



An-Najah National University
Faculty of Graduate Studies

**STRESSFUL LIFE EVENTS AND MENTAL
HEALTH OUTCOMES AMONG HEALTHCARE
PROVIDERS: THE MEDIATING ROLE OF
AGENCY AND PERCEIVED SELF-EFFICACY**

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**This Thesis is Submitted in Partial Fulfillment of the Requirements for the Degree
of Master of Clinical Psychology, Faculty of Graduate Studies, An-Najah National
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Dedication

"And Say: Alhamdulillah"

I have successfully completed my Master's degree in Clinical Psychology after a six-year journey. With pride, I say: *"We will stay here until the pain fades away, we will live here, and the melody will be sweet again."* All praise and thanks be to Allah. Through His help, grace, and strength, the hardships and challenges became bearable, and the path of knowledge became easier. O Allah, make this knowledge beneficial, allowing me to serve people and be a source of goodness for my beloved family and me.

I dedicate this work to my parents and my beloved hometown, Umm al-Fahm. My dear parents, after Allah, I owe everything to you—my deepest gratitude and utmost appreciation. You have been my support, my safe haven, and my driving force to continue drawing from the endless ocean of knowledge, never yielding to the waves of hardships and trials.

"He who does not thank people does not thank Allah."

A special thanks to my dear siblings for their unwavering support and encouragement, and to my precious family. I also express my appreciation to my dear friends, my companions on this journey, and to everyone—whether close or distant—who extended a helping hand.

I also extend my heartfelt gratitude to my life partner, Mohammad Omar, who believed in my success and stood by me in difficult times, as well as to his wonderful family—both siblings and in-laws.

The road was incredibly difficult, almost unbearable, but the end was so beautiful that it made every hardship worthwhile. So, keep seeking knowledge, aspire for greatness, and let every challenge feel lighter and easier.

The end of one path is always the beginning of another, Insha'Allah.

With love and respect.

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Furthermore, I extend my gratitude to all the esteemed faculty members at An-Najah National University, with special recognition to the Clinical Psychology Department.

Thank you for your dedication, commitment to academic excellence, and continuous support for your students.

Declaration

I, the undersigned, declare that I submitted the thesis entitled:

STRESSFUL LIFE EVENTS AND MENTAL HEALTH OUTCOMES AMONG HEALTHCARE PROVIDERS: THE MEDIATING ROLE OF AGENCY AND PERCEIVED SELF-EFFICACY

I declare that the work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

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۲۰۲۰/۰۸

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Abstract

This descriptive corrective study investigated how the incidence of stressful life affects the results of mental health between Palestinian health service providers (HCP), especially flexibility (concept here as an agency) and alleged even as arbitrators. The focus on efficiency. Research also investigated demographic variables gender, age and monthly income roles to provide a broad understanding of mental health factors in this population. A selection of 200 health professionals (96 men and 104 women) were prepared from several hospitals in Palestine, where data was collected through both the survey administration and the online questionnaire.

Conclusions revealed a statistically important positive correlation between the events of stressful life and adverse mental health consequences, including depression, anxiety and stress. In particular, the correlation coefficients of 0.775 were set for both depression and stress, and for anxiety 0.696, the strong relationship between stress rational events and the frequency of psychological crisis emphasized. Between correlation coefficient - 0.389 and 0.883, which highlights the strength of the proposed model. The study also demonstrated the important role of the agency and alleged self -efficiency as an arbitration variable: high levels of both constructions reduced the harmful effects of stressful life events on mental health results significantly. For example, the negative correlation of -0.485 between self -efficiency and depression emphasizes that those who strongly believe in their ability to handle challenges show low frequencies of symptoms of depression.

Analysis of demographic factors made no statistically significant difference in stressful life events, mental health results or self-efficiency based on gender or monthly income. However, age appeared as a remarkable factor in flexibility, where old health professionals showed high flexibility levels. This discovery corresponds to theoretical

models as it suggests that individuals may develop more sophisticated coping strategies and emotional regulatory skills over time.

In total, these results correspond to the model for the transaction of stress and intercourse (Lazarus & Folkman, 1984), which suggests that stress reactions take shape by evaluating both external stresses and individuals with available coping resources. Recent empirical tasks (García-Izquierdo, 2018); (Mealer, 2014) further confirm protective function of flexibility and self-efficacy in high pressure professional environments. The current study emphasizes the imperative to design the flexibility of health professionals and design interventions that design self-efficacy, which provided their ability to buffer the harmful effects of broader stress. Investments in such strategies can not only promote psychological welfare for health professionals, but can also increase the general quality of distributed care in a high tension clinical environment.

Keywords: Events with stressful life, mental health results, agency, self-efficacy, Palestine

Chapter One

Introduction and Theoretical Background

1.1 Introduction

Healthcare workers often face stressful life events due to their profession, which can significantly impact their mental health and job performance. Research indicates that these professionals often experience high levels of stress due to long work hours, psychological pressure, and patient care (Khasawneh, 2021). In addition, psychological tribulations such as burnout and compassion fatigue can occur due to exposure to life-threatening conditions and patients' pain (Berger, 2022).

The cumulative effect of these stresses affects not only health professionals, but also the quality of care given to patients (Bria, 2015). The effect of stressful life events on mental health for medical personnel is deep, where many studies highlight dangerous figures. For example, a large-scale meta-analysis found that about 43% of workers in health services in the front-line experience symptoms of anxiety, while 45% suffer from depression, which is much higher than the general population (Marvaldi, 2021). The same meta-analysis emphasized that the psychological strain for health workers in the front-line during the Covid-19 epidemic was sufficient with anxiety and high spreading speed for depression. While the study was mainly focused on mental health disorders, it also emphasized the ability to use a maladaptive coping system, such as the use of increased substances, as a response to long-term stress and emotional fatigue. In addition, the suicide rate among female doctors the suicide rate among female physicians was significantly higher than that of the general population, while the normal population did not see any significant growth among male doctors than men. However, male doctors still have a high risk of suicide than other businesses, and emphasize the important character of mental health challenges facing health professionals (Zimmermann, 2024).

Psychological agency and resilience play an important role in reducing the impact of stressful life events on mental health for health professionals. Stress in high pressure health environment and ability to adapt effectively for challenges is necessary. Research has shown that structured exercise programs designed to increase psychological resilience can improve health care workers to deal with stress and reduce the symptoms of psychological crisis, such as anxiety and depression (Ho, et al., 2024), the study

states that preventive mental health education programs designed to increase the resiliency of health services with necessary strategies. By strengthening their psychological resiliency, these programs help maintain their mental good and increase patient care results.

Self -efficiency refers to a person's confidence in his ability to manage job requirements and to overcome professional challenges. Research indicates that nurses with high own efficiency experience lower levels of mental health problems related to stress, as they consider the challenges in the workplace as more manageable and use active sexual strategies. For example, Alissa & Hazazi (2024) study conducted in Saudi Arabia found a positive correlation between the alleged self-efficiency of nurses in mental health and their quality of professional life, suggesting that mental welfare between nurses by increasing their own efficiency and job satisfaction can improve. The study further stated that increasing self -efficiency among mental health nurses is positively associated with the better professional quality of life and reduces the stress level related to inconsistent violence. Strengthening one's own efficiency through targeted interventions can increase nurses' ability to cope with the challenges in the workplace, finally better psychological welfare and job satisfaction. Therefore, it is an important component to maintain flexibility and maintain mental health in a high -pressure psychiatric care environment.

The role of medical personnel is important to preserve both personal and social health. Despite this, research that focuses on mental health for medical personnel is insufficient, especially in the context of public health crises. This difference is given the stress, high-level anxiety, and burntness that these professionals often tolerate. Recent research emphasizes the immediate need to check the psychological welfare of health workers on the front line, and both risk factors to identify which ones contribute to mental health and protective factors that can increase flexibility (Søvold, Naslund, Qoronfleh, & Münter, 2021). For example, the Organization (2022) has emphasized that mental health is an integral part of general health and mental welfare, safety, and restoration due to challenges, especially immediate action to promote global epidemic needs It is important to solve this problem for to ensure the stability of the health care system and the general quality of patient care.

1.2 Stressful life events

1.2.1 Definition

Stress is frequently described as the body's way of responding to a demand or challenge, and it is typified by physiological reactions that result from the tension and mental or emotional strain brought on by difficult or demanding situations. According to (Lazarus & Folkman, 1984), stress is a specific interaction between an individual and their surroundings that they see as exhausting or exceeding their resources and posing a risk to their well-being.

1.2.2 Historical background to the term psychological stress

The understanding of psychological stress has developed over the past century, with important theorists and contributors to the thought process behind this concept. Hans Selye popularized the term “stress” in a biological and psychological context in the 1930s. Selye, nicknamed the “father of stress research,” defined stress as the nonspecific response of the body to any demand. He distinguished between 'eustress' (good or positive stress) and 'distress' (bad or harmful stress), stating that stress was ubiquitous in life and not necessarily bad (Selye, 1956). Selye himself began with a strict physiological view of stress, of how the body responds to external pressures. But gradually, the definition expanded to cover psychological dimensions as well. One of the major influences behind this shift was the work of psychologists Richard Lazarus and Susan Folkman who pioneered the transactional model of stress and coping in the 1980s. Their model argued that stress doesn't just come from external situations, but by evaluating those situations as threatening or when they exceed the resources one feels able to deal with (Lazarus & Folkman, 1984). These advancements in theory resulted in a more sophisticated understanding of stress, emphasizing the interrelation between subjective experiences of stress, objectively measured environmental stimuli, and behavioral responses to challenging circumstances.

1.2.3 Sources of Psychological Stress

Psychological stress has many causes but can be roughly classified into internal and external stressors. Transitions in life that come in the form of getting married having a baby, moving, or experiencing the death of a loved one are outside stressors that force major adaptations to occur. Again, environmental figures such as high crime rates or

living in a socially destructive context, as well as work-related issues, like heavy charges, job security, or disagreements with coworkers, do play a massive role in causing stress (Redzic, 2024).

Cognitive evaluation, in which an individual's opinion or weight plays a significant part in the form of perception, might increase internal stress (Lazarus & Folkman, 1984). Stress sensitivity can be further heightened by mental health disorders like anxiety or depression, as well as personality traits like perfection or low self-esteem. Each of these elements interacts in intricate ways that influence how people experience and manage stress.

1.2.4 Types of Stressors

There are various types of stressors, which are the particular events or stimuli that cause stress. Knowing these many kinds makes it easier to pinpoint stressors and create useful coping mechanisms. These are a few examples of typical stressor types:

1. **Acute Stressors:** These are short-lived situations that cause stress. An dispute, being caught in traffic, or having a deadline are a few examples. The "fight or flight" reaction is frequently triggered by these stressors, but it usually passes rapidly when the incident is done.
2. **Chronic Stressors:** These include persistent, seemingly never-ending demands, pressures, and anxieties, such persistent financial hardships, long-term illnesses, or troubled marriages. Persistent arousal brought on by chronic stress can gradually deplete the body's reserves of energy and resources (Selye, 1956).
3. **Life Transitions:** Major life changes, even good ones like getting married or starting a new career, can be stressful since they call for a lot of adaptation and adjustment. By classifying different life events as possible stressors, the Holmes and Rahe Stress Scale emphasizes the significance of both good and negative life transitions (Holmes & Rahe, 1967).
4. **Environmental stressors:** They are elements of the environment that make people feel stressed, such pollution, noise, or crowding. For example, the noise and density of urban areas can continually stress people without necessarily making them aware of the stress they generate.
5. **Organizational Stressors:** A poisonous work culture, imprecise expectations, or inadequate management can all lead to stress at work. Stress in the workplace is

frequently caused by organizational structure and changes, job demands vs control, and interpersonal connections (Lazarus & Folkman, 1984).

6. Daily Hassles: Small annoyances and irritations that occur every day, including misplacing keys, commuting, or interacting with challenging people, can add up and greatly raise stress levels (Kanner, Coyne, Schaefer, & Lazarus, 1981).

