour dominance (Baum & Devine, 2007). The majority (n=128, 51.2%) of the respondents earned between 1,001 and 2,000 Ghana cedis as monthly income, indicative of the fact that most hotel staff are usually low to medium income earners as espoused by Neumark and Wascher (2007). Table 1 summarised the demographic information of the respondents.

### **Objective 1: COVID-19 Safety Measures Followed by Hotels used as Quarantine Facilities.**

The adherence to COVID-19 safety measures by hotels that were used as quarantine facilities was sought. Responses to the first item affirmed studies which indicated that most employees of quarantine facilities were not quarantine during the pandemic (Di Maria et al., 2020; Li et al., 2020). Responses to *item 2: whether COVID-19 protocol materials were adequately available to respondents (n=134, 53.6%)*, responded in the affirmative which is contrary to studies by Aljedaani (2020), De Kock et al., (2021) and Sigfrid et al., (2021) which reveal that protocol materials were inadequate during the pandemic. This inadvertently explains why quite a number of responses (*n=116, 46.4%*) affirmed in the negative to this same question in the current study. *Item 3: whether respondents were taken through a series of COVID-19 training preventive (n=138, 55.2%)*, affirmed studies by Deressa et al., (2021)

and Martínez-López, Pérez Lázaro and Gómez-Galán (2021) who indicated that there was COVID-19 training preventives in various forms in various health or quarantine facilities across the globe. With regards to *item 4: strict adherence to COVID-19 safety protocols by hotel employees (n=184, 73.6%)* and *item 5: strictly adhered to COVID-19 Safety Protocols by the facility (n=186, 74.4%)*, more than half of the respondents affirmed in the positive. Outcomes with regards to items 4 and 5 further reiterates the assertion that there was a greater level of compliance to safety protocol than to non-compliance to COVID-19 safety protocols in quarantine facilities (Kumar, et al., 2020; Lee et al., 2022; Liow et al., 2022). It was also established that the threat to lives and livelihoods by coronavirus meant that employees at work as well as the facilities at which they worked during the pandemic relatively adhered to safety protocols (Kumar, et al., 2020; Lee et al., 2022; Liow et al., 2022) for survival.

Results from *Item 6: whether there were any motivational packages during the period*, as concretised by researches such as Grover et al., (2020); Kuppuswamy and Sharma (2020) was not the case for this current study thus, giving credence to a study by Shaikh & Ali (2020) which sought to reiterate the fact that impoverished countries have over-burdened budgetary constraints and so the presence of any adversity such as COVID-19 will leave them on their knees begging for support to contain such, and thus certain prominent measures such as to motivate employees in the midst of the pandemic might seem too high of a hurdle to cross. And so, revelation in this study culminating in the fact that employees were not privy to motivational packages during the period seems not surprising at all as summarised in table 2 below.

**Table 2: Participants' Responses to a List of COVID-19 Safety Measures Followed by Hotels Used as Quarantine Facilities.**

| Item<br>No. | Item  | Yes | %    | No  | %    |
|-------------|---|-----|------|-----|------|
|             | Were you quarantined during the period?                                     |     |      |     |      |
| 1*          |   | 80  | 32.0 | 169 | 67.6 |
|             | Would you say COVID-19 protocol materials were adequately available to you? |     |      |     |      |
| 2**         |   | 134 | 53.6 | 116 | 46.4 |
|             | Were you taken through a series of COVID -19 training preventive?           |     |      |     |      |
| 3**         |   | 138 | 55.2 | 112 | 44.8 |
|             | Would you say you strictly adhered to COVID-19 Safety Protocols?            |     |      |     |      |
| 4**         |   | 184 | 73.6 | 66  | 26.4 |
|             | Would you say your hotel strictly adhered to COVID-19 Safety Protocols?     |     |      |     |      |
| 5**         |   | 186 | 74.4 | 64  | 25.6 |
|             | Were there any motivation package during the period?                        |     |      |     |      |
| 6*          |   | 93  | 37.2 | 155 | 62.0 |

\*N=250      Source: Fieldwork, Zakaria (2021)

### **Objective 2: The Prevalent Degrees of COVID-19 Induced Depression, Anxiety and Stress among Employees at Hotels used as Quarantine Facilities**

Data from assessing the prevalence of COVID-19 induced mental health and the different degrees of depression, anxiety and stress among employees at hotels used as quarantine facilities, revealed that the majority (n=226, 89%) of the respondents reported of a COVID-19 induced depression. It is reported that individuals' perceptions of the COVID-19 risk tend to heavily impact on depression thus the likelihood of depressive symptoms and behaviours in spite of the real risks (Ding et al., 2020; Georgiou et al., 2020); as attested to by the outcome of objective 1 of this current study, the insufficiency of protocol materials might have escalated anxiety leading to

rising employees depression and stress levels. Of the total respondents, fifty-nine (23.6%) reported of a COVID-19 induced extremely severe depression giving a substantial meaning to the works of Ding et al., (2020) and Georgiou et al., (2020) that the advent of COVID-19 heightened depressive symptoms and thus the likelihood of people exuding depressive behaviours. With regards to COVID-19 induced anxiety among hotel employees, majority (n=234, 93.6) reported a COVID-19 induced anxiety justifying the studies of Khawaja et al., (2021); Dincer and Gocer (2021) that indicated that the used of hotels as quarantine centres brewed a lot of anxiety among hotel employees who had to beef up services alongside additional services as though they were healthcare service providers while securing their own lives and that of their clients and loved ones.

