

# STRESS AND CRISIS MANAGEMENT

**FASUA ELOHO LOICE**

Federal Medical Centre, Owo, Ondo State, Nigeria  
fasua.henryfash7@gmail.com

## **Abstract**

This study provides a thorough exploration of crisis management theories and stress-related concepts. It employs qualitative and literature research method. In achieving this, it traces the historical development of stress theories, shedding light on the transition from viewing stress as a static stimulus to understanding it as a dynamic transactional process between individuals and their intricate environments. The significance of personality traits, particularly hardiness, in enhancing stress resilience is underscored, offering valuable insights into effective coping mechanisms. Moreover, the paper anchors on transactional theory of stress and coping (TTSC) and the innovative butterfly theory of crisis management, which advocates for proactive preparedness to address minor events that possess the potential to escalate into major crises. This approach recognizes the substantial impact of low-probability events and underscores the importance of readiness and risk mitigation. Overall, this compilation serves as a comprehensive reference for comprehending the intricacies of stress and crisis management. It provides practical guidance for organizations and individuals, empowering them to approach crisis management with foresight and resilience, ultimately enhancing their ability to navigate and mitigate crises effectively.

**Key Words:** Stress; Crisis Management; Transactional Theory; Butterfly Theory

**JEL Classification:** M19, M54

## **1. INTRODUCTION**

Managing stress and crises is essential in contemporary life, affecting individuals, institutions, and society as a whole. As outlined by Koval (2016), stress is a pervasive global phenomenon, well-acquainted by healthcare professionals across different regions. The primary sources of workplace stress, as identified by the American Psychological Association (2015), encompass factors like inadequate compensation, burdensome workloads, and limited opportunities for career growth, unrealistic job expectations, job insecurity, and insufficient involvement in decision-making processes. Additionally, Koval (2016) highlights elements such as understaffing, outdated equipment, and subpar working conditions in economically disadvantaged nations as contributors to stress. Furthermore, according to Geuens et al. (2015), healthcare practitioners routinely

encounter environmental stressors such as pain, suffering, mortality, and ethical dilemmas.

Similarly, a crisis can be seen as a situation or event that poses a substantial and often sudden threat to the health and well-being of a community or population. These crises can vary in scale, ranging from localized outbreaks of diseases to large-scale pandemics or natural disasters with public health consequences. Public health crises can also be triggered by human-made factors, such as bioterrorism incidents or industrial accidents. In a broader context, a public health crisis exhibits several distinctive characteristics: It entails a significant danger to the welfare of a community or the general populace (Payton, 2021). This danger can manifest as a disease outbreak, environmental pollution, or a health-related incident that endangers lives. The crisis's reach can span from localized incidents that affect specific regions or groups to global pandemics that impact populations worldwide. The crisis's size and scale often determine the level of response that is needed. Crises usually materialize suddenly or rapidly intensify, demanding immediate attention and intervention from public health authorities and healthcare systems (Janka, 2015).

The underlying cause behind the increase in disruptive events and the emergence of what Tierney (2014) calls the "new normal" can be partially attributed to the interconnected systems and networks established by humans, as outlined by Helbing (2013). The author asserts that a single video or tweet has the potential to spark deadly social unrest on the opposite side of the globe. Indeed, the transition toward an increasingly hyperconnected society is a consensus in the business literature, as noted by Dahlberg (2015), Helbing (2013), and Ramezani and Camarinha-Matos (2020). These interconnected pathways facilitate the rapid global spread of crises, which may originate from external factors like natural disasters or inadequately designed organizational systems (Helbing, 2013). Carmeli and Schaubroeck (2008) elucidate that, in general, companies are ill-prepared to handle crises and may inadvertently exacerbate the situation. Given the rising interconnectivity and complexity of systems (Ramezani & Camarinha-Matos, 2020), it is imperative to acknowledge the inherent unpredictability of the world and adapt organizational management systems, accordingly, as emphasized by Dahlberg (2015) and Ramezani & Camarinha-Matos (2020).

Over the last decade, there has been a notable increase in the emphasis on handling crises, a trend that Darkow (2019) observed. A prime example of this is the Covid-19 pandemic, which exposed significant vulnerabilities in both organizations and broader societal systems worldwide, as pointed out by Dobrowolski (2020). Additionally, global challenges such as climate change, food shortages, economic downturns, and cybercrime, as discussed by Helbing (2013), continue to pose ongoing concerns. More recently, the Russian invasion of Ukraine presented substantial challenges that affected not only the worldwide economy but also individuals and local businesses, as detailed by Orhan (2022). This conflict resulted in significant increases in oil and gas prices and disruptions in the international supply chain for components and materials (Orhan, 2022). As a result,

what was once considered disruptive and chaotic is now commonly referred to as the "new normal," a term popularized by Tierney (2014).