1.2.5 Stressor impact

Numerous studies have examined the effects of stresses, highlighting how they impact both physical and mental health. Stress hormones like cortisol and adrenaline are released as the body responds to stresses by activating the sympathetic nervous system and the hypothalamic-pituitary-adrenal (HPA) axis. In the short term, these hormones help the body deal with obstacles that arise right away, but when they are present for an extended period of time because of chronic stress, they can have negative health effects like heart disease, decreased immunity, anxiety, and depression (McEwen B. S., 1998). Additionally, psychological research emphasizes how perception affects the effects of stressors. The way people perceive a stressor—as a challenge event a threat—has a significant impact on their psychological and physiological reactions, claim (Lazarus & Folkman, 1984). This evaluation influences whether the stressor has adverse health effects or, in the case of eustress, acts as a stimulant for development and adaptability. Moreover, allostatic load—a cumulative strain on the body that raises the risk of a number of chronic conditions—can result from prolonged exposure to stressors without sufficient recuperation (McEwen & Stellar, 1993).

1.2.6 Measurement of psychological stress

This study used the Holmes and Rahe Stress Scale, a 43-item scale used by healthcare professionals to measure whether a person is experiencing significant stress. The scale was developed in 1967 by psychiatrists Thomas Holmes and Richard Rahe during their time at the University of Washington. It was based on a survey of 5,000 medical patients who were asked to rate life-changing events they had experienced over the past two years. The scale consists of 43 items, each assigned a score. The total score indicates the level of stress experienced by the person. Some items on the scale include: death of a spouse, divorce, marital separation, imprisonment, death of a close family member, personal injury or illness, marriage, or job loss (Cuncic, 2022).

1.2.7 Explaining theories of psychological distress

Psychological stress is a field of extensive, multidisciplinary research (Schneiderman, 2005), with significant contributions from many fields, including psychology, neurology, endocrinology, and public health. These studies have collectively added to our knowledge of the mechanisms through which stress has powerful effects on behavior and health.

1. Biological Perspectives

The General Adaptation Syndrome (GAS) is a theory that stress sets off a universal reaction sequence in three stages: alert, resistance, and weariness. It was first presented by Hans Selye in his groundbreaking study in 1956. The adrenal gland releases cortisol and adrenaline to give the body a brief energy boost during the alarm phase, when the body instantly reacts to the stressor. This stage is comparable to the body's first shock and resource mobilization in response to the threat. (Selye, 1956)

If the stressor continues, the resistance phase comes next. The body tries to adjust to the stressor during this stage. The body attempts to restore equilibrium while maintaining a high degree of alertness when the initial hormone surge subsides. In order to maintain this elevated state of preparedness, which can only be sustained momentarily without causing harm, physiological resources are extensively strained throughout this period (Selye, 1956).

The body's resources are spent during the fatigue phase, which results in weakened immunity and heightened susceptibility to disease, if the stressor persists and the body's adaptive mechanisms are overtaxed. The detrimental effects of prolonged stress on physical health are highlighted by the fact that immune system malfunction, cardiovascular disease, and a host of other stress-related illnesses can result from chronic exposure to stressors without sufficient recuperation. ((Selye, 1956); (McEwen B. S., 1998).

2. Allostatic Load

Allostatic load was developed to help clarify the physiological impact of stress; it describes the bodily wear and tear that arises from repeated or chronic stress, and its biological consequences. This concept, introduced by Seeman (1997) illustrates how

the body's active effort to regain stability, or allostasis, through chronic stress exposure results in dramatic physiological impacts. Allostatic burden is quantified using numerous metrics, like elevated levels of cortisol, hypertension, and suppressed immune system function.

It is a predictor and measure of health outcomes. It stresses exposure. Chronic stress increases the allostatic load; that accumulation is associated with conditions that include diabetes, heart disease and mental health disorders. However, the body's continual effort to maintain homeostasis via hormonal and physiological changes compromises the ability to respond appropriately to challenge (McEwen B. S., 2000).

3. Recent Advances in Biological Stress Research

Recent work in this area has focused on detailed descriptions of the mechanisms involved in how stress impacts neuroendocrine processes and how those processes, in turn, impact other body systems. For instance, chronic stress has been shown to alter the structure and function of the brain, particularly in areas involved in memory, decision-making, and emotional responses like the hippocampus, prefrontal cortex, and amygdala (McEwen B. S., 2000).

Effective stress management should include behavioral changes, lifestyle changes, and, where appropriate, pharmacological therapies to mitigate the physiological consequences of chronic stress exposure. This is exemplified by the continuing study of the biology of stress.

Biological studies of stress primarily focus on the physiological responses activated by the hypothalamic-pituitary-adrenal (HPA) axis and subsequent secretion of glucocorticoids, chief among them cortisol. The trajectory in this area was through Selye backed in 1956 with General Adaptation Syndrome (GAS) that describes how stress triggers a three-dimensional phase alert, resistance, and weariness. Prolonged stress is harmful to health and can result in immune system shortcomings and cardiovascular diseases in the body remains in the phase of resistance or exhaustion (McEwen B. S., 1998). Other research has explored the idea that long-term stress leads to allostatic load, or the wear-and-tear on our bodies as we try to maintain stability during periods of change (Seeman, 1997).

4. Psychological and Cognitive Approaches

Ours was a paradigm shift in stress as a dynamic process arising from the individual's transactions with the environment, as initially articulated in Lazarus and Folkman's (1984) Transactional Theory of Stress and Coping. This idea assumes that stress is a personal problem where an individual perceives and responds to stresses through coping strategies and evaluation cognitivism. This more nuanced perspective adds psychological resilience and vulnerability to the mix and offers an expansive conceptualization of stress beyond physiological responses alone.

5. Cognitive Appraisal

Two important processes, primary and secondary appraisal, form the feeling of stress. In the primary evaluation process, a person evaluates whether the event is stressful, benevolent, optimistic, or irrelevant. Perceptions of harm-loss (Near-Death experiences), threat (the anticipated damage or metaphysical aspects of death), and challenge (the opportunity for growth or gain) are each subdivided into stress-based evaluations. This is the first assessment, which is important as it determines how an individual should respond emotionally to the occurrence (Lazarus & Folkman, 1984).

The secondary appraisal is the second part of the cognitive appraisal, which considers coping resources and options. This evaluation determines whether a person's abilities, assets, and information can be adequate to accomplish the stressor task. The assessment decides how the body and emotions respond to the stressor. Resource potential of the stressor: When the individual feels they possess enough resources to cope with it, it is more prone to be perceived as a challenge than a threat. Conversely, when a stressor is perceived as overwhelming available coping resources, it is recognized as triggering stress reactivity, markers of high levels of stress such as anxiety and discomfort (Lazarus & Folkman, 1984).

6. Coping Mechanisms

The transactional model also emphasizes coping responses. According to Lazarus and Folkman 1984, coping is categorized into two primary types: emotion-focused and problem-focused. The problem-focused coping involves confronting stress by taking action or making a recovery plan. This coping is most likely to be used in circumstances for which it is malleable. Emotion-focused coping, in contrast, focuses

on managing the emotional response to a stressor. These can include reframing the events to seem less threatening, avoiding proximity, seeking social support, or denying them.

7. Evolution of the Theory and Contemporary Research

The aspect of coping is emphasized in the transactional model. Lazarus and Folkman also identify two major types of coping strategies: emotion-focused and problem-focused. So, the first step is that you have that problem-focused way of coping: managing the stressor by taking proactive measures or developing a plan. This type of coping is more likely to be adopted when the situation is modifiable. In contrast, emotion-focused coping seeks to manage the emotional response to the stressor. This might include rationalizing the event to reduce its perceived danger, not approaching, asking the other party for emotional help, or denying it (Folkman & Moskowitz, 2004).

8. Implications for Clinical Practice

Transactional theory plays a crucial role in clinical practice, especially in developing therapeutic strategies to enhance adaptive coping skills. Psychotherapy often involves helping patients develop coping techniques and changing the lens through which they view obstacles. Cognitive-behavioral therapies, such as mindfulness-based stress reduction, are based heavily on cognitive appraisal and coping to help individuals control stress more effectively (Lazarus & Folkman, 1984).

To sum up, the Transactional Theory of Stress and Coping redoubles the complexity of stress as an active routine with solid psychological features. This model offers valuable perspectives on why people respond similarly or differently to similar stressors and how psychological interventions can be adapted to mitigate the damaging effects of stress based on the significance of coping mechanisms and evaluation (Lazarus & Folkman, 1984).

9. Socio-Psychological Studies

• Social Determinants of Stress

The social-psychological perspective argues strongly that society significantly influences stress and is not just a product of personal circumstances. Therefore, the stress process model is helpful in this respect as it shows how social roles and structures

make particular kinds of stress possible (Pearlin, 1989). For example, the relationship between income and stress (SES) has been looked at extensively, and the findings are simply that stress levels are higher among those with lower SES. Thus, the sources of this stress, in addition to pecuniary insecurity, are living in dangerous places, suffering especially severe social and environmental pressures, less provision for social assistance (artificial or natural) or direct health care support for those with greater need (Pearlin, Menaghan, Lieberman, & Mullan, 1981; Matthews, 2011).

- **Chronic Stress and Minority Stress**

An effective example of social stress combined with the psychology of social belonging lies in the notion on minority stress - and minority simply means those suffering from heavier socio-psychological stresses simply because their members are more vulnerable, such as LGBTQ. According to Meyer's minority stress hypothesis (2003), members of such groups are continuously exposed to stress from their surroundings. Their social environment includes discrimination, prejudice against those not in the majority society. More social encounters with potentially discriminatory attitudes may lead a person to anticipate them even earlier-- the impact on their mental health is thus worse. The acquired physiological alterations may serve to lengthen significantly inequalities in health (Meyer, 2003).

- **Community and Environmental Stress**

Environmental and community factors also instill stress. For example, urbanization has been found to cause more significant levels of stress. This is probably because of things like crowding and poisonous air. Vibrations and other examples not limited by them include production or non-production (i.e., noise and other lower-level impacts on human health). It has been found in numerous research studies on crowded cities aside from stress reactions. They seem to bring with them long-lasting effects--an actual increase in the number of people who become mentally sick because of higher rates and all that entails (Lederbogen, et al., 2011). Moreover, it has been found that being resident in violent areas or being exposed to violence is a significant cause of stress, which adversely affects mental health and well-being, particularly for children and adolescents (Foster & Brooks-Gunn, 2009).

- **Social Support and Resilience**

Social support is an important defense against the harmful effects of stress. Stress research results of the past two decades have shown that people using their strong social networks to deal with stress live longer and more productive lives. On the other hand, those who relied less heavily on others for support were shown to suffer from significantly more frequent health problems. People with social support can more easily manage their stress and their odds of the negative impacts of continued stress falling, becoming more resilient (Cohen & Wills, 1985).

- **Implications for Policy and Intervention**

The socio-psychological study of stress spotlights the need for comprehensive health care and provides an analysis to improve health conditions that consider economic disparity within society. Whereas health and well-being in a person compared to the stresses he or she experiences. Systems for relieving stress must combine individual care options with community-level strategies that reinforce social networks, alleviate environmental pressures, and remove structural impediments to safety and health.

In short, mental stress studies have revealed the extensive interrelationships between larger social contexts and individual psychological processes. The comprehensive strategy these studies offer for understanding and dealing with stress recognizes how personal health outcomes are greatly affected by their surrounding social factors.

- **Contemporary Research and Advances**

A more profound comprehension of the organic processes afflicted by strain has been rendered practicable by adding modern technology and approaches, such as neurological imaging and genomics research. For example, investigations have exhibited that strain can vary the encephalon's framework and purpose, impacting areas engaged in recollection, emotion regulation, and decision-making, such as the prefrontal cortex, hippocampus, and amygdala (McEwen B. S., 2000). Furthermore, epigenetic examination has been inaugurated to indicate how revelation to strain can ensue in both transient and durable amendments in gene expression, which may affect how consequent generations react and are predisposed to responding to psychogenic stressors. In addition, long-time exposure to psychosocial stressors in prior generations can lead to variances in how succeeding generations acknowledge and answer to

demanding circumstances by adjusting genes governing the stress reaction (Meaney, 2001).

To recap, extensive examination into psychological stress underscored its intricacy and multitude of means by which it influences individuals' health and prosperity. A full comprehension of stress' diversity necessitates holistic techniques for mitigating and interacting with stress that consider its biological, mental, and socioecological dimensions. Effectively addressing stress' ramifications demands reflecting how its complex impacts differ dependent on personal and communal circumstances. Alleviating life's pressures involves recognizing how we are each distinctly affected while situated within broader environments that can excessive or relieve strain.