Of the total respondents, one hundred and forty (56.4%) reported a COVID-19 induced extremely severe anxiety resonating also with the fact that fear of the effects of COVID-19 in an environment where to a certain degree there were inadequate protocol materials coupled with a seemingly insufficient training as suggested by analysis of objective 1 of this study; which is backed by Teng et al., (2020) who established that additional training was required for quarantine hotel employees' to boost their readiness and competence with regards to workplace protocol. Therefore, the seeming insufficiency of an otherwise needful requirement that should have been in additional quantum, could have led to the high anxiety numbers and consequently, the high numbers in depression as well as stress. With respect to COVID-19 induced stress by respondents, a total of two-hundred and eight (83.2%) reported of a COVID-19 induced stress and this was not surprising as Teng et al., (2021) reported that employees were so much concerned about their hotels brand

image post-COVID-19 and were experiencing workplace stress as a result of their fear of contracting COVID-19 and infecting their closed relatives or even clients at the facility who might not yet contracted the disease. Of this total number, five (2%) reported of a COVID-19 induced extremely severe stress. This again could have been due to the continual regiment of adherence to safety protocols which eventually might have stressed up employees. The levels of depressions, anxiety and stress are summarised in table 3.

**Table 3: Varying Degrees of COVID-19 Induced Mental Health among Employees at Hotels Used as Quarantine Facilities**

|                  | Severity Level   | Frequency | Percentage |
|------------------|------------------|-----------|------------|
| Depression       | Normal           | 27        | 10.8       |
|                  | Mild             | 21        | 8.4        |
|                  | Moderate         | 77        | 29.6       |
|                  | Severe           | 69        | 27.6       |
|                  | Extremely severe | 59        | 23.6       |
|                  | Anxiety          | Normal    | 16         |
| Mild             |                  | 5         | 2.0        |
| Moderate         |                  | 37        | 14.8       |
| Severe           |                  | 51        | 20.4       |
| Extremely severe |                  | 141       | 6.4        |
| Stress           | Normal           | 42        | 16.8       |
|                  | Mild             | 34        | 13.6       |
|                  | Moderate         | 92        | 36.8       |
|                  | Severe           | 77        | 30.8       |
|                  | Extremely severe | 5         | 2.0        |

Source: Fieldwork, Zakaria (2021).

With regard to the prevalence of COVID-19 induced depression, anxiety, and stress, the DASS (Lovibond & Lovibond, 1995; Teng et al., 2020) was employed. A cutoff score of 14 for the DASS Depression subscale (Teng et al., 2020) indicated that 80.80% (n=202) of the hotel employees report a COVID-19 induced depression symptoms as evidenced in the works of Alkhamees, Aljohani, Alghesen and Alhabib, (2020),

Also, Krishnamoorthy, Nagarajan, Saya and Menon (2020), Teng et al., (2020) and Teng et al., (2021) all recorded high numbers and percentages for depressive symptoms and reported the presence of untoward psychological effects on employees in quarantine facilities in different parts of the world during COVID-19 outbreak. With regards to anxiety and a cutoff score of 10 for the DASS anxiety subscale (Teng et al., 2020), 91.60% (n=229) of participants reported COVID-19 induced anxiety symptoms which is affirmed in the works of Teng et al., (2020), Teng et al., (2021) which report astronomical values for the rate of response for anxiety, also culminating in worsened psychological defects during the pandemic. Finally, when the cutoff score of 19 for the DASS stress subscale (Lovibond & Lovibond, 1995; Teng et al., 2020) was 69.60% (174) of participants reported a COVID-19 induced stress symptoms similar to results found in studies that concluded that untoward psychological experiences were influenced by the presence of high rate of depressive and anxiety symptoms as recorded in table 3 for this current study; that warrant the affected people being stressed up (Li, Cao, Leung & Mak, 2020; Liu et al., 2020). The prevalence of COVID-19 induced depression, anxiety, and stress are summarised in Table 4.

**Table 4: Prevalence of COVID-19 Induced Mental Health among Employees at Hotels Used as Quarantine Facilities**

| Characteristics     | Category          | Frequencies (%) |
|---------------------|-------------------|-----------------|
| Depression symptoms | No (<14)          | 48 (19.20)      |
|                     | Yes ( $\geq 14$ ) | 202 (80.80)     |
| Anxiety symptoms    | No (<10)          | 21 (8.40)       |
|                     | Yes ( $\geq 10$ ) | 229 (91.60)     |
| Stress symptoms     | No (<19)          | 76 (30.40)      |
|                     | Yes ( $\geq 19$ ) | 174 (69.60)     |

*Source: Fieldwork, Zakaria (2021)*

### **Objective 3: Prevalence of COVID-19 Induced Mental Health Stratified by Demographic Characteristics of Employees at Hotels Used as Quarantine Facilities during COVID-19**

Results from table 5 indicated that there was no statistically significant relationship among males and females as far as COVID-19 induced depression ( $\chi^2 = 0.323$ ; p-value = 0.570), anxiety ( $\chi^2 = 0.006$ ; p-value = 0.940) and stress ( $\chi^2 = 1.345$ ; p-value = (0.246) was concern. Thus, affirming the findings of Gas, Ozsoy & Aydin (2021) and Rožman, Zabukovšek, Bobek and Tominc (2021) which indicate the fact that males and females have no statistically significant relationship with respect to how they exhibit depression, anxiety and stress as far as COVID-19 is concern. Another study however, established



a statistically significant relationship for male and female athletes with respect to how they break in activism during the pandemic (Şenışık, Denerel, Köyağasıoğlu and Tunç (2021). Similarly, Table 4 shows no statistically significant relationship among respondents' ages and COVID-19 induced depression ( $\chi^2 = 0.044$ ; p-value = 0.439), anxiety ( $\chi^2 = 0.104$ ; p-value = 0.099) and stress ( $\chi^2 = 0.098$ ; p-value 0.121). While this current study confirmed other studies in relation to age and the mental health components (Gas, Ozsoy & Aydın; 2021; Grover et al., 2021; Rožman et al., 2021), it also contradicted a study that reported statistically significant relationship between age and the various components of mental health induced by COVID-19 (Shah et al., 2021).