While there exists a substantial body of literature addressing various aspects of stress and crisis management (Darkow, 2019; Dobrowolski, 2020; Tengblad & Oudhuis, 2018), Bundy et al. (2017) contend that there is an urgent requirement to refine and expand upon current strategies, making them adaptable to diverse types of businesses. Criticisms within this field predominantly revolve around the absence of empirical testing and practical guidance for managing disasters and risks (Ritchie et al., 2011). It is suggested that many individuals claim to be capable of handling the unpredictable, yet they are often ill-prepared for such situations (McConnell & Drennan, 2006). Notably, contemporary literature on crises tends to dismiss traditional frameworks (Ansell & Boin, 2019; Ramezani & Camarinha-Matos, 2020) as lacking in rigor, relying on theoretical reasoning rather than empirical organizational studies that would validate the presumed effectiveness of modern approaches.

Similarly, the existing body of literature on stress and crisis management often focuses on various subgroups, such as undergraduates, children, employees, pregnant women, individuals of different genders, and professionals. However, these studies typically lack a comparative approach among these groups. For instance, Koval (2016) conducted research on stress management among healthcare professionals using psychological methods and coping techniques but did not compare them with non-healthcare professionals within the same sector. Wegbom et al. (2023) examined the determinants of depression, anxiety, and stress among pregnant women attending tertiary hospitals in urban centers in Nigeria, but did not compare them with non-pregnant women, as noted in the study's limitations. Ubani (2023) investigated the prevalence of psychological stress among Nigerian undergraduates during the COVID-19 pandemic but solely focused on stress and crisis among Nigerian undergraduates without comparing them to non-undergraduates in Nigeria. Therefore, this paper is motivated to conduct a comparative study on stress and crisis management.

This paper aims to analyze the concepts of stress, crisis, and stress and crisis management, explore their causes and consequences, and delve into strategies for effective management. By gaining a deeper understanding of these dynamics, we can better prepare ourselves and our organizations to thrive during challenging times. The remaining sections of this paper are organized into a conceptual review, theoretical review, and conclusion.

## **2. CONCEPTUAL REVIEW**

### **2.1. STRESS**

Stress represents a physiological and psychological reaction to external pressures or demands, referred to as stressors. It can manifest as either acute (short-term) or chronic (long-term) and has varying impacts on individuals. Stressors can be classified into three main categories: environmental, social, and internal

stressors. Examples of these stressors encompass work-related pressures, financial challenges, relationship issues, and health concerns (Wegbom et al., 2023). One way to define stress is through a stimulus-based perspective, where stress results from external pressures. As Butler (1993) suggests, "the greater the pressure, the more likely it is that the recipient, whether a person or a load-bearing beam, will succumb." When the external stimulus becomes overwhelming, the internal system can break down.

Another approach to understanding stress is from a response-based viewpoint, which considers stress as a reaction to harmful or aversive stimuli (Koval, 2016). The General Adaptation Syndrome (GAS) outlines three stages that describe the progression of the physiological response to stress. In the initial stage, the body becomes activated, leading to an alarm reaction in response to stress. The second stage, known as resistance, involves autonomic activity preparing the body to cope with the stressor. Finally, in the stage of exhaustion, if the stress persists and the body lacks the capacity to respond adequately, it may result in damage, and the system may collapse (Koval, 2016).

### **2.1.1. TYPES OF STRESS**

As per the guidelines provided by APA (2015), stress can be classified into three primary types: acute stress, episodic acute stress, and chronic stress. Acute stress, which is the most common form, arises from the demands and pressures of recent events and immediate future expectations. Due to its short-term nature, acute stress typically does not cause extensive harm. Episodic stress, on the other hand, is characterized by recurrent bouts of acute stress and is often observed in individuals with a "Type A" personality—those who tend to be overly competitive, aggressive, and demanding. Chronic stress, as described, has a profound and destructive impact, affecting not only physical health but also mental well-being and overall quality of life. It is associated with enduring difficulties such as poverty, dysfunctional family situations, unhappy marriages, despised jobs or careers, and persistent life troubles (Koval, 2016).

Additionally, there is another category of stress known as Post-traumatic stress (PTSD), which can manifest in individuals who have experienced or witnessed life-threatening events like natural disasters, serious accidents, terrorist incidents, sudden loss of a loved one, war, or violent personal assaults like rape. People with PTSD may relive these traumatic experiences through nightmares and flashbacks (Koval, 2016). Colligan and Higgins (2005) introduce a different perspective on stress, dividing it into two categories: eustress and distress. Eustress, often referred to as positive or beneficial stress, can actually help individuals achieve their goals and increase productivity. In contrast, distress, also known as negative or harmful stress, can lead to emotional turmoil, burnout, and health problems. The purpose of discussing these two stress types is to highlight that while stress can be a motivating factor leading to achievement, it can also have adverse effects on mental and physical well-being (Colligan & Higgins, 2005).

### **2.1.2 CAUSES AND SYMPTOMS OF STRESS**

As outlined by Koval (2016), individuals can encounter stress stemming from four primary sources: Environmental Factors: These encompass aspects such as weather conditions, noise, traffic congestion, pollution, crowded living conditions, and residing in unsafe environments.

Social Stressors: Social stressors relate to the various roles individuals play in their lives, including those of a spouse, parent, caregiver, or employee. These stressors can also arise from significant life events like the loss of a loved one, divorce, meeting deadlines, financial challenges, job interviews, co-parenting responsibilities, or disagreements in social interactions.