1.2.8 Previous studies of psychological stress

Two important studies shed light on stress's wide-ranging health impacts—a sweeping meta-analysis by Kivimäki, et al. (2012), examined job strain's link to cardiovascular disease among European employees. Combining over 13 cohort studies and 197,473 subjects free of heart disease at onset, researchers sought to ascertain whether occupational stress independently risks coronary issues. Separately, another seminal work profiled the diverse physiological toll sustained activation takes on multiple body systems. These investigations provide comprehensive perspectives on how prolonged activation corrodes health across several domains. Their results demonstrate the important role that work-related stress plays in cardiovascular health, showing that those who experienced high job strain had a 23% higher chance of developing CHD than those who did not. The idea that job stress alone raises risk was supported by the study's careful adjustment for other lifestyle and traditional risk factors. The researchers came to the conclusion that occupational stress-reduction measures may lower the incidence of CHD, suggesting a clear path for workplace health improvement initiatives.

In their second groundbreaking study, Segerstrom & Miller (2004) conduct a meta-analytic analysis of more than thirty years of research on the relationship between psychological stress and the immune system. They looked at the effects of different kinds and lengths of stress on immune function by analyzing 293 research. Acute stressors lasting fleeting minutes to hours potentially amplify immune defenses against

looming threats, as one complex examination uncovered. In stark comparison, unrelenting stresses continuously smother immunity, weakening it for weeks or years and harming humoral and cellular protection. Immune suppression may aggravate specific autoimmune maladies and raise susceptibilities to infections. According to the research, regulating persistent stress is paramount for safeguarding overall wellness and skirting diverse immune-linked disorders.

As revealed through diverse investigations, stress has profound consequences on the immune and cardiovascular systems. Working conditions generating job strain could be optimized to mitigate stress, while customized strategies may aid in addressing continual life stresses. Such findings augment comprehension of stress and shall inform upcoming public policy and personalized health practices seeking to reduce stress-related harm. Concurrently, investigations unveil stress' intricate impacts, underlining the necessity for nuanced solutions—from reforming taxing work environments to devising individualized plans for successfully managing perpetual stress. Furthermore, augmenting knowledge of stress permits shaping subsequent regulations and habits to minimize its diverse detrimental effects.

1.3 Agency

1.3.1 Definition

Agency is the human capacity to act according to conjecture, improvise plans and behaviors in order to forestall or allay a crisis. It refers to temporally overlapping processes of social interactions, consisting of actions and reactions aimed at acquiring new competencies, techniques and strategies aimed at bringing about changes or modifications in the social and economic environment. In order to comprehend how people, negotiate intricate social situations and make choices that are consistent with their own objectives and beliefs, psychologists investigate agency. It is also essential to resilience because people who feel themselves to have greater personal agency are better able to handle hardship (Bristow, 2014).

1.3.2 History of the term "Agency"

Psychology's conception of agency has its roots in philosophical debates that go all the way back to classical and Enlightenment philosophers. For example, Aristotle's *Nicomachean Ethics* emphasizes how each person may control their own fate by

making thoughtful decisions and examining the role of free will and decision-making in reaching eudaimonia, or a flourishing life (Aristotle, 2009). Like Kant's landmark "Critique of Practical Reason," his enlightenment writings emphasized autonomy and free will as indispensable to moral accountability and upright conduct. This philosophical basis enabled later psychological theories to incorporate notions of personal initiative and self-steering, as depicted in Kant's seminal 1788 treatise (Kant, 1788).

These philosophical ideas were incorporated into novel psychological models when psychology emerged as an established scientific field in the late 19th and early 20th centuries, pioneered by theorists such as William James and Carl Jung. James initiated a formal analysis of agency within psychological research. At the same time, Jung pioneered investigating the intricacies of human consciousness and capacity for self-awareness, as chronicled in his seminal 1890 and 1960 publications, respectively (James, 1890; Jung, 1960).

- **20th Century: Behaviorism vs. Humanism**

However, the early to mid-20th century was a time of significant paradigm shifts in psychological research: behaviorism—the movement spearheaded by B.F. Skinner and, before him, John B. Watson wanted to create a more objective psychology by restricting it for the most part to overt behavior and response to stimuli, mostly ignoring internal mechanisms such as volition, thoughts, and emotions. In his works, particularly in "Science and Human Behavior" (1953) and "Beyond Freedom and Dignity" (1971), Skinner argued that human behavior was a result of conditioning by environmental factors and that free will was just an illusion (Skinner B. F., 1953, Skinner, 1971).

However, the emergence of humanistic psychology in the middle of the 20th century brought about a paradigm shift in opposition to behaviorists' deterministic viewpoints. Humanistic psychologists such as Abraham Maslow and Carl Rogers highlighted each person's potential for self-determination and personal development. The self-actualizing tendency, a basic desire for development, fulfillment, and increased agency, was first described by Rogers in his groundbreaking book "On Becoming a Person" (1961) Maslow expanded on these concepts by putting self-actualization at the top of his

hierarchy of requirements and promoting the idea that people can go beyond meeting their most fundamental physiological and security needs (Maslow, 1943).

1.3.3 The importance of agency

Because it has a direct impact on many aspects of human functioning and well-being, the concept of agency is extremely important in psychology. The following are some crucial contexts where agency is particularly important:

1. **Autonomy and personal empowerment:** agency is critical to autonomy and personal empowerment. It mainly refers to one's ability and authority to make choices as the most acceptable option determined by one's values and desired outcomes and to pursue self-realization. Higher levels of motivation, engagement, and satisfaction in many areas of existence, such as occupation, studying, and human relationships, are frequently identified with control over one's life. Autonomy, as a feature of agency, will dramatically improve a person's mental health and motivation by keeping their interests and beliefs genuine and honest, improving personal development and satisfaction in most areas of life (Deci & Ryan, 2000).
2. **Psychological well-being:** A high level of psychological well-being is associated with high levels of agency. People with a sense of powerlessness and shooting, which are characteristic of depression and anxiety disorders, are low in stir when they feel that they can control and change their fate. Thus, for example, one study found that agentic individuals experienced less stress because they felt better managing potential obstacles and failures (Deci & Ryan, 2000).
3. **Agency significantly affects resilience and adaptability.** When individuals have the power to decide and take action, they are better able to cope with stress, change, and adversity. Those who take advantage of the agency find it easier to solve problems, eliminate roadblocks, and recover from failures quickly. Resilience is essentially rooted in individual agency, enabling individuals to become proactive and solve better to cope more effectively with stressors and adversity (Masten & Obradović, 2006).
4. **Social and moral development:** According to developmental theory, social and moral development depend on agency. As kids get older, having a sense of agency makes

them more self-reliant, accountable, and socially conscious. Their capacity to make moral decisions, engage with others in an ethical manner, and operate effectively in society depends on this growth. According to Bandura et al. (2001), children's social and moral capacities are strengthened by self-efficacy, a crucial component of agency, which results in better pro-social behaviors and ethical involvement. Their results highlight how crucial it is to provide young people a strong feeling of agency in order to encourage morally and responsibly behaved conduct (Bandura A. B., 2001).

5. Goal achievement and motivation: Theories of motivation, particularly in corporate and educational contexts, also rely greatly on agency. One example is the fundamental elements of intrinsic motivation as identified in the Self-Determination Theory (SDT) perspective, with autonomy being one of them. When people believe that they are the main actor in their actions, they are more motivated from the inside and better perform, persist, and innovate in reaching personal and vocational goals (Deci & Ryan, 2000).
6. Long-run happiness with life: People who regularly use their agency to make decisions that correspond with their more profound objectives and values tend to report more life satisfaction. They are also better at setting and working towards longer-term goals, often leading to more meaningful and fulfilling lives. Higher life satisfaction is significantly predicted by self-concordance in goal-setting, which indicates the exercise of agency, as shown by Sheldon and Elliot (1999). Their results confirm that agency is essential for attaining long-term happiness and fulfillment in addition to being a fundamental component in comprehending human behavior and mental health. The importance of agency extends to the ethical, social, and psychological facets of life, highlighting the enormous influence of having control over one's own destiny (Sheldon & Elliot, 1999).

1.3.4 Concepts related to agency

Cognitive-behavioral therapy (CBT), Freudian psychoanalysis, and other psychological theories all touch on the idea of agency, which is fundamental to psychology. Every theory presents a different angle on how psychological processes and individual behavior both impact and are influenced by agency (Freud, 1923).

The following fundamental terms about agency are taken from several psychological frameworks:

1. Id, Ego, and Superego: The ego functions as the agent in Freud's psychoanalytic theory, negotiating between the id's primal urges and the superego's moral principles. The ego's crucial role in exercising agency is demonstrated by its capacity to strike a balance between various demands and select socially acceptable actions. (Freud, 1923).
2. Reality Testing: This ego function entails evaluating the outside world and differentiating it from inner desires. By choosing choices based on a true perception of the outside world rather than on moral principles or inner wants, the ego exercises agency through reality testing. (Freud, 1923).
3. Cognitive Restructuring: This technique in cognitive-behavioral therapy helps people recognize and alter problematic thinking, which increases their agency and gives them more control over their emotional and behavioral reactions. (Beck, Rush, Shaw, & Emery, 1979).
4. Self-Efficacy: According to Bandura, self-efficacy is the conviction that one can carry out the actions required to accomplish particular performances. Increased self-efficacy promotes personal agency, activity, and tenacity (Bandura., 1997).
5. Optimism: Optimistic people are more likely to act in ways that anticipate favorable results, which increases agency via affecting motivational states (Scheier & Carver, 1985).
6. Self-Determination Theory (SDT): In SDT, autonomy is at the agency's core. It improves motivation and well-being and impacts individuals' ability to pursue meaningful goals (Deci & Ryan, 2000).
7. Zone of Proximal Development (ZPD): This concept, developed by Vygotsky, highlights social interaction in learning. ZPD students show agency moving in and out of the Zone of Proximal Development, where they scaffold and develop through social support in a dialectical relationship between the environment and the individual (Vygotsky, 1978).
8. Theory of Planned Behavior: This theory links agency to perceived behavioural control, which is an indication of how competent an individual feels about carrying out behaviours. This enhances perceived agency and behaviour reporting (Ajzen, 1991).

9. Social Cognitive Theory: Within this theory, self-efficacy and reciprocal determinism are found, which state that people have agency when they believe they can change their environment and actions (Bandura A. , 1986).

1.3.5 Theoretical approaches of agency

The concept of self-efficacy is critical for fostering what Albert Bandura terms personal agency. And, that vastly broadens our understanding of agency in his Social Cognitive Theory. In Bandura's estimation, one may demonstrate agency through the belief in the capacity to plan and execute the necessary behaviours to deal with possible occurrences. Self-efficacy, or a belief in one's ability to do stuff, encompasses more than just the ability to behave and involves faith in one's ability to apply one's abilities effectively despite the situation (Bandura A. , 1986).

1. There are several key means by which Bandura's Social Cognitive Theory entails one may Intentionality: Humans make strategies and tactics to realize their objectives. This agency aspect is proactively committing to behaviours necessary to achieve desired outcomes.
2. Forethought: Agents are not confined to reacting to the world; they engage in goal-directive behaviour and can anticipate the outcomes of their actions. Indeed, due to that future-oriented component of the agency, people ascribe means to effort with anticipated future conditions in preparing for the consequences of their actions.
3. Aspects of self-reactiveness: self-regulation of motivations, actions, and emotions. This agency is evidenced by the ability to monitor one's behaviour and regulate it against one's standards and situational requirements, adjusting one's behaviour as needed to meet one's goals.
4. 4- Self-reflectiveness is the metacognitive ability to observe oneself and one's motivations. It means evaluating how sound your ideas and actions are so that they match your fundamental values and beliefs and making necessary adjustments.

- **Indicate agency**

Bandura's theory also offers the concept of reciprocal determinism, where behaviour, environmental influences and individual characteristics interact to influence one another. This paradigm states that while an individual may be impacted by his/her surroundings, the individual can act on and change his/her environment through

agency. This reciprocal process is crucial since self-efficacy becomes the driving force for the individual, adjusting the social and physical environment according to their use (Bandura A. , 1986).