With regards to the relationship between respondents' level of education and COVID-19 induced depression, anxiety and stress, the outcome indicated that there was no statistically significant relationship between levels of education and COVID-19 induced depression ( $\chi^2 = 2.766$ ; p-value = 0.598) as well as COVID-19 induced anxiety ( $\chi^2 = 7.617$ ; p-value= 0.107). This current result gives credence to studies that concluded on the same or similar fate of non-statistically significant relationship as cited in Grover et al., (2021), Rožman et al., (2021) and Teng et al., (2020). However, there was a statistically significant relationship between respondents' level of education and COVID-19 induced stress ( $\chi^2 = 12.018$ ; p-value = 0.017). This current finding supported some studies that concluded that educational qualification has a statistically significant relationship with stress and for that matter mental health as resonated by the present study (Shah et al., 2021; Wang, Di, Ye & Wei, 2021). Therefore, this is an indicative factor responsible for the extent to which stress heavily dealt with quarantine hotel employees' during the period.

Especially when educational level determines monthly income in most jobs and may further require higher responsibility (Teng, Wu, Lin & Xu, 2020) and to compound issues during a pandemic period. Pertaining the relationship between monthly income and COVID-19 induced depression, anxiety and stress, there was no statistically significant relationship between respondents' monthly income and COVID-19 induced depression ( $\chi^2 = 4.018$ ; p-value = 0.259) as well as COVID-19 induced anxiety ( $\chi^2 = 0.774$ ; p-value = 0.856), but there exists a statistically significant relationship between monthly income and COVID-19 induced stress ( $\chi^2 = 8.754$ ; p-value = 0.033). Teng, et al., (2020) concluded that employees' stress levels were dependent directly on the monthly earnings, such that high salaried employees suffered more stress than low earners. This possibly could be due to quantum of responsibilities shouldered by such employees' at both work and expectancy at home, as well as the constant thought of losing out a well-paid job due to COVID-19. The rest of the results related to this objective are presented in Table 5.

**Table 5: The Prevalence of Depression, Anxiety, and Stress, Stratified by Demographic Characteristics of Employees at Hotels Used as Quarantine Facilities during COVID-19.**

| X'tics         | Total (n, %) | Depression |          |                          | Anxiety   |          |                          | Stress    |          |                          |
|----------------|--------------|------------|----------|--------------------------|-----------|----------|--------------------------|-----------|----------|--------------------------|
|                |              | Yes (%)    | No (%)   | X <sup>2</sup> (p-value) | Yes (%)   | No (%)   | X <sup>2</sup> (p-value) | Yes (%)   | No (%)   | X <sup>2</sup> (p-value) |
| Overall        |              |            |          |                          |           |          |                          |           |          |                          |
| Gender         |              |            |          | 0.323(0.57)              |           |          | 0.006(0.94)              |           |          | 1.345(0.245)             |
| Male           | 129(51.6)    | 106(52.5)  | 23(47.9) |                          | 118(51.5) | 11(52.4) |                          | 94(50.0)  | 35(46.1) |                          |
| Female         | 121(48.4)    | 96(47.5)   | 25(52.1) |                          | 111(48.5) | 10(47.6) |                          | 80(46.0)  | 41(53.9) |                          |
| Age            |              |            |          |                          |           |          |                          |           |          |                          |
| 46-57(Gen x)   | 43(17.2)     | 38(18.8)   | 5(17.2)  | 0.044(0.44)              | 41(17.9)  | 2(9.5)   | 0.104(0.09)              | 30(17.2)  | 13(17.1) |                          |
| 27-45          | 139(55.6)    | 109(54.0)  | 30(62.5) |                          | 129(56.3) | 10(47.6) |                          | 104(59.8) | 35(46.1) |                          |
| (Millennials)  |              |            |          |                          |           |          |                          |           |          |                          |
| 18-26 (Gen Z)  | 68(27.2)     | 55(27.2)   | 13(27.1) |                          | 59(25.8)  | 9(42.9)  |                          | 40(23.0)  | 28(36.8) |                          |
| Level of Edu.  |              |            |          | 2.766(0.59)              |           |          | 7.617(0.11)              |           |          | 12.02(0.02)*             |
| Masters        | 42(16.8)     | 37(18.3)   | 5(10.4)  |                          | 39(17.0)  | 3(14.3)  |                          | 32(18.4)  | 10(13.2) |                          |
| Bachelor's     | 73(29.2)     | 59(29.2)   | 14(29.2) |                          | 69(29.7)  | 5(23.8)  |                          | 56(32.2)  | 17(22.4) |                          |
| Diploma        | 78(31.2)     | 63(31.2)   | 15(31.3) |                          | 74(32.3)  | 4(19.0)  |                          | 53(30.5)  | 25(32.9) |                          |
| GCE/SSSCE/W    | 51(20.4)     | 38(18.8)   | 13(27.1) |                          | 42(18.3)  | 9(42.9)  |                          | 27(15.5)  | 24(31.6) |                          |
| ASSCE          |              |            |          |                          |           |          |                          |           |          |                          |
| Others         | 6(2.4)       | 5(2.5)     | 1(2.1)   |                          | 6(2.6)    | 0(0.0)   |                          | 6(3.4)    | 0(0.0)   |                          |
| Monthly income |              |            |          | 4.018(0.26)              |           |          | 0.774(0.86)              |           |          | 8.754(0.03)*             |
| 1000 and below | 82(32.8)     | 61(30.2)   | 21(43.8) |                          | 74(32.3)  | 8(32.8)  |                          | 52(29.9)  | 30(32.8) |                          |
| 1001-2000      | 128(51.2)    | 109(54.0)  | 19(39.6) |                          | 110(52.0) | 9(42.9)  |                          | 99(56.9)  | 29(38.2) |                          |
| 2001 and above | 39(15.6)     | 31(15.3)   | 8(16.7)  |                          | 35(15.3)  | 4(19.0)  |                          | 22(12.6)  | 17(22.4) |                          |