Physiological Factors: Stress can be influenced by physiological factors, including illness, the aging process, childbirth, rapid growth during adolescence, menopause, accidents, and a lack of physical activity, poor nutritional habits, and disruptions in sleep patterns.

Cognitive Factors: In certain situations, stress arises not from external circumstances but from how the brain interprets and perceives these situations, labelling them as stressful, difficult, painful, or pleasant (Stress & Stress Management 2010).

When individuals struggle to effectively cope with these stressors, they may exhibit signs and symptoms that manifest in various dimensions, including cognitive, physical, emotional, and behavioral aspects.

### **2.1.3 CONSEQUENCES OF STRESS**

According to Bickford (2005), the natural human response to stress can lead to both physical and mental harm. Stress is linked to negative emotions, increased vulnerability, heightened activity in the autonomic nervous system, elevated levels of stress hormones, and the manifestation of psychosomatic symptoms. Stress can also impact the immune system, making the body more susceptible to infections. Individuals experiencing stress, especially over an extended period, often struggle to maintain a healthy balance between their work and leisure time. Additionally, those who lack effective coping strategies for stress often resort to "relaxants" such as alcohol, smoking, drugs, or strong medications (Leka et al., 2003).

Numerous emotional and physical illnesses have been associated with stress, including conditions like depression, anxiety, heart attacks, stroke, high blood pressure, disturbances in the immune system that increase vulnerability to infections, a range of viral-related disorders from the common cold to herpes to certain types of cancer, as well as autoimmune diseases like rheumatoid arthritis and multiple sclerosis. Furthermore, stress can directly affect the skin (resulting in rashes, hives, or atopic dermatitis), the gastrointestinal system (contributing to GERD, peptic ulcers, irritable bowel syndrome, or ulcerative colitis), and may

contribute to insomnia and degenerative neurological conditions such as Parkinson's disease (Leka et al., 2003).

#### **2.1.4. STRESS MANAGEMENT TECHNIQUES**

As stated by Varvogli and Darviri (2011), stress management techniques can be beneficial not only for dealing with diagnosed conditions but also for prevention and as part of one's daily routine. According to Koval (2016), coping can be described as "constantly changing cognitive and behavioral efforts aimed at mastering specific external and internal demands that an individual perceives as overwhelming or exceeding their available resources." Effective stress management involves the adoption of healthy coping strategies, such as mindfulness meditation, regular exercise, effective time management, and seeking social support.

There are various categories of stress management techniques, with one classification provided by Koval (2016) in their article on "Stress management among health care professionals: Psychological methods and coping techniques". These categories include:

**Physical Activity:** This encompasses both individual and group activities like exercise, walking, tourism, and physical labor.

**Replacement Techniques:** These involve engaging in hobbies, communicating with friends, listening to music, reading, and participating in creative activities as a way to replace stressful thoughts or behaviors.

**Distancing from the Problem Techniques:** These techniques are rooted in defense mechanisms. People use defense mechanisms unconsciously to shield themselves from feelings of threat or regret. Some examples include forgetting, humor, offering pseudo-rational explanations, escaping into fantasies, ignoring the stressor, and seeking solace in sleep.

**Escaping the Difficulty Techniques:** In this category, individuals attempt to find pleasure or relief through various forms of addiction: such as substance abuse, overeating, seeking adrenaline rushes, religious practices, or simply resting.

**Problem-Solving Techniques:** These techniques involve analyzing a situation and planning actions to resolve a problem effectively.

**Support Techniques:** This category focuses on seeking help and support from others, including specialists.

**Adjusting Tension and Emotions Techniques:** Techniques in this category include yoga, meditation, breathing exercises, Jacobson's progressive muscle relaxation, Schultz's autogenic training, visualization, sensory-focused practices, autohypnosis, and positive thinking.

**Lack of Activity or Helplessness:** This technique involves passive waiting or a sense of powerlessness in dealing with stressors.

## 2.2. CRISIS MANAGEMENT

A crisis is characterized by the potential threat it poses to human life, the fundamental values of a system, or the operation of life-sustaining systems. It demands a response under conditions of profound uncertainty (Rosenthal et al., 2001). In essence, a crisis is an uncertain event with a low probability of occurring but carries high impact, posing a threat that exceeds the capacity for a timely and effective response, necessitating swift decision-making (Cai et al, 2022). Quarantelli (1988) emphasizes that whether an event such as an earthquake or a chemical explosion turns into a crisis depends on how it affects people. Furthermore, it is essential to distinguish between personal crises, which can arise from normal developmental difficulties or personal challenges brought about by significant life events like illness or divorce, and societal collective crises (Cullberg, 2006).