Moreover, Bandura distinguishes between personal agency and collective agency. Personal agency is about individuals impacting their functioning and immediate environment. In contrast, collective agency is about people having a shared conviction about their collective might to generate desired results. This facet of agency enables the start and performance of group-directed movements to affect social change or meet common aims.

Originating from the work of Edward Deci and Richard Ryan, Self-Determination Theory (SDT) reflects a rich and layered perspective of agency. However, it emphasizes autonomy as a central condition of self-determination. Autonomy is a type of essential psychological need that, once it is fulfilled, allows individuals to behave by choice and of their own accord. Based on SDT, people experience agency when they engage in volitional behaviours congruent with their inherent values and interests, facilitating psychological development and global wellness (Deci & Ryan, 2000).

SDT identifies several types of motivation on the continuum of internal motivation, some types of extrinsic and motivation. Intrinsic motivation, whereby acts are performed for the intrinsic fulfilment of the activity itself, is the purest expression of agency. Deci and Ryan, on the other hand, also discuss extrinsic incentives that they label "internalization" and "integration" to create self-determination. To people who do their jobs. Others must enjoy these behaviours because they align with their identities and values as they understand and internalize their drivers. This process strengthens their sense of agency as they take action on what they feel is personally relevant (Deci & Ryan, 2000).

Another concept is "Causal agency", which is the degree to which people are the author of their behaviour (SDT). To promote causal agency, Deci and Ryan argue that it is necessary to fulfill the basic psychological needs of relatedness, competence, and autonomy. People with high autonomy feel their actions are self-generated. Competence — the feeling of being effective when one is interacting with the environment — reinforces this perception, enabling individuals to attain desired

outcomes. The need to feel connected with others, or relatedness, enhances agency by providing emotional security and encouragement to engage in goal-directed behaviour (Deci & Ryan, 2000).

SDT has been applied across diverse contexts, like healthcare, education, athletics and work, demonstrating the ubiquitous importance of agency for enhancing human functioning. According to this theory, people perform better. They are more innovative and persistent, as well as feeling more autonomous, competent, and connected to others when their environment meets their needs for autonomy, competence, and relatedness.

1.3.6 Previous studies of agency

In 1977, Albert Bandura published the landmark "Self-Efficacy: Toward a Unifying Theory of Behavioral Change," a publication that described the direct link between self-efficacy—one of the core dimensions of agency—and individuals' ability to change their behaviour. Bandura believed that self-efficacy, or belief in one's ability to execute the behaviours necessary to produce specific performance attainments, has a large influence on people's actions, effort, persistence in the face of challenges, and thought processes. People exhibiting higher degrees of self-efficacy choose more difficult work and exert more effort, persevering longer in the face of adversity, coping with stressors more effectively and rebounding from failures (Bandura A. , 1977).

Bandura's findings were derived from extensive examination and synthesis of a breadth of empirical research in controlled trials and long-term field studies in diverse settings, from educational facilities, medical organizations, and business workplaces to the domain of people development. All used modelling, verbal persuasion, and mastery experience in order to manipulate self-efficacy and subsequently observe changes in behaviour. The studies suggest that individuals with greater self-efficacy believe they possess the ability to do something and ultimately align their motivation, performance, persistence and emotional states accordingly. These findings lend support to the idea that therapies that enhance self-efficacy are likely to have widespread effects on behaviour change and mental well-being (Bandura, 1977).

The findings of Bandura were derived from a comprehensive review and synthesis of hundreds of empirical studies, including both controlled experiments and long-term field studies, in diverse environments such as schools, clinics, workplaces, and domains

of self-development. These studies manipulated self-efficacy using modeling, verbal persuasion, and mastery experiences to achieve necessary behavior change. Participants who reported stronger self-efficacy consistently showed greater motivation, performance, persistence, and psychological well-being. These findings support the idea that therapies targeting self-efficacy may have a wide-reaching effect on behavior change and mental health (Bandura, 1977).

Mike Slade's research provides an in-depth look at the role agency plays in mental health recovery. It represents a departure from traditional, symptom-oriented models toward a recovery-oriented approach whose ultimate aim is individual development and self-realization. This approach emphasizes individual accountability, with patients playing an active role in their treatment strategies. According to the study's hypothesis, higher recovery outcomes are facilitated by increased personal agency. Recovery services that empower patients by providing them with meaningful options and encouraging optimism will also result in better health metrics (Slade, 2009).

Slade 2009 used a qualitative approach to collect data from case studies and interviews with people with mental health issues as well as support providers from a range of recovery-focused programs in the UK. The results show that those with a higher sense of agency engage in their recovery more actively. They display initiative, searching for skills and resources that will help them to get better. Specific individuals displaying this phenomenon reported greater courses of life satisfaction and happiness, attaching the importance of the power of agency through which an individual will or a portion will be more successful when paired with quality. It found that participant satisfaction mattered more for mental health treatments that promote patient autonomy, allowing patients to make informed decisions.

Slade's findings are consistent with the inclusion of agency in mental health care frameworks, suggesting that best practice should be to maximise patient agency using choice and engagement strategies and this needs to be one of the first things that mental health services do. This approach enhances the overall effectiveness of a mental health recovery strategy and aligns with a more humanistic and empathetic style of treatment. Slade's work has far-reaching implications for designing and delivering mental health services, because it demonstrates that agency is integral to the recovery process. It also

promotes a shift towards greater patient-centred, supportive approaches that foster growth and healing.

1.4 Self- efficacy

1.4.1 Definition

“self-efficacy” defines an individual’s belief in their ability to execute the behaviors necessary to achieve specific performance objectives. Psychologist Albert Bandura first developed this concept as part of a broader Social Cognitive Theory, which emphasizes how cognitive processes regulate behavior. Self-efficacy is essentially your belief in the ability to manage your motivation, behavior, and social environment.

1.4.2 History of the term self- efficacy

Psychologically, the idea of "self-efficacy" has a long lineage, emerging most obviously from Albert Bandura's social cognitive theory. Bandura first suggested the concept in the 1970s, and it has since evolved to become a fundamental part of our understanding of cognitive processes that drive behavior regulation (Bandura, 1977).

Self-efficacy builds on Bandura's earlier work on social learning theory, emphasizing the role of modeling, imitation, and observation in learning. But Bandura expanded upon this theory to include how a person's actions, motivation, and emotional states are affected by their beliefs about their abilities. In his 1977 article, *Self-Efficacy: Toward A Unifying Theory of Behavioral Change*, he formalized the self-efficacy concept, which appeared in the *Psychological Review*. This literature summarized a vast amount of data demonstrating that self-regulation and personal success are profoundly shaped by how people believe about their ability to manage their functioning and the events in their lives (Bandura, 1977).

1.4.3 Sources of self-efficacy

The four primary sources of self-efficacy that influence people's beliefs are suggested by Albert Bandura, which influences the perception of these individuals about their ability to perform a particular task or achieve a specific goal. These sources influence how individuals perceive their capability of overcoming obstacles and pursuing goals. Each source provides a comprehensive understanding of the development and

sustenance of self-efficacy and has been critically analyzed in light of Bandura's Social Cognitive Theory (Bandura, 1977).

- a. The most significant source of self-efficacy beliefs is mastery experiences. When someone completes a task or overcomes a problem successfully, their confidence in their talents is boosted; when they fail, this confidence might be undermined. The way a person explains their accomplishments and shortcomings—their attribution style—affects the impact of each encounter. The conviction that one can succeed in upcoming problems is reinforced by consistent effort and repeated success at a task, particularly under varied circumstances (Bandura, 1977).
- b. Vicarious experiences: Seeing others succeed, especially those who are thought to be similar to oneself, can boost confidence in one's own skills. Without firsthand experience, this source—also referred to as modeling—offers a vicarious means of increasing self-efficacy. Observers' motivation and self-efficacy are increased when they see peers accomplish via perseverance, which strengthens their conviction that they, too, are capable of mastering similar tasks (Bandura, 1977).
- c. Verbal persuasion: It is possible to convince someone that they possess the abilities needed to complete particular activities. Encouragement from others, including peers, superiors, coaches, and teachers, can boost self-efficacy by fostering the conviction that one is capable of succeeding. Expertise, credibility, and dependability are necessary for effective persuasion. Building self-efficacy through verbal persuasion requires both positive reinforcement and motivated feedback (Bandura, 1977).
- d. Emotional and Physiological States: Self-efficacy beliefs are also influenced by how one interprets their emotional and physiological states. While negative emotions and physical symptoms like anxiety can reduce self-efficacy, positive emotions and low levels of stress and exhaustion typically increase it. People frequently use their present emotions and physical condition to predict how effectively they will perform a task; for instance, feeling at ease and invigorated might boost confidence while confronting difficulties (Bandura, 1977).

Application and Impact: Creating successful interventions in corporate, therapeutic, educational, and personal development contexts requires an understanding of these sources of self-efficacy. It has been demonstrated that techniques that increase self-

efficacy from these sources boost resilience, motivation, learning outcomes, and performance in a range of tasks and difficulties.

Giving students the chance to practice mastery, participate in peer learning, get constructive criticism, and properly handle stress, for example, can greatly improve their learning results and personal development in educational environments. Individuals and organizations can greatly increase their efforts toward accomplishing individual and group goals by utilizing these four sources, illustrating the enormous influence of self-efficacy on human behavior and performance (Bandura, 1977).

1.4.4 The importance of self-efficacy

1. Behavioral Regulation: People's choices, level of effort, perseverance in the face of adversity, and resistance to failure are all influenced by their level of self-efficacy. High self-efficacy people are more willing to take on difficult projects and stick with their objectives, which ultimately results in more accomplishments and better performance in a variety of domains, including the job, personal development, and academia (Bandura A. , 1986).
2. Emotional Health: Stress levels and emotional states are influenced by self-efficacy. Because they feel more in control of their life and their activities, those who have high self-efficacy are less likely to suffer from anxiety and sadness. Better mental health and general well-being are facilitated by their increased emotional resilience and good stress management (Bandura., 1997).
3. Social Functioning: People who have high levels of self-efficacy are more able to build social bonds. By encouraging a positive sense of one's own value and potential, it improves social skills by making people more assertive in their social interactions and more robust when confronted with social rejection or disagreement (Bandura .. , 1995). Health Behaviors: Self-efficacy has an impact on how people handle their nutrition, exercise, and medical procedures. Higher self-efficacy increases the likelihood that people will continue to practice good habits, follow their treatment plans, and experience improved health outcomes (Bandura A. ..., 2004).

1.4.5 Concepts related to self-efficacy

1. Self-efficacy has a direct impact on how people set goals. Self-efficacious people are more inclined to establish difficult but attainable goals for themselves. Theories like Locke and Latham's Goal Setting Theory, which holds that people create goals most successfully when they have high self-efficacy and commit to particular, difficult goals, highlight this relationship (Locke & Latham, 2002).
2. Motivation: One important factor influencing motivational levels is self-efficacy. Bandura asserts that self-efficacy influences one's effort and perseverance in the face of adversity. This idea is fundamental to many theories of motivation, especially when it comes to academic accomplishment and motivation. (Schunk & Pajares, 2009).
3. Beliefs regarding the results of a behavior are known as outcome expectations, and they are directly related to self-efficacy. Bandura distinguishes between outcome expectancy—the conviction that a specific result will follow an action—and self-efficacy—the confidence in one's capacity to carry out an action—noting that both are crucial in influencing how people behave (Bandura, 1997).
4. Self-Regulation: Self-efficacy affects a person's capacity to self-regulate, or to keep an eye on, manage, and modify their behavior in order to accomplish long-term objectives. A high level of self-efficacy increases the possibility of establishing personal standards and reacting to criticism, which improves self-regulatory abilities. Zimmerman's research on self-regulated learning emphasizes how self-efficacy helps students take charge of their education (Zimmerman, 2000).
5. Resilience: Self-efficacy is frequently incorporated into the psychological concept of resilience. Those who are resilient, or able to overcome obstacles, usually have high levels of self-efficacy, which allows them to cope with stress and hardship (Masten A. S., 2001).
6. Stress and Coping: How individuals perceive and manage stress is influenced by their level of self-efficacy. High levels of self-efficacy might help people view stressful situations as challenges rather than threats and can also affect their choice of more proactive coping mechanisms (Bandura., 1997).