\*N= 250. X'tics = Characteristics. Source: Fieldwork, Zakaria (2021)

#### **Objective 4: Levels of Resilience by Employees at Hotels Used as Quarantine Facilities**

With regards to results related to this objective above ( $M= 2.14$ ,  $SD= 0.576$ ), the overall mean and standard deviation resonated with the findings of studies that reported that the high prevalence of depression, anxiety and stress rates recorded during the COVID-19 outbreak implied low resilience e.g., Awano et al., (2020), Grover et al., (2021), Ouanes et al., (2021) and Teng et al., (2020). Other studies however, recorded higher values for resilience and attributed these to high exposure to risk, experienced coping strategies and old age nonetheless, all such studies reported high prevalent rates for depression, anxiety and stress e.g., Adam-Bagley et al., (2021), El Ouni et al., (2021) and Yildirim and Solmaz, (2022). Participants for this current study were to respond to the statement by selecting any one option per statement, higher scores reflecting greater resilience; and lower scores indicating a low exhibition of resilience by the respondents. In terms of respondents ability to adapt to change, the responses in the affirmative were ( $n=120$ , 48.2%) reflecting a mean ( $M=1.74$ ,  $SD=1.435$ ); in dealing with whatever comes, the responses were ( $n=168$ , 67.2%) affirmation, projecting a mean ( $M=2.01$ ,  $SD=1.149$ ); participants responses to seeing the humorous side of problems, produced a response of ( $n=160$ , 76.0%) affirmation, thus a mean ( $M=2.08$ ,  $SD=1.033$ ); with regards to respondents agreement to them being strengthened by coping with stress, the resultant responses were ( $n=180$ , 72.0%) affirmation, reflecting a mean ( $Mean=2.14$ ,  $SD=1.107$ ); responses to bouncing back after illness or hardship was affirmed ( $n=181$ , 72.4%), indicating a mean ( $M=2.18$ ,  $SD=1.230$ ); when respondents were confronted with the ability to achieving goals despite obstacles, responses in the affirmative were ( $n=188$ ,

75.2%) representing a mean ( $M=2.37$ ,  $SD=1.123$ ); participants produced a response of ( $n=187$ , 74.8%) when they were confronted with being able to stay focused under pressure, mirroring a mean ( $M=2.23$ ,  $SD=1.142$ ); resultant responses with regards to respondents not being easily discouraged by failure, attracted ( $n=180$ , 72.0%) affirmation, landing a mean (Mean=2.17,  $SD=1.103$ ); in respect of how respondents think of themselves as being strong, the response was ( $n=188$ , 75.2%) in the affirmative, indicating a mean ( $M=2.31$ ,  $SD=1.215$ ) and when respondents were queried as to their handling of unpleasant feelings, a response of ( $n=189$ , 75.6%) affirmation was obtained, reflecting a mean ( $M=2.23$ ,  $SD= 1.109$ ); while majority (more than 67%) of the respondents affirmed in the positive to 9 of the 10 resilience items, it is worthy to note that all these responses amounted to an overall subordinate resilience among hotel employees' during the COVID-19 outbreak when their workplaces were used as quarantine centres as confirmed by Parvar, Ghamari, Pezeshkian and Shahriarirad (2022). This is not surprising as data from this objective further supports the outcomes related to objective 2 (Tables 3 & 4). The mean scores related to the items that measured resilience are presented in Table 6.

**Table 6: Descriptive Statistics for the Levels of Resilience by Employees at Hotels Used as Quarantine Facilities**

| No. | Item  | No. of Affirmation to Item | %    | Mean        | SD           |
|-----|---|----------------------------|------|-------------|--------------|
| 1   | Able to adapt to change.                        | 120                        | 48.2 | 1.74        | 1.435        |
| 2   | Can deal with whatever comes.                   | 168                        | 67.2 | 2.01        | 1.149        |
| 3   | Tries to see humorous side of problems.         | 190                        | 76.0 | 2.08        | 1.033        |
| 4   | Coping with stress can strengthen me.           | 180                        | 72.0 | 2.14        | 1.107        |
| 5   | Tends to bounce back after illness or hardship. | 181                        | 72.4 | 2.18        | 1.230        |
| 6   | Can achieve goals despite obstacles.            | 188                        | 75.2 | 2.37        | 1.123        |
| 7   | Can stay focused under pressure.                | 187                        | 74.8 | 2.23        | 1.142        |
| 8   | Not easily discouraged by failure.              | 180                        | 72.0 | 2.17        | 1.103        |
| 9   | Thinks of self as strong person.                | 188                        | 75.2 | 2.31        | 1.215        |
| 10  | Can handle unpleasant feelings.                 | 189                        | 75.6 | 2.23        | 1.109        |
|     | Overall   |                            |      | <b>2.14</b> | <b>0.576</b> |

Source: Fieldwork, Zakaria (2021).