The definition of crisis management (CM) in contemporary contexts can vary significantly, depending on the specific business, organization, or country (Hede, 2018). Some scholars place particular emphasis on the central role of the actors involved in CM, particularly leaders and managers. For instance, Pearson and Clair (1998) define CM as a systematic effort involving organizational members and external stakeholders to either prevent crises or effectively manage those that occur. On the other hand, Boin et al. (2005) describe CM as a set of interconnected and exceptional governance challenges where leaders are tasked with making critical decisions and providing guidance in the most challenging circumstances. They stress that effective crisis management by policymakers can mitigate the impact of a crisis on an organization, while failure to do so can exacerbate the crisis's effects. Pauchant and Mitroff (1988) argue that some organizations are more prone to crises, while others are more resilient. They attribute this to organizational culture and assert that executives contemplating a shift in organizational culture should not only consider the technical aspects of CM but also the human and social dimensions.

On the other hand, some researchers delve into the conceptualization of crisis management (CM) from a procedural perspective. Hede (2018) asserts that CM is a process that involves identifying, investigating, and predicting crisis-related issues, along with establishing various strategies that an organization can employ to either prevent or effectively deal with a crisis. Hede (2018) suggest that CM comprises a series of organized and systematic procedures that organizations employ to recognize and anticipate potential crises, followed by the implementation of preventive measures to mitigate their impact. Another group of scholars examines CM as a phenomenon that transcends individual organizations and is something that companies must address throughout their lifecycle. Alzatari and Ramzani (2019) argue that CM has its roots in trans-organizational factors, encompassing social, cultural, and political elements, and that its prevention and management cannot be solely accomplished at the organizational level.

### **2.2.1 CRISIS COMMUNICATION**

In times of crisis, clear and effective communication is essential (Okoli & Watt, 2018). Organizations should have a well-defined crisis communication plan in place to address stakeholders' concerns and maintain trust. In addition, over time, the understanding CM has changed from crisis response emphasizing the operational aspect of CM as explored by several authors since decades to another approach based on prevention and preparedness, cultural antecedents, learning, and resilience (Orazalin & Mahmood, 2019). Therefore, it is necessary to review and understand the connections between CM and these other approaches.

### **2.2.2 CRISIS MANAGEMENT APPROACHES**

Firstly, concerning the relationship between prevention and preparedness in crisis management (CM), Génereux et al. (2019) argues that CM should not be viewed solely as a reactive response when a crisis unfolds but as a proactive approach encompassing interconnected actions ranging from response to prevention, preparedness, and recovery. Additionally, McConnell and Drennan (2006) suggest that for crisis managers operating in organizations where prevention and preparedness are integrated, CM actions are more manageable because they do not have to contend with a rigid organizational culture primarily focused on crisis response. They also underscore that while achieving prevention and preparedness in CM is challenging, it is not an impossible mission.

Secondly, another aspect that warrants deeper understanding is the relationship between learning and CM. Learning entails the acquisition of knowledge and skills through experiential means, and scholars have explored this aspect in the context of CM. Brockner and James (2008) argue that CM should emphasize rectifying organizational systems and fostering a learning mindset to identify opportunities within crises. Smith and Elliott (2007) assert that the learning process is crucial in creating the necessary conditions for effectively addressing future challenges in CM. Moreover, Smith and Elliott stress the vital role of learning in informing the strategy for crisis prevention and response while also challenging core beliefs related to CM. However, during the learning process in CM, a key question arises: "What are the obstacles to learning from crises?" Smith and Elliott (2007) address this question by identifying significant barriers to learning from crises, which can create situations where a minor incident escalates into a full-blown crisis. Some of these barriers, as discussed by various authors, are more comprehensively explored and categorized within a multi-agency network.

Thirdly, regarding the link between cultural adjustment and CM, Turner's seminal work (1976) is one of the early studies that emphasizes the process of cultural adaptation in CM (Johansson & Pihl, 2023). Turner posits that a complete cultural adaptation involves inquiries and assessments, requiring beliefs and norms to align with a newfound understanding of the world. Thus, cultural adaptation is essential to prevent future issues in CM, necessitating a reassessment of core assumptions, beliefs, and culturally accepted practices when disasters occur. Similarly, Pauchant and Mitroff (1988) encourage organizations to examine their



fundamental sense of identity, with leaders and managers recognizing the need for changing organizational culture, considering not only the technical aspects of CM but also the social and human dimensions. Elliott and Macpherson (2010) underscore the imperative of cultural change in CM, emphasizing that CM is an active process, and recognizing lessons is insufficient; learning must focus on developing resilience to cope with unforeseen high-impact events, such as disasters.

Fourthly, another facet related to crises is the association between CM and resilience. In a practical context, CM managers should advance and integrate processes for building resilience to empower their organizations to both prevent and mitigate the effects and duration of crises and disasters. While this may appear challenging, especially in the context of transnational crises, several scholars and practitioners have made efforts in this regard; McEntire et al. (2002) argue that organizations and communities must pay increased attention to resilience due to its close relationship with crises, particularly disasters, and their cultural, social, psychological, and economic factors. Johnson and Elliott (2011) explore the sources of organizational resilience through inter-organizational cooperation, considering how interconnectedness and interrelations can be harnessed to build resilience by enhancing the organizational capacity to prevent and respond to crises. They also investigate how social capital provides a productive foundation that facilitates organizational resilience.