1.4.6 Theoretical approaches of self-efficacy

A fundamental idea in psychology, self-efficacy was created by Albert Bandura and is mainly highlighted in the context of Social Cognitive Theory.

The Social Cognitive Theory of Albert Bandura, which centers human motivation and behavior around self-efficacy, has had a significant impact on psychological theories regarding how people interact with themselves and their surroundings. In SCT, self-efficacy refers to how one's belief in one's own ability to achieve influences interactions with the outside environment, rather than just the belief itself. According to this view, people do more than just respond to their surroundings; they are proactive, self-regulating, and self-reflective (Bandura A. , 1986).

According to this theory, a person's self-efficacy dictates their thoughts, feelings, motivations, and actions. Strong self-efficacy improves human achievement and wellbeing in a number of ways (Bandura A. , 1986):

1. Cognitive Processes: People with high self-efficacy view challenging tasks as challenges to be conquered, which increases their commitment to and interest in activities to them.
2. Motivational Processes: According to Bandura, who popularized the idea of an inherent interest in activities, persons who have a high level of self-efficacy are more likely to predict favorable results and, as a result, are more likely to complete tasks. This is due in part to their strong conviction that they can affect those results.
3. Affective Processes: People who have a high level of self-efficacy are less likely to experience stress and to experience depression. They tackle difficult assignments with a self-assurance that fosters emotional stability and protects them from the discouragement that can result from trying circumstances.
4. Selection Processes: People's choices of settings and activities are influenced by their level of self-efficacy. High self-efficacy individuals choose demanding settings that promote learning, growth, and development.

Reciprocal Determinism: A fundamental idea in SCT, reciprocal determinism holds that an individual's behavior is shaped by the interplay of their behavior, personal elements (such as thoughts, feelings, and biological occurrences), and environmental circumstances. According to this concept, self-efficacy is essential because it

determines a person's conduct in a particular circumstance as well as how they interpret the outcomes of that activity, which in turn affects their emotional responses and mental processes (Bandura A. , 1986).

Self-efficacy and SCT have implications in a number of fields, such as education, where teachers use it to increase students' confidence in their academic abilities and improve learning outcomes; health psychology, where it helps patients believe that they can manage their illnesses or stick to treatment plans; and organizational psychology, which improves employee performance through perceived competence and empowerment (Bandura A. , 1986).

A large body of research has shown the importance of self-efficacy in many different contexts. For example, Students with high academic self-efficacy are more likely to push through challenging assignments and perform better academically. Those who have a strong sense of self-efficacy are better able to manage chronic illness and adhere to treatment plans (Bandura., 1997; Schunk D. H., 2002; Luszczynska, 2005).

Edward Deci and Richard Ryan developed Self-Determination Theory (SDT), a comprehensive framework for understanding human motivation focusing on the role of intrinsic and extrinsic motivation. This theory describes how motivation is not just about quantity but quality as well—how motivation is essential to performing successfully, persisting, and maintaining mental health (Deci & Ryan, 2000).

Human well-being and motivation quality, according to SDT, are determined by the degree to which basic psychological needs are satisfied. These requirements are:

- **Autonomy:** Having the ability to act freely and with volition.
- **Competence:** Similar to self-efficacy, the feeling that one is capable and effective in one's endeavors.
- **Relatedness:** Having a sense of belonging and being in relationships with interested others.

The construct of self-efficacy from Social Cognitive Theory closely aligns with the need for competence in SDT. It refers to feeling competent and effective; thus, competence is an essential part of SDT. This needs to feel challenged based on an individual's capacity promotes growth and education and encourages people to search

for challenges appropriate to each person's ability levels. People's intrinsic drive and feeling of competence are enhanced when projects are well-suited to their skill set and have good results (Deci & Ryan, 2000).

SDT posits that an essential motivating factor of people's decisions, persistence and emotional responses to failure and success is their perceived competence. When people do feel competent, they are more engaged, more curious, and have a greater tendency to persevere in the face of a challenge. This dynamic creates a positive feedback loop of motivation and success (Deci & Ryan, 2000).

Most importantly, SDT emphasizes how important it is for people to have social and environmental conditions that challenge their need for competence, and how this need will thrive or wilt, depending on those factors. Individuals are more capable in environments with the right degree of challenge, where helpful criticism is available and given. Conversely, situations that are overly demanding or controlling can chip away at this sensation which decreases well-being and motivation (Deci & Ryan, 2000).

SDT has been utilized in multiple domains like health care, educational settings, employment, and sports. Teaching approaches that promote perceptions of competence and autonomy in students promote learning and increase intrinsic motivation. When jobs are designed to create greater competence and autonomy for employees at work, those employees are more productive, turnover declines, and job satisfaction increases (Deci & Ryan, 2000).

1.4.7 Previous studies of self- efficacy

“The Role of Self-Efficacy in Recovery from Serious Psychiatric Disabilities: A Qualitative Study with Fifteen Psychiatric Survivors,” Adina Coroiu et al. (2015) is particularly noteworthy among those who examined self-efficacy. Aim This qualitative study aims to document the experiences and perspectives of psychiatric survivors regarding their self-efficacy during recovery and understand the effects of self-efficacy on the recovery process for people with severe mental disorders. The study's objective was thus to investigate the role that self-efficacy has in enabling individuals to manage their symptoms and, ultimately, recovery from severe mental illnesses (Coroiu, Ștefan, & Chiroban, 2015).

The methodology involved semi-structured interviews with fifteen individuals with major histories of psychiatric problems who were considered to be in recovery phases. Doing so allowed them to have a solid understanding of how self-efficacy played a role in their healing processes. The study published in *JAMA Otolaryngology-Head & Neck Surgery* found that higher self-efficacy levels were closely associated with improved recovery outcomes. When participants believed they could exert control over their symptomatology and take an active role in their rehabilitation, they also reported lower stress and better health. And this association is important as self-efficacy is crucial in facilitating resilience, general mental health and disease management as well.

The results of this study underscore the need to integrate self-efficacy-enhancing modalities into mental health care. Therapeutic interventions can greatly enhance recovery outcomes for patients with psychiatric disability by enhancing self-efficacy. These findings support the more general concept that self-efficacy is important in enabling individuals to take an active role in their health and recovery as well as managing mental health problems. As these accounts position self-efficacy as a persisting priority in mental health research and practice, such insights underlie the value of its continued focus in promoting psychological health and therapy.

The article “Self-Efficacy Reduces the Impact of Social Isolation on Medical Student's Perceived Stress and Mood” Sarah Wright et al. (2014) thus attempts to determine to what degree self-efficacy buffers medical students' stress and mood from the negative effects of social isolation. The primary objective of the study was to determine the effect of self-efficacy that mitigates the negative effects of social isolation (namely, medical students' stress level and mood disorders) (Wright, Wong, & Newill, 2014).

The researchers used a quantitative approach to survey medical students to assess their mood, perception of stress, sense of self-efficacy, and experiences with social isolation. Results of the study indicated that there is a strong relationship between social isolation, self-efficacy, and psychological well-being. Medical students who reported higher levels of self-efficacy reported feeling less stress and maintaining a better mood despite social isolation than their counterparts. The current findings shed light on the role of self-efficacy in promoting mental health resilience among medical students and in providing a protective role against the psychological effects of social isolation.

This study shows that self-efficacy can play a significant role in reducing the perceived stress and elevating the mood of medical students during time of social isolation. These results underline the importance of self-efficacy-enhancing interventions to be integrated into educational curricula as a means of equipping students with psychological resources for better handling identified stressors and promoting mental health under challenging social and academic conditions.

1.5 Problem statement

Healthcare professionals are vital to society, providing essential patient care under adverse circumstances. But the nature of their work, which often includes life-or-death situations, long working hours and exposure to traumas, often finds them under high levels of stress. Repeated exposure to the stressors of acute general mental distress background could be harmful to their mental health, with anxiety, depression, and burnout as potential consequences. Understanding the mechanisms through which stressful life events affect mental health outcomes of healthcare providers is essential.

Exploring the mediating role of agency and perceived self-efficacy may one route to understanding and addressing these negative mental health outcomes. Agency is an individual's sense of it in their actions and decisions at the same time, self-image has to do with how we view our capabilities as potential solution providers to the problem we encounter. In the realm of healthcare provider well-being, understanding these psychological constructs is critical, as they can affect how people interpret and respond to acute stressors.

1.6 Questions of study

1. What is the association between stressful life events and healthcare providers' mental health outcomes, and to what extent do agency and perceived self-efficacy moderate that relationship?

Thus, this problem statement highlights a gap and a need for empirical research to elucidate the relationship between stressful life events, agency, perceived self-efficacy, and mental health outcomes among healthcare providers. Building knowledge of these associations will be necessary for creating focused interventions and support measures to prevent the adverse effects of stress and bolster the mental health of these key

frontline workers. Solving this problem is an individual health issue and an important consideration of the overall efficiency and sustainability of health systems globally. Cultivating mental health resilience among healthcare workers is critical to providing optimal patient care and maintaining a sustainable, capable workforce.

2. Are there statistically significant differences in stressful life events, mental health outcomes, resilience, and perceived self-efficacy among caregivers based on gender, age, and monthly income?

1.7 Study Hypothesis

Hypothesis: Healthcare providers with higher levels of perceived self-efficacy and agency will demonstrate a weaker association between exposure to stressful life events and the development of mental health disorders, such as anxiety and depression, when compared to healthcare providers with lower perceived self-efficacy and agency. This suggests that agency and perceived self-efficacy mediate the relationship between stressful life events and mental health outcomes among healthcare providers.

1.8 significance of the study

The study on the mediating role of agency and perceived self-efficacy in the relationship between stressful life events and mental health outcomes among healthcare providers is of critical significance. Healthcare providers are frequently exposed to high-stress situations that can adversely affect their mental health, leading to issues such as burnout, anxiety, and depression. Understanding how agency and self-efficacy can buffer these negative outcomes is vital for developing effective support systems within healthcare settings. Agency, or the ability to act autonomously and make decisions, along with perceived self-efficacy, or belief in one's ability to handle difficult situations, can significantly mediate the impact of stress. By exploring these relationships, this study aims to contribute to the literature on stress management and mental health resilience in healthcare professionals. The findings could lead to targeted interventions designed to enhance self-efficacy and agency among healthcare providers, ultimately improving their ability to cope with stress and reducing the risk of mental health issues. This research holds the potential to not only enhance individual provider well-being but also improve overall patient care outcomes, underscoring the importance of

psychological support as an integral component of healthcare professional development and maintenance.

1.9 The aims of the study

The primary aim of this study is to explore the mediating roles of agency and perceived self-efficacy in the relationship between stressful life events and mental health outcomes among healthcare providers. Specifically, the study seeks to determine how these two psychological constructs influence the impact of stress on mental health, potentially buffering healthcare professionals against the negative effects of their high-stress environments. By identifying the extent to which agency and self-efficacy can mitigate the adverse mental health consequences of stressful life events, the study aims to inform the development of targeted interventions that can enhance these protective factors in healthcare settings. Ultimately, this research aims to contribute to a deeper understanding of the dynamics of stress resilience among healthcare providers, facilitating the creation of more supportive work environments that promote mental well-being and effective stress management strategies. This could lead to improved healthcare outcomes, not only for the providers themselves but also for the patients they serve, by sustaining the health and efficacy of those at the forefront of patient care.

1.10 The study limitations

1. **Sample Diversity and Size:** Depending on the demographic and professional diversity of the healthcare providers included in the study (only healthcare providers in Palestine), the findings may not be generalizable to all healthcare settings or regions. A sample that lacks diversity in terms of specialty, experience, or cultural background may limit the applicability of the results across different subgroups within the healthcare profession.
2. **Cross-sectional Design:** If the study is cross-sectional, it can only capture a snapshot in time, making it difficult to infer causality or the directionality of the relationships among stressful events, agency, self-efficacy, and mental health outcomes. Longitudinal designs would be more informative in understanding how these relationships evolve over time.
3. **Self-Report Bias:** Studies relying on self-reported data are subject to biases such as social desirability or recall bias, where participants may underreport their stress levels or overestimate their coping abilities. This could affect the accuracy of the

measurement of both the predictors (stressful life events and self-efficacy) and the outcomes (mental health states).