### **Objective 5: The relationship between Employees Resilience and their Mental Health.**

This section of the chapter as summarised in table 7 presented the relationship that exist amongst the three COVID-19 induced mental health variables (Depression, Stress and Anxiety) and resilience. From the results, there was a moderate (Mindrila & Balentyne, 2017), positive, and statistically significant correlation between anxiety and depression ( $r=.580$ ,  $p<0.05$ )

concretising the works of Awano et al., (2020), Grover et al., (2021) and Teng et al., (2020) which indicated that anxiety and depression has a moderately positive statistically significant correlation. The current study's result also revealed that there was low (Mindrila & Balentyne, 2017), positive, and statistically significant correlation between stress and depression ( $r = .445$ ,  $p < 0.05$ ). This outcome supported the work of Anyan and Hjemdal (2016) who reported a positive and statistically significant relationship between stress and depression. Furthermore, this current study's results also revealed a moderate (Anyan & Hjemdal, 2016; Grover et al., 2021) positive, and statistically significant correlation between stress and anxiety ( $r = .613$ ,  $p < 0.05$ ). This outcome affirmed studies that conclude that there is usually a positive statistically significant relationship between stress and symptoms of anxiety (Grover et al., 2021; Orzechowska, Zajęczkowska, Talarowska & Gałecki, 2013)

With reference to the relationship between resilience and the three components of mental health, there was also very low, negative, and statistically significant correlation between resilience and depression ( $r = -.286$ ,  $p < 0.05$ ), resilience and stress ( $r = -.319$ ,  $p < 0.05$ ) and very low relationship between resilience and anxiety ( $r = -.286$ ,  $p < 0.05$ ). This outcome therefore suggested that as resilience decreased, depressive, stress and anxiety symptoms seem to have gone up. This is not surprising given the overall mean of less than 2.5 on the resilience scale as was reported in this current study (Table 6). To further support the above current study's results, Anyan & Hjemdal (2016) also reported a negative relationship between resilience and the mental health components. To reiterate the outcomes of the relationship between resilience and the components of mental health, Grover et al., (2021),

Ran et al., (2020), Yıldırım, Arslan and Özaslan (2020) indicated that depression, anxiety and stress positively affect each other and negatively correlate with resilience. Table 7 summarised the relationship between the mental health components as well as with resilience.

**Table 7: Bi-variate Correlation among Latent Variables**

| Latent Variable | Depression       | Anxiety          | Stress           | Resilience |
|-----------------|------------------|------------------|------------------|------------|
| Depression      | 1.00             |                  |                  |            |
| Anxiety         | .580**<br>(.000) | 1.00             |                  |            |
| Stress          | .445**<br>(.000) | .613**<br>(.000) | 1.00             |            |
| Resilience      | -.286*<br>(.000) | -.201*<br>(.001) | -.319*<br>(.000) | 1.00       |

\*\*Correlation was significant at 0.05 level (2-tailed)

\*Correlation was significant at 0.01 level (2-tailed)

### Chapter Summary

This chapter dealt with the analyses and discussion of data as per the objectives of the study. It considered the demographic information of the research respondents; examined the COVID-19 safety protocols compliance by employees at hotels used as quarantine facilities which showed that employees' and their hotels complied with COVID-19 safety protocols to some degree resulting in few infection rates among employees therefore low quarantine rate however, the lack of motivational packages contributed to this



effect. It assessed the prevalence of COVID-19 induced mental health by determining the different degrees of depression, anxiety and stress among hotel employees whose workplaces served as quarantine facilities during the pandemic and clearly hotel employees suffered moderate to high rates of depression, extremely severe forms of anxiety and moderately stressed; cumulatively affecting their mental health. The prevalence of depression, anxiety and stress among employees at hotels used as quarantine facilities was considered as well; and the picture was very clear that the pandemic was characterised by high prevalent rates of depression, anxiety and stress. The prevalence of depression, anxiety, and stress were stratified by demographic characteristics of employees at hotels used as quarantine facilities during COVID-19 and the outcome informed a significant relationship between stress and level of education and also between stress and income level. It proceeded with the various levels of resilience by employees at hotels used as quarantine facilities and clearly hotel employees showed minimal resilience and thus low readiness to recover from the effects of COVID-19. Ultimately, the relationship between employees' resilience and their mental health had an outcome that, there was a statistically significant negative relationship between hotel staff resilience and their respective mental health (depression, anxiety and stress) during the COVID-19 lockdown with the components themselves being positively related; signifying that the rate of mental health conditionalities was actually very high during the period.

Summary, conclusions drawn and recommendations of this study follows in the preceding chapter.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

This chapter presented the summary of the main findings, conclusions and recommendations on a research conducted among hotel employees. The main objective of the study was to assess the mental health and resilience of employees at hotels used as quarantine facilities during COVID-19 pandemic. The specific objectives were to:

1. Identify COVID-19 safety measures followed by hotels used as quarantine facilities.
2. Determine the prevalent degrees of COVID-19 induced mental health among employees at hotels used as quarantine facilities.
3. Examine the prevalence of COVID-19 induced mental health stratified by demographic factors of employees at hotels used as quarantine facilities.
4. Explore the levels of resilience by employees at hotels used as quarantine facilities during COVID-19.
5. Analyse the relationship between employees' resilience and their COVID-19 induced mental health.

#### Summary of the Research Findings

Although a number of studies have been done on mental health of employees during COVID-19 in other jurisdictions (Awano et al., 2020; Grover et al., 2021; Ouanes et al., 2021; Teng et al., 2020), none has investigated the mental health and resilience of hotel employees' during the COVID-19 outbreak in Ghana. The study was based on the behaviourism theory which has so much to do with mental health and together with the

cognitive, Lazarus and resilience theories that are closely related to the variables for the study informed the conceptual framework. The quantitative approach together with a survey design was adopted and a structured questionnaire aided in the collection of data for the study. Two hundred and fifty (250) participants responded to the survey. The data was analysed using descriptive and inferential statistics such as crosstabs and correlation analytical tools.