Additionally, Pat and Van Dewald (2008) assert that governments need to depart from traditional thinking, which assumes that nothing can be done to prevent crises and disasters, and embrace a new developmental approach aligned with global trends. This approach integrates crisis and disaster management methodologies to foster resilience in communities and areas prone to risk. Johansson and Pihl (2023) adds that the response system in crisis events should be reframed to consider reactions and responses within a broader framework based on organizational resilience. This entails making the response system more resilient to intense challenges or threats and enhancing its ability to recover after a crisis.

### **2.2.3 CRISIS MANAGEMENT STRATEGY**

A successful crisis management strategy can help avoid a crisis (Alzatari & Ramzani, 2019).

#### **I. Preparation**

Preparation encompasses the development of the crisis management strategy, the selection and training of public relations directors, and the implementation of exercises to evaluate the crisis management strategies executed by public relations teams (Bhaduri, 2019). In times of crisis, it is imperative to assemble a highly competent team dedicated to managing the situation, as emphasized by Kalkman (2019). Organizations should consider enlisting the services of a reputable public relations firm, recognized for its expertise in addressing the root causes and consequences of crises, guiding the organization through the crisis, and offering ongoing support after the crisis has subsided.

Additionally, the organization should designate a spokesperson responsible for effectively communicating and managing the crisis, ensuring clarity, purpose, and active involvement in evaluating the crisis. Crisis management strategies constitute a fundamental component of an organization's administrative policies. To align with the organization's crisis management strategy practices, all operational departments within the organization must adhere to these policies (Kalkman, 2019).

## **II. Crisis Principles**

Preparation involves the development of a comprehensive crisis management strategy, the careful selection and training of public relations directors, and the implementation of drills and exercises to assess the effectiveness of the crisis management strategies implemented by public relations teams (Bhaduri, 2019). In the face of a crisis, it becomes paramount to assemble a highly capable team dedicated to overseeing and addressing the situation, as stressed by Kalkman (2019). Organizations should contemplate enlisting the services of a reputable public relations firm, acknowledged for its proficiency in addressing the underlying causes and consequences of crises, guiding the organization throughout the crisis, and providing sustained support once the crisis subsides (Payton, 2021). Furthermore, the organization should designate a spokesperson tasked with efficiently communicating and managing the crisis, ensuring clarity and purpose, while actively participating in the assessment of the crisis. Crisis management strategies represent an integral component of an organization's administrative policies. To ensure alignment with the organization's crisis management strategy practices, all operational departments within the organization must adhere to these policies (Payton, 2021).

## **III. Crisis Communication**

Crisis communication, a specialized field within public relations, is specifically designed to safeguard the reputation of individuals and organizations facing reputational threats (Diers-Lawson, 2017). It places a strong emphasis on maintaining consistent communication, particularly during moments of crisis. The strategic objective of crisis communication is to effectively convey information to individuals and entities amidst disruptive events (Diers-Lawson, 2017). Many organizations heavily rely on crisis communication as an integral part of their day-to-day operations, recognizing its significance in the successful growth of enterprises ((Payton, 2021).

Companies often employ crisis communication as a means to maintain control over the dissemination of information and to establish effective channels of communication with employees, stakeholders, and the general public. Being proactive, swift, and comprehensive in communication becomes imperative when a crisis unfolds (Diers-Lawson, 2017). Businesses should have a well-defined emergency communication plan in place, outlining the procedures for sharing information in the event of a significant crisis or disaster. To manage crises effectively, it is crucial to avoid adopting a one-size-fits-all approach and instead,

break down a crisis into distinct stages. A crisis typically unfolds in three phases: pre-crisis, acute-crisis, and postcrisis (Payton, 2021). Integrating crisis management and response strategies into the decision-making process enhances the organization's ability to navigate crises successfully.

#### **IV. Crisis Response**

Crisis response entails a professional approach to addressing an event's urgent needs and critical timeframe (Ou & Wong, 2020). The primary focus lies in managing the current crisis and minimizing its impact as effectively as possible. Crisis response essentially encompasses crisis management. Many public relations directors recognize the challenge of restoring reputation, and an efficient crisis management strategy places a significant emphasis on ensuring public safety. Inability to address public safety issues can exacerbate the extent of damage caused by a tragedy (Bjørkdahl & Carlsen, 2018). Crisis response planning serves as a proactive measure that enables organizations to address crucial questions before crises emerge. Crisis planning is all about preparing for the worst-case scenario, with the objective of establishing protocols and procedures that will guide an organization's decision-making, employee actions, and client expectations (Ou & Wong, 2020). It is imperative for a company to provide regular updates regarding the recovery process, corrective actions taken, and the investigations conducted during a crisis.

#### **V. Crisis Phases**

##### **Pre-crisis Phase.**

The pre-crisis phase involves both planning and education (Hatani, 2019). During this stage, there is a preliminary warning phase in which a member of the organization, typically a supervisor or manager, becomes aware of a critical and threatening situation (Smith, 2019). At the outset of a crisis, mass communication channels may not be immediately activated, restricting communication within the higher tiers of the organizational hierarchy. It is the responsibility of public relations directors to analyze the situation at this stage, assess its potential for harm, and identify any necessary actions that require immediate attention. An emergency notification system becomes crucial as managers initiate the risk assessment process. The organization's emergency action plan is set into motion, including the deployment of communication resources to assemble team members, executives, and officials linked to the incident. An organization's public relations director plays a key role in monitoring emerging risks, foreseeing potential crises, educating stakeholders about potential risks, and recommending appropriate actions in case of a crisis (Hatani, 2019).