4. **Operationalization of Variables:** The way in which stressful life events, agency, self-efficacy, and mental health outcomes are defined and measured can influence the study's findings. There might be variability in how these constructs are perceived and reported by different individuals, potentially affecting the consistency and reliability of the results.
5. **Control of Confounding Variables:** There may be other variables that influence both the exposure (stressful life events) and the outcome (mental health) that are not accounted for, such as personal or environmental factors, which could confound the results. Without controlling for these variables, it's challenging to ascertain the precise effects of agency and self-efficacy.
6. **Interpretation of Mediation:** Establishing mediation involves strong statistical and methodological rigor, and slight variations in analytical strategies can lead to different interpretations. Ensuring that the mediation effect is not only statistically significant but also meaningful in terms of effect size is crucial for the practical implications of the study.

Chapter Two

Methodology

2.1 Introduction

This chapter addresses the techniques and approaches used in the research, including with a description of the study tools, identification of the research methodology, participants and technique, and so forth. It also describes the useful actions done to validate the study instruments, offers a justification of the study variables, and emphasizes the several statistical tests applied to examine the research results.

2.2 Study Design

With an eye toward the mediating function of agency and perceived self-efficacy, this study uses a descriptive study design to investigate the relationship between stressful life events and mental health outcomes among healthcare providers. This descriptive study aims to give a realistic representation of the interactions among these factors inside the population of interest.

2.3 Study population

Working in many healthcare environments including hospitals, clinics, and long-term care homes, the study population comprised doctors, nurses, and other healthcare professionals including pharmacists, technicians, and administrative personnel. This group comprised men and women Arabic-speaking Palestinians living in Palestine, with duties spanning primary healthcare facilities, emergency rooms, and hospitals.

2.4 Study sampling

The study questionnaires were given to the research sample—healthcare personnel—during the researcher's visits to different institutions. The surveys also were sent via an online survey.

The pilot study, which sought to assess the psychometric characteristics of the study tools, involved forty healthcare professionals in all. The main research comprised two hundred medical professionals. Table 1 shows the demographic-based distribution of the study sample:

Table 1*Distribution of the Study Sample by Demographic Variables*

Variables	Categories	Number	% Percentage
Gender	Male	96	48.0
	Female	104	52.0
Age	23-33	118	59.0
	4-434	44	22.0
	and above45	38	19.0
Monthly income	Less than 2000 shekels	25	12.5
	Between 2000-4000 shekels	81	40.5
	More than 4000 shekels	94	47.0

The way the study sample is distributed offers a whole picture of the traits of the participants. There were 104 women (52%) and 96 men (48%). The sample Regarding age, most participants (59%) fell between 23 and 33 years old; followed by 22% between 34 and 44; and 19% 45 years and above. About monthly income, 12.5% of participants made less than 2000 shekels, 40.5% had income between 2000 and 4000 shekels, and 47% made more than 4000 shekels.

2.5 Study instruments

1. Stressful Life Events Scale

Using a set of already-existing scales, including the Life occurrences Scale, the researcher gauged stressful occurrences in life (Holmes & Rahe, 1967), and the Recent Life Changes Questionnaire (Rahe, Mahan, & Arthur, 1970). These scales let the present study modify the measure to fit the sample and study surroundings. Comprising 25 self-report items, this unidimensional measure is scored on a 5-point Likert scale: 1 = To a very little degree, to 5 = To a very significant extent. A higher overall score indicates a more intense degree of demanding life experiences. Participants were asked to rate their agreement with phrases including, "I find it difficult to stay asleep."

2. DASS-21 Depression and Anxiety Scale

To measure mental health outcomes, the DASS-21 scale (Depression, Anxiety, and Stress Scales) was used. The DASS-21 is a self-report tool containing 21 items (7 per scale) that assess three constructs: Depression, Anxiety, and Stress (Lovibond & Lovibond, 1995). In the DASS-21, the depression subscale is composed of Items 3, 5, 10, 13, 16, 17, and 21, and includes statements such as “I couldn’t seem to experience any positive feeling at all.” The anxiety subscale consists of Items 2, 4, 7, 9, 15, 19, and 20, with items such as “I felt I was close to panic.” The stress subscale is made up of Items 1, 6, 8, 11, 12, 14, and 18, and includes items like “I found myself getting agitated.” The items are rated on a 4-point Likert scale ranging from 0 to 3. The DASS-21 demonstrates high internal consistency (with all Cronbach's α s above .87; (Antony, Bieling, Cox, Enns, & Swinson, 1998). Test-retest reliability and construct validity have also been reported as adequate across various studies (Antony, Bieling, Cox, Enns, & Swinson, 1998; Lovibond & Lovibond, 1995).

3. Resilience Scale

To measure resilience, the researcher used the Connor-Davidson Resilience Scale (CD-RISC). The scale was adapted in this study to better suit the nature of the sample and the research environment. This unidimensional scale consists of 27 self-report items, rated on a 5-point Likert scale (1 = Never to 5 = Always). A higher total score indicates a greater level of resilience. Participants were asked to indicate the extent to which they agreed with statements such as, “I can achieve my goals.” Items (5, 15, 17, 22, 25, 26, 27) were reverse scored (Connor & Davidson, 2003).

4. General Self-Efficacy Scale

The General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) was used to measure a general sense of perceived self-efficacy. This unidimensional scale consists of 10 self-report items, rated on a 4-point Likert scale (1 = Not at all true to 4 = Exactly true). A higher total score reflects a higher level of self-efficacy. Participants were asked to indicate the extent to which they agreed with statements such as, “I can always manage to solve difficult problems if I try hard enough.” This scale has been used in various contexts, with internal consistency coefficients ranging from .75 to .91 (Scholz, Gutiérrez Doña, Sud, & Schwarzer, 2002).

2.6 Validity

To validate the psychometric properties of the study scales, the scales were administered to a pilot sample of 40 healthcare providers. The results were as follows:

- **Construct Validity**

The Pearson correlation coefficient was calculated to obtain the values of the item correlation coefficients with the respective dimensions and the total score of the DASS-21 scale. Additionally, the Pearson correlation coefficient was calculated to determine the item correlation coefficients with the total scores of the following scales: Stressful Life Events, Resilience, and GSE, as shown in tables (2), (3), (4), and (5).

Table 2

Correlation coefficients of the items in the Stressful Life Events Scale with the total scale score (n=40)

Item	Correlation with total score	Item	Correlation with total score
Stressful life events			
1	0.682	14	0.775
2	0.677	15	0.698
3	0.815	16	0.457
4	0.380	17	0.829
5	0.788	18	0.766
6	0.837	19	0.774
7	0.324	20	0.615
8	0.338	21	0.835
9	0.865	22	0.795
10	0.808	23	0.832
11	0.846	24	0.404
12	0.767	25	0.714
13	0.598	-	-

Table (2) shows that the items correlation coefficients ranged between 0.324 and 0.865, all exceeding the specified threshold of 0.30.

Table 3

Values of the correlation coefficients between the items of the DASS-21 scale and their respective dimensions, the correlation coefficients between the items and the total scale score, and the correlation coefficients between each dimension and the total scale score (n=40)

Item	Connection with dimension	Correlation with total score	Item	Connection with dimension	Correlation with total score	Item	Connection with dimension	Correlation with total score
Depression			Stress			Anxiety		
3	0.809	0.760	1	0.936	0.900	2	0.679	0.626
5	0.819	0.805	6	0.834	0.805	4	0.881	0.849
10	0.860	0.739	8	0.848	0.838	7	0.821	0.723
13	0.879	0.897	11	0.957	0.931	9	0.801	0.716
16	0.907	0.841	12	0.919	0.880	15	0.867	0.849
17	0.868	0.806	14	0.876	0.865	19	0.893	0.842
21	0.850	0.840	18	0.772	0.773	20	0.832	0.855
A total score for the dimension of.95			A total score for the dimension of.98			A total score for the dimension of.95		

Table (3) shows that the items correlation coefficients ranged between 0.626 and 0.957, all exceeding the specified threshold of 0.30.

Table 4

Correlation coefficients of the Resilience Scale items with the total scale score (n=40)

Item	Correlation with total score	Item	Correlation with total score
Resilience			
1	0.635	15	0.461
2	0.628	16	0.561
3	0.659	17	0.334
4	0.720	18	0.438
5	0.598	19	0.648
6	0.458	20	0.563
7	0.664	21	0.709
8	0.586	22	0.542
9	0.730	23	0.340
10	0.607	24	0.323
11	0.402	25	0.494
12	0.344	26	0.550
13	0.756	27	0.601
14	0.737	-	-

Table (4) shows that the items correlation coefficients ranged between 0.323 and 0.737, all exceeding the specified threshold of 0.30.

Table 5

Correlation coefficients of the GSE Scale items with the total scale score (n=40)

Item	Correlation with total score
GSE	
1	.627
2	.812
3	.830
4	.762
5	.821
6	.744
7	.754
8	.826
9	.711
10	.551

Table (5) shows that the items correlation coefficients ranged between 0.551 and 0.830, all exceeding the specified threshold of 0.30.

2.7 Reliability

The internal consistency of each scale was assessed using Cronbach's alpha coefficient, based on the pilot sample data, after calculating the validity of each scale. Table (6) provides the details

Table 6

Reliability coefficients of the study scales using Cronbach's alpha method

Tools	The dimension	Number of Items	Cronbach's alpha
Stressful life events	–	25	.96
DASS-21	Depression	7	.94
	Stress	7	.95
	Anxiety	7	.92
DASS-21		21	.98
Resilience	–	27	.91
GSE	–	10	.91

As shown in Table 6, the Cronbach's alpha reliability coefficient for the Stressful Life Events Scale was $\alpha=.96$. The Cronbach's alpha coefficients for the dimensions of the DASS-21 scale ranged from $\alpha=.92$ to $\alpha=.94$, while the Cronbach's alpha for the total score was $\alpha=.98$. The Cronbach's alpha reliability coefficient for the Resilience Scale was $\alpha=.91$, and for the GSE scale, it was also $\alpha=.91$. These values are considered appropriate, indicating that the tools are reliable and applicable.

2.8 Study Variables

The study included the following variables :

First: independent variable: Life stress events.

Second: Mediating variables: Resilience, Self-Efficacy .

Third: Dependent variable: Mental Health Outcomes.

The study included: Demographic Variables:

1. Gender: Two categories: (1- Male, 2- Female).
2. Age: Three categories: (1- 23-33 years, 2- 34-44 years, 3- 45 years and above).
3. Monthly Income: Three categories: (1- Less than 2000 shekels, 2- Between 2000-4000 shekels, 3- More than 4000 shekels) .

2.9 Study Implementation Procedures

The study was conducted according to the following steps:

1. Collecting information from various sources to establish the theoretical framework for the study.
2. Defining the study population, followed by selecting the study sample.
3. Choosing the study instruments.
4. Administering the study instruments to a pilot sample, comprising 40 healthcare providers, to assess the psychometric properties.
5. Administering the study instruments to the main sample, requesting participants to respond to the items accurately and objectively, after ensuring that participants were

informed that their responses would be used exclusively for scientific research purposes.

6. Using SPSS (version 28) and AMOS (version 24) for data analysis and conducting the appropriate statistical tests.
7. Discussing the results derived from the analysis in light of theoretical literature and previous studies, and formulating a set of recommendations and research proposals.

2.10 Statistical Analysis

To analyze the data, the researcher used SPSS (version 28) and AMOS (version 24), employing the following statistical methods:

1. Pearson Correlation Coefficient to assess construct validity.
2. Cronbach's Alpha to determine the reliability coefficient for each of the study scales.
3. MANOVA ("without interaction effects") to examine the differences in the mean scores of DASS-21 attributed to the variables: gender, age, and monthly income.
4. Three-way ANOVA ("without interaction effects") to examine the differences in the mean scores of each of the following scales: life stress events, General Self-Efficacy Scale (GSE), and resilience, to assess differences based on the variables: gender, age, and monthly income.
- 5- Scheffe Test for post-hoc comparisons.
5. Scheffe Test for post-hoc comparisons to assess construct validity.