Participants demographic information showed that majority of the respondents were males, aged 27-45 (millennials) with respondents with diploma/vocational certificates dominance in terms of educational qualification. However, a good number of the respondents had master's degree which seems quite unusual in a Ghanaian context. Most of the participants fell within the 2000(\$=308) and below income brackets. The study established that employees as well as their facilities during the pandemic relatively adhered to safety protocols thus supporting the fact that majority of the respondents were not quarantined during the pandemic. In addition, there were no motivational packages for most employees during the period.

With regard to the various degrees of depression, anxiety and stress, majority exhibited COVID-19 induced moderate depression followed by relatively high degrees of severe to extremely severe COVID-19 induced depression. The majority of respondents further exhibited an extremely severe COVID-19 induced anxiety. Moderate COVID-19 induced stress was reported among the majority of respondents. However, an appreciable number of the respondents reported a severe COVID-19 induced stress. These outcomes further reiterate this study's report of high prevalence of symptoms of depression, anxiety and stress among respondents.

Outcome of this study revealed no relationship between the three components of mental health (depression, anxiety and stress) and gender and, age. Furthermore, there was no relationship recorded between COVID-19 induced depression and anxiety with educational levels and monthly income of the respondents. COVID-19 induced stress however had a significant relationship with educational levels and monthly income.

The study found that there were generally low levels of resilience items among hotel employees' which culminated into an overall low or negative resilience among these respondents. This is further strengthened with minority of the respondents affirming to the fact that they are *Able to adapt to change*. The low resilience by employees further reiterates the very high levels of COVID-19 induced depression, anxiety and stress.

There existed significant relationships among all the three mental health components. The strongest of these relationships was recorded among COVID-19 induced anxiety and COVID-19 induced stress. The least of these relationships was recorded between COVID-19 induced stress and COVID-19 induced depression. However, the relationship between all the mental health components recorded a significant but negative relationship with resilience. Thus, suggesting that, the low levels of resilience might have resulted in the reported very high levels of COVID-19 induced mental health.

### **Conclusions**

Even though majority of the employees at hotels used as quarantine facilities did not receive motivational packages during the COVID-19 pandemic, both these hotels as well as the employees relatively adhered to COVID-19 safety protocols. Respondents had COVID-19 preventive training

and majority of them were not quarantined during the pandemic. The percentage of the severity levels of COVID-19 induced depression, anxiety and stress among employees at hotels used as quarantine facilities were high with a recorded high prevalence of symptoms of depression, anxiety and stress among these respondents. Respondents' educational levels coupled with their monthly income had significant relationship with COVID-19 induced stress. Generally, there was relatively low levels of resilience among hotel employees during the pandemic which reflected in a negative but significant relationship with the components of mental health. Ultimately, the three components of mental health had positive and significant relationship between them.

### **Recommendations**

Government must resource and empower the health ministry of the country to be able to conduct research into workers mental health. Outcomes of such researches could help formulate and design mental health policies and programmes. Such researches could be collaboratively conducted with Higher Educational institutions within and outside the country. Policies developed through these collaborative endeavours could then resource regional health departments and sponsor NGOs to function effectively and efficiently by facilitating and supporting schemes as well as offering in-service training and updates on common healthy practices during disease outbreaks and/or future pandemics. Periodically bringing in health experts, especially during disease outbreaks to encourage and offer measures to ensure positive mind-sets and healthy coexistence amongst the populace or employees could go a long way to help minimise disease outbreak induced mental health or at least render some resilience during outbreak of diseases.

Hotels and hotel associations must incorporate or enforce psychology/guidance and counselling units in hotels to monitor and take care of the mental/psychological needs of employees to enhance and prepare them mentally to face eventualities such as disease outbreaks. Information and communication materials (brochures, manuals, posters, leaflets etc.) for creating the awareness of employees about the need to have a sound mind could also facilitate employees' resilience. To achieve this, the Ghana Tourism Authority (GTA) must enforce as part of their annual renewal of hotels licences; hotels must include a report of a mental health screening activities for employees, not necessarily indicating employees by names but a general report showing such an activity has taken place within an establishment. Collaborative work between GTA, the hotels association and management of these hotels could organise annual workshops where regional health departments could provide education to hotel employees on mental health, its warning signs and remedies.

Research could be conducted by various hotels to strategically determine which path(s) to chart in order to be unique and outstanding in their handling and survival of mental health issues in the midst of a pandemic.

On the employees' side, they must make every effort to utilise all opportunities that their employer and GTA provide in terms of their mental health education. Where there are employee associations within a hotel, the association must encourage her members to speak out or help direct their grievances to the appropriate quarters when situations that can escalate mental health issues arises.