##### **Acute-Crisis Phase.**

The acute crisis represents the subsequent phase in a crisis, during which the crisis becomes noticeable to individuals and entities external to the organization (Warnecke, 2020). It is imperative to implement strategies during this phase. In the context of a small business, this typically involves the business owner and selects

key staff members. During this stage, a crisis communication system is established to inform the public about the incident. Effective communication is of utmost importance in the acute-crisis stage to ensure that stakeholders are informed about the situation and provided with necessary guidance (Banwart, 2020). First-responders are called to the scene at this juncture. Crisis communication efforts shift toward providing regular status updates to concerned audiences, adjusting prior instructions, managing rumors, and facilitating communication between leadership and responder teams.

### **Post crisis Phase.**

The organization returns to its regular operations during the post-crisis phase. As a crisis progresses from the acute crisis stage to its concluding phase, known as the post-crisis stage (Meyers & Holusha, 2018), the organization strives to recover its losses. Simultaneously, it endeavors to communicate the repercussions of the crisis to the community, shareholders, and customers through all-clear notifications and reassuring messages (Meyers & Holusha, 2018). During the post-crisis stage, the organization's primary objectives are centered on recovering losses, evaluating its performance throughout the crisis, and identifying any necessary adjustments to its crisis management system. Communication during this phase also involves offering post-crisis counseling. The post-crisis phase is dedicated to exploring strategies that enable the organization to sustain its operations in the face of similar crises in the future (Meyers & Holusha, 2018).

### **Crisis Maintenance Phase**

In the crisis maintenance phase, organizational leaders take the initiative to communicate and provide continuous updates regarding ongoing risks (Teo et al., 2017). Furthermore, crisis management teams within organizations actively solicit feedback from individuals affected by the crisis. It is crucial to rectify any misinformation or misconceptions during crisis management (Jin et al., 2020). The crisis maintenance process involves a coordinated effort to prevent or address a crisis when an organization anticipates its occurrence (Clarke, 2017). When an organization effectively manages a crisis, it can emerge from the situation with its customers' trust intact, revenues back to pre-crisis levels, and organizational stability maintained.

### **Resolution Crisis Phase**

In the resolution stage of a crisis, while the immediate situation has concluded, the process of recovery persists, and communication remains essential (Wombacher et al., 2018). Effective communication plays a crucial role in the recovery and reconstruction efforts following a crisis. This phase also provides an opportune moment to reiterate the importance of preparing for future crises.

#### **2.2.4. COMMUNICATION CHANNELS**

The most effective way to communicate crisis practices is through social media platforms. However, when a crisis is discussed across various online channels, the information about the crisis may appear inconsistent (Wang, 2019).

Social media serves as a valuable communication tool during a crisis, with platforms like Instagram, Facebook, LinkedIn, and Twitter offering potential channels for effective communication. It's crucial for organizations to have a specific social media communication strategy in place for times of disruption. By utilizing social media and their website, organizations can present their perspective on the crisis while staying connected to the unfolding events. In essence, to manage an organization's crisis narrative effectively, it needs to engage where the crisis is taking place (Wang, 2019). While the ultimate goal of crisis management strategies is always a full recovery, organizations should also incorporate survival strategies (Payton, 2021).

### **2.2.5 PROACTIVE CRISIS MANAGEMENT**

The proactive team anticipates the possibility of a crisis and strives to prepare for it (Payton, 2021). For example, an organization might construct an earthquake-resistant office and share a preparedness plan with its employees for a natural disaster (Al-Khrabsheh, 2018). While not all crises can be prevented, leaders can take steps to help organizations minimize the impact of potential crises. In crisis analysis, the involvement of a mediator or negotiator can be beneficial.

### **2.2.6 RECUPERATION CRISIS MANAGEMENT**

A recovery crisis management (RCM) plan is designed to safeguard and shield individuals, organizations, or companies facing challenges to their public image (Nizamidou & Vouzas, 2020). Nevertheless, operational and personnel crises can often take a business by surprise, leading to enduring adverse consequences (Rasoulilian et al., 2017).

## **2.3 EMPIRICAL REVIEW OF CASES**

### **Stress among pregnant women**

Globally, an estimated 10% to 16% of pregnant women grapple with mental disorders, particularly depression, with a higher prevalence observed in underdeveloped countries, exceeding the global average at 16% (World Health Organization [WHO], 2016). Recent years have seen mounting evidence of psychiatric disorders affecting many pregnant women, making perinatal mental health a significant public health concern. It has substantial repercussions not only on mothers but also on families, partners, and the cognitive development of babies (McMahon, 2015). The most commonly reported symptoms of psychological disorders related to pregnancy include depression, anxiety, and stress, which can manifest individually or in combination. As per the DSM-V, a depressive disorder is characterized by distinct episodes lasting a minimum of 2 weeks, marked by pronounced changes in cognitive, emotional, and vegetative functions, as well as inter-episode remissions. Those experiencing stress may exhibit elevated levels of sadness, emptiness, irritability, alongside somatic and cognitive changes that can significantly affect their functioning (Busari, 2018).