Additionally, AMOS (version 24) was used to test the model based on the Maximum Likelihood Estimation (MLE) method, utilizing the following goodness-of-fit indices:

- Chi-square (χ^2)
- P-value.
- CMIN/df: The Relative Chi-Square.
- Comparative Fit Index (CFI).
- Incremental Fit Index (IFI).
- Tucker–Lewis Index (TLI).
- Root Mean Square Error of Approximation (RMSEA).
- Root Mean Squared Residual (SRMR).

Path analysis was conducted to examine the Direct, Indirect, and Total Effects of the variables, using the Bootstrapping method.

2.11 Ethical Considerations

Ethical approval for the study was granted by the institutional review board at Al-Najah National University. Participants' confidentiality and privacy were carefully protected, as the questionnaires used in the study did not require any personal identifying information from the respondents.

Chapter Three

Study Results

This chapter presents the findings of the study in relation to the research questions posed. The results are organized systematically according to a structured methodology, as follows:

3.1 Results related to the first question

Question 1: Does the proposed model examining the relationship between stressful life events and mental health outcomes achieve an acceptable fit when resilience and perceived self-efficacy are included as mediating variables among caregivers?

To answer this question, the means, standard deviations, and correlations between the variables in the proposed model were calculated, and the results are presented in Table (7) below:

Table 7

Means, Standard Deviations, and Correlations between the Variables of the Proposed Model (N=200)

variable	M	SD	Stressful life events	Resilience	Self- Efficacy	Depression	Stress	Anxiety
Stressful life events	2.73	.789	1.000					
Resilience	2.73	.557	-.564	1.000				
Self-Efficacy	3.18	.544	-.485	.762	1.000			
Depression	1.17	.817	.775	-.603	-.485	1.000		
Stress	1.30	.837	.775	-.535	-.442	.883	1.000	
Anxiety	.98	.783	.696	-.507	-.389	.794	.848	1.000

M = Mean, SD = Standard Deviation

As shown in Table (7), statistically significant correlations were found between the study variables, ranging from -.389 to .883, indicating that the model is appropriate for further analysis.

Before performing the analysis and calculating the model's goodness-of-fit indices, and to ensure the accuracy of the results, the Mahalanobis Distance-squared (D^2) index was computed to identify and remove cases with statistical significance values of less than $p < .001$, following (Tabachnick & Fidell, 2013). As a result, case (85) was identified as an outlier and removed, leaving a final sample size of 199.

Additionally, the normal distribution of the Observed variables was assessed by calculating the skewness and kurtosis values, as presented in Table (8).

Table 8
Skewness and Kurtosis Values

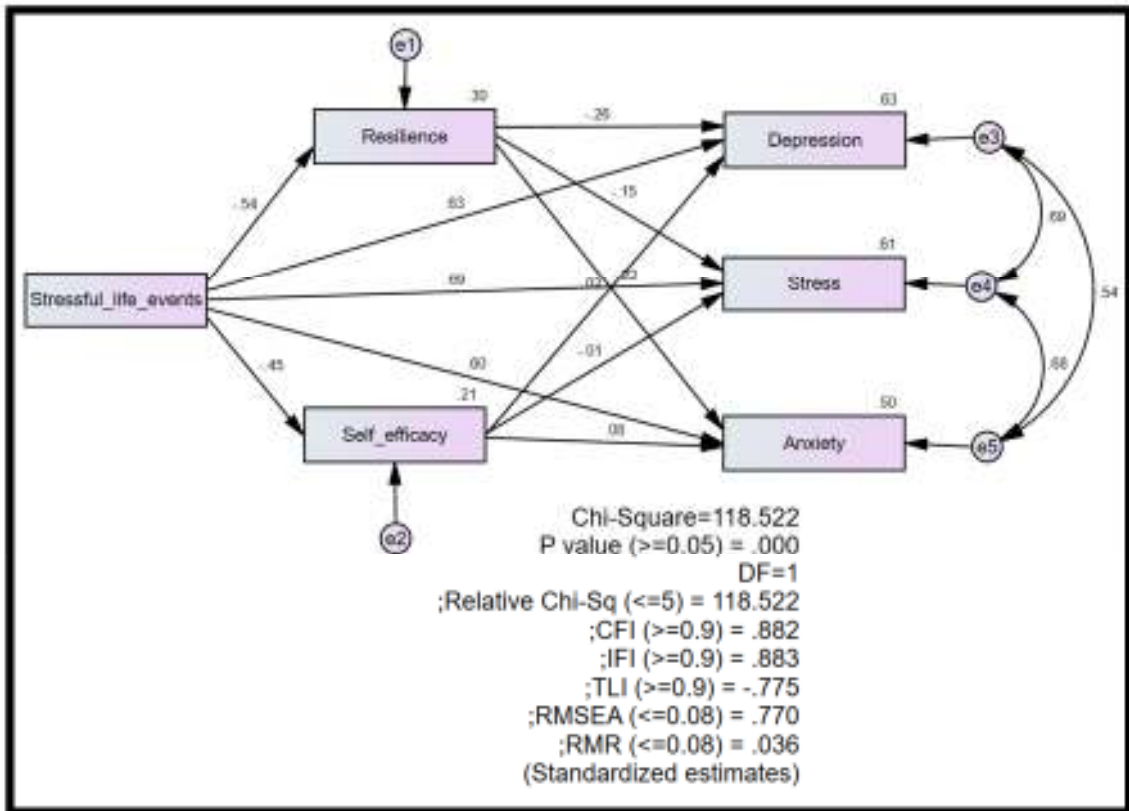
Variables	skew		kurtosis	
	Value	c.r.	Value	c.r.
Stressful life events	.143	.935	-.921	-3.019
Resilience	.353	2.317	-.617	-2.023
Self-efficacy	-.318	-2.082	-.906	-2.971
Anxiety	-.824	-5.405	.122	.399
Stress	.297	1.946	-.432	-1.415
Depression	-.258	-1.689	-.725	-2.379

As shown in Table (8), the skewness and kurtosis values fall within the acceptable range. The skewness values range from .143 to -.824, while the kurtosis values range from .122 to -.921. All these values are within the acceptable limits according to the criterion mentioned by Finney & DiStefano (2006) where the skewness should be within (± 2.00) and kurtosis within (± 7.00 .)

A causal model was constructed based on theoretical foundations, logical reasoning, and the findings of previous studies. The model proposed life stress events as an independent variable, with resilience and self-efficacy as mediating variables, and mental health outcomes (depression, stress, and anxiety) as dependent variables. To achieve this, path analysis was conducted using the Maximum Likelihood Estimation method through AMOS (version 24). This approach was employed to map the proposed model and examine how well the data fit the model using goodness-of-fit indices, as illustrated in Figure (1).

Figure 1

Fit Indices and Regression Coefficients for the Proposed Model



As shown in Figure (1), the proposed model suggests the life stress events as an independent variable, with resilience and self-efficacy as mediating variables, and mental health outcomes (depression, stress, and anxiety) as dependent variables. The figure also displays the fit indices and regression coefficients for the proposed model. For a clearer presentation of the model's fit indices for the study sample, according to the criteria, values, and fit status, see Table (9) below:

Table 9*Fit Indices for the Model in the Study Sample Based on Criteria, Values, and Fit Status*

Model fit indicators	Value	Indicator standard	Criterion
χ^2	118.522		
Number of distinct sample moments	21		
Number of distinct parameters to be estimated	20		
Degrees of freedom	1		
p-value	.000	Not a sign	Not a Good Fit
χ^2 / df	118.522	Less than or equal to 5	Not a Good Fit
CFI	.882	.90Greater than or equal to	Not a Good Fit
IFI	.883	.90Greater than or equal to	Not a Good Fit
TLI	.770	.90Greater than or equal to	Not a Good Fit
RMSEA	.770	.80Less than or equal to	Not a Good Fit
RMR	.036	.80Less than or equal to	Acceptable Fit

Note: Acceptance criterion indicators are as stated in (Awang, 2012; Wang & Wang, 2020).

Table (9) shows that all fit indices, except for SRMR, did not meet the acceptable criteria. The Comparative Fit Index (CFI) had a value of.882, which is lower than the acceptable threshold of $\geq .90$. Similarly, the Incremental Fit Index (IFI) was.883, also below the required threshold of $\geq .90$. The Tucker-Lewis Index (TLI) was.770, which is below the acceptable threshold of $\geq .90$.

The Chi-Square test did not meet the non-significance threshold, with a value of $\chi^2 = 118.522$ and a p-value $< .000$ at 1 degree of freedom, indicating a poor fit. Additionally, the Relative Chi-Square (χ^2/df) was 118.522, which exceeds the acceptable threshold of ≤ 5 . The Root Mean Square Error of Approximation (RMSEA) was.770, greater than the acceptable threshold of $\leq .80$.

On the other hand, the Root Mean Squared Residual (SRMR) was.036, which is within the acceptable threshold of $\leq .080$.

In summary, most of the indices suggest that the model fit is generally unacceptable.

The regression coefficients for the causal paths between variables were also extracted, including the Standardized Regression Weights, Unstandardized Regression Weights, and the statistical significance of the regression coefficients. Table (10) illustrates this:

Table 10

Regression Coefficients for Causal Paths: Standardized and Unstandardized Values, and Statistical Significance for the Model

path	Regression Weights		S.E.	C.R.	p-value
	Standardized	Unstandardized			
Stressful life events --> Self-efficacy	-.455	-.307	.043	-7.184	.000
Stressful life events --> Resilience	-.544	-.383	.042	-9.125	.000
Resilience --> Depression	-.256	-.380	.076	-4.992	.000
Stressful life events --> Depression	.635	.664	.058	11.388	.000
Stressful life events --> Stress	.691	.743	.062	12.038	.000
Stressful life events --> Anxiety	.596	.599	.066	9.134	.000
Self-efficacy --> Anxiety	.081	.120	.084	1.431	.152
Resilience --> Stress	-.146	-.222	.081	-2.763	.006
Resilience --> Anxiety	-.219	-.313	.086	-3.659	.000
Self-efficacy --> Stress	-.005	-.008	.079	-1.107	.915
Self-efficacy --> Depression	.016	.025	.075	.336	.737

* p <.05

Table (10) shows that three of the regression coefficients for the causal paths were not statistically significant, while the others were.

To achieve the best-fitting model for the study sample data, two proposals were considered. The first proposal suggested removing the non-significant paths between variables, indicating no influence between them. According to Hooper, Coughlan, & Mullen (2008), variables with low and non-significant effects should be excluded from the analysis, as they suggest high levels of error.

The second proposal, based on the Modification Indices suggested by the software, involved making two types of adjustments: the first suggested correlations between the measurement errors of the mediator variables, and the second proposed adding or modifying paths between the mediator variables.

Based on the above, the first proposal, which involved removing the non-significant paths between variables, was adopted. Additionally, the second proposal, using the Modification Indices, was implemented. This adjustment involved adding a path between self-efficacy and resilience, which was followed by a reanalysis, as illustrated in Figure (2).

As shown in Table 11 in appendix E, one path exists between the mediator variables, self-efficacy, and resilience. Adding this path is expected to reduce the Chi-Square value and improve the model's fit indices. As a result, a path between the mediator variables, self-efficacy, and resilience, was added based on the Modification Indices.