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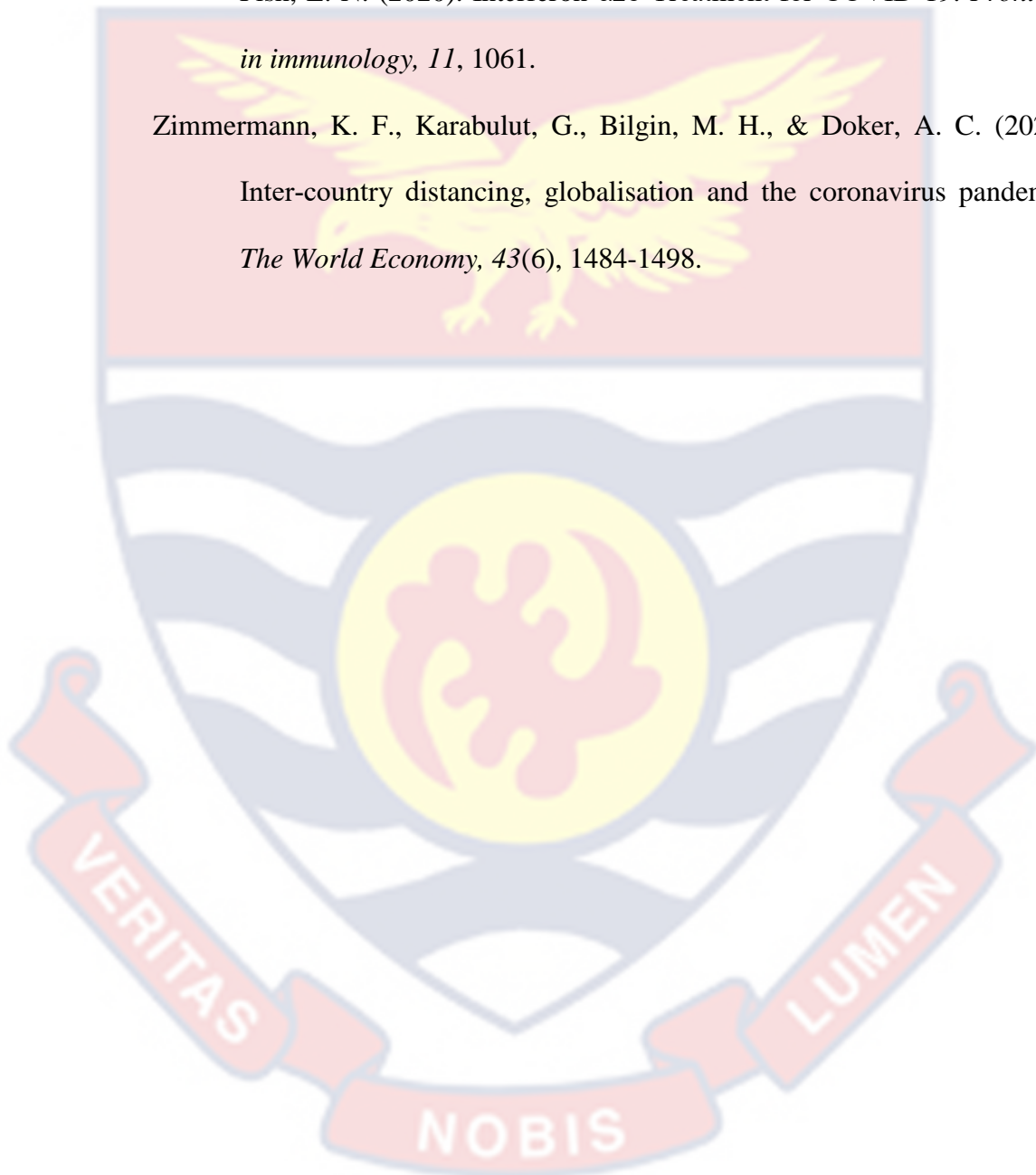
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## APPENDIX I

UNIVERSITY OF CAPE COAST

Department of Hospitality and Tourism

College of Humanities and Legal Studies

Questionnaire on Mental Health and Resilience of Hotel Employees' during COVID-19 Outbreak in Ghana: The Case of Ghanaian Hotels used for Quarantine.

The study seeks to explore the Mental Health of Hotel Employees' during COVID-19 Outbreak in Ghana: The Case of Ghanaian Hotels used for **Quarantine**. In order to attain the above, the researcher kindly requests you to

respond to the questionnaire below. Participation is voluntary and you may quit at any point if you wish to or equally skip a question(s) if you so wish.

The interview will last for about twenty (20) minutes. All information provided will be treated with the utmost level of **privacy, confidentiality** and **integrity**. Please should you have any questions about this research, you may contact the researcher: via mobile phone number: **0208404369/0558833915**.

Thank you.

**Section A: Demographic Information of Respondents**

1. Name of Hotel used as quarantine facility.....

2. Gender

A. Male [  ]

B. Female [  ]

3. Age

A. 46-57

B. 27-45

C. 18-26

4. Educational Qualification

A. Master's Degree

B. Bachelor's Degree

C. Diploma/Vocational

D. GCE "O"/"A" Level/ SSSCE/WASSCE

E. Others, please specify.....

5. Monthly Income

A. 1000 and below

B. 1001-2000

C. 2001 and above

**Section B: COVID-19 Safety Protocols**

6. Were you quarantined during the period?

A. Yes

B. No

7. Would you say COVID-19 protocol materials were adequately available to you?

A. Yes

B. No

8. Were you taken through a series of COVID -19 training preventive?

A. Yes

B. No

9. Would you say you strictly adhered to COVID-19 Safety Protocols?

A. Yes

B. No

10. Would you say your hotel strictly adhered to COVID-19 Safety Protocols?

A. Yes

B. No

11. Were there any motivation package during the period?

A. Yes

B. No

### Section C. The 10-Item Connor-Davidson Resilience Scale (CD-RISC)

Resilience may be viewed as a measure of stress coping ability and, as such, could be an important target of treatment in anxiety, depression, and stress reactions. The 10-item Connor-Davidson Resilience Scale (10-item CD-RISC) is an instrument for measuring resilience that has shown good psychometric properties as in the original 25-item version. Each item is rated on a 5-point scale (0-4), with higher scores reflecting greater resilience. **The scale is rated based on how you have felt during your stay in a quarantine hotel as a hotel worker.** Circle the appropriate (CD-RISC) Scale option: Not true at all = 0, Rarely true =1, Sometimes true =2, Often true =3, True nearly all the time =4.