In Nigeria, a study has revealed higher levels of depression and anxiety during pregnancy (Busari, 2018). A global meta-analysis reported a wide-ranging

prevalence of antenatal depression from 0.5% to 51%. A similar study focused on low- and middle-income countries found a mean weighted prevalence of common mental disorders during pregnancy to be 15.6%. The prevalence of depression during pregnancy varies across African countries, with studies indicating rates between 8.3% and 78.2% (Wegbom, 2023). In Nigeria, research has unveiled a notably high prevalence of depression, anxiety, and stress among pregnant women. For example, in Kano, the prevalence of anxiety and depression among pregnant women was 23.2% and 26.6%, respectively. Another study in Abakaliki, eastern Nigeria, reported prevalence rates of 13.6%, 11%, and 39.7% for depression, anxiety, and stress, respectively, among pregnant women during the COVID-19 lockdown (Nwafor et al., 2021). Understanding the extent of depression, anxiety, and stress, along with their contributing factors, among pregnant women can provide valuable insights for addressing the mental health challenges faced by this population.

### **Occupational stress**

Occupational stress among professionals is a well-recognized global challenge that significantly impacts both the health and productivity of workers, as emphasized by Leka et al. (2003). Occupational stress can be defined as the inability to effectively cope with the pressures and demands within the workplace, stemming from a person's perceived inability to meet job requirements and work conditions (Loo et al., 2015). According to Melanie Bickford and the Canadian Mental Health Association, workplace stress is characterized by harmful physical and emotional responses resulting from conflicts between the demands placed on employees by their jobs and the level of control they have over meeting these demands.

Koval (2016) suggests that stress arises when there is a misalignment between an individual and their work environment. It occurs when individuals feel that their workplace does not align with their needs, desires, and expectations. This environmental stress encompasses job-related demands, role expectations, rules, and norms. Occupational stress is a comprehensive process that includes both the sources of stress in the environment and an individual's perception of these stressors. It is important to note that recognized stress and the resulting strains can trigger a snowball effect, where negative emotions escalate, leading to increased stress levels (Koval, 2016). This accumulation of physiological, psychological, and behavioral strains may ultimately result in acute depression, alcoholism, unemployment, and health issues. Occupational stress is closely tied to the nature of the work itself, which can be broken down into two key components: job demands and job control. Situations characterized by high demands, very limited control, and a significant level of strain are more likely to result in elevated levels of occupational stress (Bickford, 2005).

### **Stress among Professionals**

According to Wilkins (2007), in 2003, nearly half of Canadian healthcare workers, totaling 413,000 individuals, reported that most days on the job were

either "quite" or "extremely" stressful. Halder and Mahato (2013) conducted research to assess the stress and well-being levels of healthcare providers in Kolkata. The sample included 50 professionals of both genders, comprising 15 doctors, 15 nurses, 15 technicians, and 5 paramedics. The results indicated that stress was a "clear problem" for 33% of nurses, 20% of paramedics and technicians, and 13.3% of doctors. Additionally, 13.3% of nurses and 6.6% of technicians reported stress as a "major problem". In a study conducted in North Tunisia, out of 100 healthcare professionals surveyed, 37% reported working more than 40 hours per week, 47% experienced high levels of emotional exhaustion, 36.6% had a high level of depersonalization, and 33% had a low level of professional accomplishment (Maaroufi et al., 2015).

Furthermore, a survey involving one-fourth of hospital doctors in Germany revealed that 22% of them experienced job strain. About one-fifth of the hospital doctors mentioned considering leaving their profession at least 1-2 times per month. Excessive physician workload was considered a contributing factor to impaired patient care quality "sometimes or often" by 44% of respondents. A cross-sectional study conducted in Dubai in 2011 reported that 26.2% of 282 doctors had a high level of total job stress, with similar results found in the UK (Al Mazrouei et al., 2015). According to the American Psychological Association (APA), in 2008, the primary stress factors at work included heavy workloads, low salaries, and a lack of opportunities for growth and career advancement (43%), unrealistic job expectations (40%), and security concerns (34%). It was noted that higher stress levels were associated with a lower level of service delivered to patients. Health Advocates reported that stress-related complications or sleepiness were associated with 60% to 80% of job accidents. Additionally, according to the National Institute for Occupational Safety and Health (NIOSH) in 2008, 60% to 90% of low-level patient care depended on the stress levels of healthcare professionals (Etim et al., 2015).

### **3. THEORETICAL REVIEW**

#### **3.1 THE THEORY OF STRESS**

The concept of stress as a stimulus was introduced in the 1960s by Holmes and Rahe, who perceived stress as significant life events or changes that require a response, adjustment, or adaptation. They developed the Social Readjustment Rating Scale (SRRS) in 1967, which included 42 life events scored based on the perceived level of adjustment they would necessitate for the individual undergoing them, such as marriage, divorce, relocation, job changes, or the loss of a loved one. Holmes and Rahe posited that stress was an independent variable in the health-stress-coping equation, implying that it was the cause of an experience rather than the experience itself. While some studies found correlations between SRRS scores and illness (Rahe et al., 1970; Johnson & Sarason, 1979), there were inherent issues with the stress as stimulus theory. This theory made certain assumptions: Any change is inherently stressful. Life events demand the same level of adjustment from everyone.

There exists a universal threshold of adjustment beyond which illness will occur. Initially, Rahe and Holmes saw individuals as passive recipients of stress, having no role in determining the extent, intensity, or nature of the stressor. However, Rahe later introduced the concept of interpretation into his research (Rahe & Arthur, 1978), suggesting that a change or life event could be seen as either positive or negative based on cognitive and emotional factors. Nevertheless, the stress as stimulus model still overlooked crucial variables like prior experiences, environment, support systems, personality traits, and individual life histories.

### **3.2 THE TRANSACTIONAL THEORY OF STRESS AND COPING (TTSC)**

In an effort to offer a more dynamic understanding of stress, Lazarus (1966) formulated the transactional theory of stress and coping (TTSC) (Lazarus, 1966; Lazarus & Folkman, 1984). This theory portrays stress as the result of an interaction between an individual (involving various systems like cognitive, physiological, affective, psychological, and neurological) and their intricate environment. The notion of stress as a transaction gained significant prominence when Kobasa introduced the concept of hardiness (Kobasa, 1979), which characterizes a set of personality traits that differentiate individuals who remain healthy during life stress from those who develop health issues. In the late 1970s, Salvatore Maddi, Kobasa, and their graduate students at the University of Chicago further elaborated on the concept of hardiness (Kobasa, 1982; Kobasa & Maddi, 1981; Kobasa et al., 1982; Kobasa, et al., 1985). Hardiness shares similarities with other personality constructs in psychology, including locus of control (Rotter, 1966), sense of coherence (Antonovsky, 1987), self-efficacy (Bandura, 1997), and dispositional optimism (Scheier & Carver, 1985), which will be discussed in the next section.

Researchers introduced multiple variables into the stress-as-transaction model, broadening and categorizing various factors to account for the intricate systems involved in experiencing a stressor (Werner, 1993). Stress was described in various ways, such as acute, episodic or intermittent, and chronic. Different types of stressors also emerged, including events, situations, cues, and conditions, which were further categorized based on attributes like locus of control, predictability, tone, impact, and duration.

### **3.3 BUTTERFLY THEORY OF CRISIS MANAGEMENT**

Numerous theories and models, including the Gonzáles-Herrera and Pratt (1995) model, provide valuable tools for effective crisis management. This paper anchors on transactional theory of stress and coping (TTSC) and the butterfly theory to the existing body of crisis management literature. The butterfly theory of crisis management posits that crisis managers should proactively anticipate and prepare to address small-scale and low-probability events that have the potential to escalate into significant and harmful crises. This theory asserts that seemingly minor events can trigger major consequences, aligning with the concept presented



in the black swan theory, which suggests that low-probability events can lead to significant impacts. These theories primarily pertain to the initial "issues management" phase within the González-Herrera and Pratt (1995) model.

While developing "risk images" during this phase, leaders must conscientiously consider small-scale issues and improbable occurrences that could pose substantial threats to the organization. It is important to note that black swan events, by definition, are inherently unpredictable (Strother, 2016). Although it may not be feasible to anticipate every conceivable threat, leaders are duty-bound to stay well-informed about various minor events that could potentially disrupt the organization's stability (Strother, 2016). As part of an effective crisis management strategy, leaders should formulate contingency plans tailored to address small-scale and low-probability events that have the potential to evolve into crises. These events may include natural disasters, severe weather incidents, fires, chemical spills, accidents such as bus crashes, bomb threats, disease outbreaks, acts of terrorism, incidents involving active shooters, and instances of employee misconduct (Strother, 2016).

#### 4. CONCLUSION

This paper covers a wide spectrum of issues related to crisis management, stress theory, and their practical implications. They explore the evolution of stress theories, with a shift from viewing stress as a stimulus to understanding it as a dynamic transaction between individuals and their complex environments. The role of personality traits like hardiness in stress resilience is highlighted, providing insights into how individuals can better cope with stressors.

Furthermore, the paper anchors on anchors on transactional theory of stress and coping (TTSC), and the innovative concept of the butterfly theory of crisis management. This theory encourages proactive planning and preparation for small, seemingly insignificant events that have the potential to escalate into major crises. It aligns with the idea that low-probability events can yield significant consequences, emphasizing the importance of readiness and risk mitigation. This paper serves as a comprehensive resource for gaining a deeper understanding of crisis management theories and stress-related concepts. It offers practical guidance on how organizations and individuals can approach crisis management with foresight and resilience, ultimately improving their ability to navigate and mitigate the impact of crises.

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