| N  | <i>The 10-Item Connor-Davidson Resilience scale</i> | 0 | 1 | 2 | 3 | 4 |
|----|---|---|---|---|---|---|
| o. | <i>(CD-RISC)</i>                                    |   |   |   |   |   |
| 12 | Able to adapt to change                             | 0 | 1 | 2 | 3 | 4 |
| 13 | Can deal with whatever comes                        | 0 | 1 | 2 | 3 | 4 |
| 14 | Tries to see humorous side of problems              | 0 | 1 | 2 | 3 | 4 |
| 15 | Coping with stress can strengthen me                | 0 | 1 | 2 | 3 | 4 |
| 16 | Tends to bounce back after illness or hardship      | 0 | 1 | 2 | 3 | 4 |
| 17 | Can achieve goals despite obstacles                 | 0 | 1 | 2 | 3 | 4 |

|    |                                   |   |   |   |   |   |
|----|-----------------------------------|---|---|---|---|---|
| 18 | Can stay focused under pressure   | 0 | 1 | 2 | 3 | 4 |
| 19 | Not easily discouraged by failure | 0 | 1 | 2 | 3 | 4 |
| 20 | Thinks of self as strong person   | 0 | 1 | 2 | 3 | 4 |
| 21 | Can handle unpleasant feelings    | 0 | 1 | 2 | 3 | 4 |

### Section D: DASS 21 Scale

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you during the quarantine period. There are no rights or wrong answers. Do not spend too much time on any statement. The rating scale is as follows:

0. Did not apply to me at all – NEVER.
1. Applied to me to some degree, or some of the time - SOMETIMES.
2. Applied to me to a considerable degree, or a good part of time – OFTEN.
3. Applied to me very much, or most of the time - ALMOST ALWAYS.

|             |   | N        | S        | O        | AA       |
|-------------|---|----------|----------|----------|----------|
| <b>DAS</b>  | <b><i>How often did the following apply to you during</i></b> | <b>0</b> | <b>1</b> | <b>2</b> | <b>3</b> |
| <b>S-21</b> | <b><i>the quarantine period?</i></b>                          |          |          |          |          |
| 22          | I found it hard to wind down.                                 | 0        | 1        | 2        | 3        |
| 23          | I was aware of dryness of my mouth.                           | 0        | 1        | 2        | 3        |
| 24          | I couldn't seem to experience any positive feeling at all.    | 0        | 1        | 2        | 3        |
| 25          | I experienced breathing difficulty.                           | 0        | 1        | 2        | 3        |
| 26          | I found it difficult to work up the initiative to do things.  | 0        | 1        | 2        | 3        |
| 27          | I tended to over-react to situations.                         | 0        | 1        | 2        | 3        |



|    |   |   |   |   |   |
|----|---|---|---|---|---|
| 28 | I experienced trembling (e.g., in the hands).   | 0 | 1 | 2 | 3 |
| 29 | I felt that I was using a lot of nervous energy.  | 0 | 1 | 2 | 3 |
| 30 | I found myself in situations that made me so anxious I was most relieved when they ended. | 0 | 1 | 2 | 3 |
| 31 | I felt that I had nothing to look forward to.   | 0 | 1 | 2 | 3 |
| 32 | I found myself getting agitated.  | 0 | 1 | 2 | 3 |
| 33 | I found it difficult to relax.  | 0 | 1 | 2 | 3 |
| 34 | I felt down-hearted and blue.   | 0 | 1 | 2 | 3 |
| 35 | I was intolerant of anything that kept me from getting on with what I was doing.          | 0 | 1 | 2 | 3 |
| 36 | I felt I was close to panic.  | 0 | 1 | 2 | 3 |
| 37 | I was unable to become enthusiastic about anything.                                       | 0 | 1 | 2 | 3 |
| 38 | I felt I wasn't worth much as a person.   | 0 | 1 | 2 | 3 |
| 39 | I felt that I was rather touchy.  | 0 | 1 | 2 | 3 |
| 40 | I was aware of the action of my heart in the absence of physical exertion.                | 0 | 1 | 2 | 3 |
| 41 | I felt scared without any good reason.  | 0 | 1 | 2 | 3 |
| 42 | I felt that life was not worthwhile.  | 0 | 1 | 2 | 3 |

## APPENDIX II

## Reliability Analysis and Convergent Validity of Items of the Constructs

| Construct          | MH Components | Items | Factor Loading | Cronbach's Alpha |
|--------------------|---------------|-------|----------------|------------------|
| Mental Health (MH) |               |       |                | .789             |
|                    | Depression    |       |                | .743             |
|                    |               | D1    | .781           |                  |
|                    |               | D2    | .822           |                  |
|                    |               | D3    | .780           |                  |
|                    |               | D4    | .782           |                  |
|                    |               | D5    | .773           |                  |
|                    |               | D6    | .773           |                  |
|                    |               | D7    | .774           |                  |
|                    | Anxiety       |       |                | .746             |
|                    |               | A1    | .773           |                  |
|                    |               | A2    | .776           |                  |
|                    |               | A3    | .779           |                  |
|                    |               | A4    | .779           |                  |
|                    |               | A5    | .775           |                  |
|                    |               | A6    | .780           |                  |
|                    |               | A7    | .781           |                  |
|                    | Stress        |       |                | .748             |

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|                |      |
|----------------|------|
| S1             | .792 |
| S2             | .774 |
| S3             | .782 |
| S4             | .777 |
| S5             | .782 |
| S6             | .778 |
| S7             | .785 |
| Resilience (R) | .747 |
| R1             | .761 |
| R2             | .755 |
| R3             | .750 |
| R4             | .754 |
| R5             | .758 |
| R6             | .752 |
| R7             | .747 |
| R8             | .753 |
| R9             | .756 |
| R10            | .752 |

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