Additionally, based on the above, the first proposal, which involved removing the non-significant paths between variables, was adopted, as shown in Figure (2) below:

Figure 2

Fit Indices and Regression Coefficients for the Optimal Causal Model After Adjustment

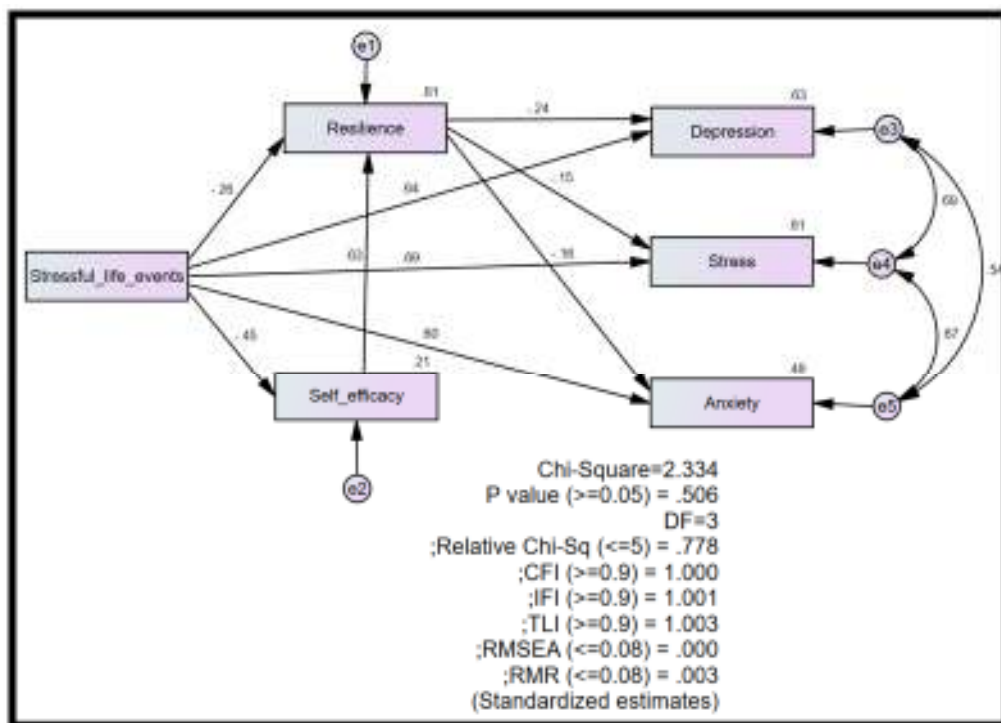


Figure (2) shows that all fit indices meet the acceptable thresholds. The values for the Comparative Fit Index (CFI), Incremental Fit Index (IFI), and Tucker-Lewis Index (TLI) were 1.000, 1.001, and 1.003, respectively, all of which exceed the threshold of $\geq .90$. Additionally, both the Root Mean Square Error of Approximation (RMSEA) and Root Mean Square Residual (RMR) met the criteria, with values of .000 and .003, respectively, both of which are below the threshold of $\leq .08$.

Moreover, the Chi-Square test was statistically non-significant with a p-value = .506, which is greater than the threshold of .05, indicating that the proposed theoretical model fits the sample data well. The Relative Chi-Square (χ^2/df) was also below the required threshold of ≤ 5 , with a value of .778, calculated by dividing the Chi-Square value by the degrees of freedom. Hence, all model fit indices were satisfied.

The regression coefficients for the causal paths, including standardized and unstandardized values and their statistical significance, were extracted for the optimal model after adjustment. Table 12 in Appendix E presents these results: all the regression coefficients for the paths were statistically significant.

Direct Effects, Indirect Effects, and Total Effects for Variables in the Optimal Model after Adjustment.

To examine the Direct, Indirect, and Total Effects between life stress events as the independent variable, self-efficacy and resilience as mediator variables, and the mental health outcomes (depression, stress, and anxiety) as dependent variables, the bootstrapping method was used. This method was employed to test these effects in the model.

It is worth noting that the bootstrapping method is considered one of the best approaches for testing mediation relationships, outperforming both the Baron and Kenny method and the Sobel test. Bootstrapping works by generating a large number of samples randomly drawn from the original sample with replacement. This method aims to improve the accuracy of the estimates by finding unbiased estimates from a set of biased estimates (Awang, 2012; Hayes, 2009).

Thus, the bootstrapping method was applied using AMOS software, with 5000 resamples and a 95% bias-corrected confidence interval to test mediation and estimate

the values of direct, indirect, and total effects, along with their statistical significance. Table 13 in appendix E presents the results:

1. Direct Effects

- A statistically significant negative direct effect exists between stressful life events and self-efficacy (-.307). This indicates that as stressful life events increase, self-efficacy decreases by -.307, showing an inverse relationship.
- Stressful life events also have a statistically significant negative direct effect on resilience (-.181), suggesting that an increase in stressful life events leads to reduced resilience.
- There are statistically significant positive direct effects of stressful life events on anxiety (.594), stress (.743), and depression (.663). These results indicate that as stressful life events increase, there is a corresponding increase in these mental health outcomes. Self-efficacy has a statistically significant positive direct effect on resilience (.660), suggesting that individuals with higher self-efficacy also demonstrate greater resilience.
- Resilience has statistically significant negative direct effects on anxiety (-.231), stress (-.228), and depression (-.363), indicating that higher resilience is associated with lower levels of anxiety, stress, and depression.

2. Indirect Effects

- Stressful life events have a statistically significant negative indirect effect on resilience (-.203) through self-efficacy as a mediator. This suggests that the impact of stressful life events on resilience is partly mediated by self-efficacy, highlighting a two-step process. In other words, stressful life events negatively influence self-efficacy, which in turn reduces resilience.
- In terms of mental health outcomes, stressful life events exert statistically significant and indirect effects on anxiety (.089), stress (.087), and depression (.139) through resilience as a mediator. This indicates that resilience serves as a protective factor, reducing the negative impact of stressful life events on these mental health outcomes.
- Additionally, self-efficacy has statistically significant negative indirect effects on anxiety (-.152), stress (-.151), and depression (-.239), mediated through resilience.

This suggests that enhancing self-efficacy can indirectly lower these mental health issues by strengthening resilience.

3. Total Effects

- The total effect of stressful life events on self-efficacy remains $-.307$, identical to the direct effect, as there are no mediators involved.
- The total effect of stressful life events on resilience is $-.383$, which includes both the direct effect ($-.181$) and the indirect effect ($-.203$) mediated through self-efficacy.
- The total effects of stressful life events on anxiety ($.682$), stress ($.831$), and depression ($.802$) are significantly positive, reflecting both the direct and indirect pathways through which stressful life events impact these mental health conditions.
- The total effect of self-efficacy on resilience is $.660$, confirming its direct positive influence on resilience.
- The total effects of self-efficacy on anxiety ($-.152$), stress ($-.151$), and depression ($-.239$) highlight its protective role, with resilience acting as a mediator.

3.2 Results of the second question

Question 2: Are there statistically significant differences in the means of stressful life events, mental health outcomes, resilience, and perceived self-efficacy among caregivers attributed to the variables of gender, age, and monthly income?

To address this question, the means and standard deviations were calculated for the responses of the study sample on the measures of stressful life events, mental health outcomes, resilience, and perceived self-efficacy. A Three-way ANOVA without interaction was conducted to examine differences in the variables of stressful life events, resilience, and perceived self-efficacy. Additionally, a Three-way MANOVA without interaction was employed to explore differences in mental health outcomes based on demographic variables, as follows:

First, differences in stressful life events by the variables of gender, age, and monthly income to examine the differences in stressful life events based on gender, age, and monthly income, the means and standard deviations were calculated for the responses of

the study sample on the stressful life events scale among caregivers according to the variables of gender, age, and monthly income. Table 14 in appendix E shows these results: observed differences in the means on the Stressful Life Events scale based on the study variables. To determine the significance of these differences in the means on the Stressful Life Events scale, a Three-way ANOVA without interaction was conducted. Table 15 in appendix E presents the results:

As shown in Table (15) in appendix E, there are no statistically significant differences at the alpha level of ($\alpha \leq .05$) in stressful life events based on the variables of gender, age, and monthly income. The results for gender, age, and monthly income were as follows, respectively: ($F(1,193) = .901, p = .344, \eta^2 = .005$), ($F(2,193) = 1.028, p = .360, \eta^2 = .011$), and ($F(2,193) = 1.205, p = .302, \eta^2 = .012$).

Second, differences in mental health outcomes by the variables of gender, age, and monthly income to explore the differences in mental health outcomes based on gender, age, and monthly income, the means and standard deviations were calculated for the responses of the study sample on the mental health outcomes scale among caregivers according to the variables of gender, age, and monthly income. Table 16 in appendix E shows these results: observed differences in the mean scores of the study sample on the mental health outcomes scale based on the distribution across demographic variables. To determine the significance of these differences in the means of the Mental Health Outcomes scale and its dimensions, a MANOVA "without Interaction" test was conducted. Before performing the analysis, its assumptions were verified by calculating Bartlett's Test of Sphericity, which yielded $\chi^2 = 2729.372$ with a statistically significant result ($p < .000$), indicating that this condition was met. Additionally, the Homogeneity of Covariance was verified using Levene's Test, with p-values greater than ($p > .05$), confirming that this assumption was satisfied. Table 17 in appendix E presents the results of the MANOVA test:

Table (17) shows that there are no statistically significant differences at the alpha level ($\alpha \leq .05$) in mental health outcomes based on the variables of gender, age, and monthly income. The results for the total score, based on gender, age, and monthly income, were as follows: ($F(1,193) = .487, p = .486, \eta^2 = .003$), ($F(2,193) = 1.702, p = .185, \eta^2 = .017$), and ($F(2,193) = 1.225, p = .296, \eta^2 = .013$).

Third, differences in resilience by the variables of gender, age, and monthly income to explore the differences in resilience based on gender, age, and monthly income, the means and standard deviations were calculated for the responses of the study sample on the resilience scale among caregivers according to the variables of gender, age, and monthly income. Table 18 in appendix E shows these results: observed differences in the means on the Resilience scale based on the distribution across the study variables. To determine the significance of these differences in the means for the Resilience scale, a Three-way ANOVA "without Interaction" was conducted. Table 19 in appendix E presents the results:

- There are no statistically significant differences at an alpha level of $\alpha = 0.05$ in Resilience based on gender and monthly income. The results were as follows, respectively: ($F(1,193) = .000, p = 0.995, \eta^2 = 0.000$), ($F(2,193) = 0.623, p = 0.537, \eta^2 = 0.006$).
- There are statistically significant differences at an alpha level of $\alpha = 0.05$ in Resilience based on age. The results were as follows: ($F(2,193) = 3.839, p = 0.023, \eta^2 = 0.038$).

To determine the location of differences between the mean scores on the Resilience scale among caregivers, attributed to the age variable, the Scheffe test was used. Table 20 in appendix E shows the results:

There are statistically significant differences at an alpha level of $\alpha = 0.05$ in the mean Resilience scores among caregivers due to the age variable, between the age groups of 23-33 and 45 years and above, with the differences favoring the 45 years and above group.

Fourth, differences in perceived self-efficacy by the variables of gender, age, and monthly income to explore the differences in perceived self-efficacy based on gender, age, and monthly income, the means and standard deviations were calculated for the responses of the study sample on the perceived self-efficacy scale among caregivers according to the variables of gender, age, and monthly income. Table 21 in appendix E shows these results: observed differences in the means on the Perceived Self-Efficacy scale based on the distribution across the study variables. To determine the significance of these differences in the means for the Perceived Self-Efficacy scale, a Three-way

ANOVA "without Interaction" was conducted. Table 22 in appendix E presents the results:

There are no statistically significant differences at an alpha level of $\alpha = 0.05$ in perceived self-efficacy based on the variables of gender, age, and monthly income. The results for gender, age, and monthly income were as follows, respectively: $(F(1,193) = 1.012, p = .316, \eta^2 = .005)$, $(F(2,193) = 1.134, p = .324, \eta^2$

Chapter Four

Discussions and Conclusions

This chapter should provide an explanation of the research topics and hypotheses. The limits, conclusions, and recommendations should be mentioned at the end of this section.

4.1 Discussion

Emphasizing resilience (agency) and perceived self-efficacy as mediating elements, this descriptive and correlational study sought to investigate how stressful life events affect mental health outcomes among healthcare workers in Palestine. The study aimed to provide a whole picture of the elements affecting mental health among this community by looking at demographic elements including gender, age, and income.

Particularly for sadness, stress, and anxiety among healthcare professionals, the results of the study expose a notable positive correlation between demanding life events and negative mental health outcomes. Stressful life events and these mental health disorders showed high correlation values: .775 for depression and stress, and .696 for anxiety, implying a substantial association between frequency and intensity of stress exposure and degrees of psychological discomfort. These results show that healthcare professionals who go through more frequent or severe stressful life events are probably going to report far higher degrees of anxiety, stress, and depressed feelings.

Table (7) shows statistically significant correlations between the studied variables ranging from -0.389 to 0.883, therefore stressing the strength of these links and the fit of the model for next investigation. Such strong correlation values—especially the noted 0.775 between stress and depression—not only confirm the validity of the suggested model but also underline the significance of addressing mental health in healthcare environments where stress is common. This close association emphasizes the great risk that chronic or repeated stress poses to healthcare professionals, whose jobs typically demand constant mental and physical resilience but give little time or means to relax or recover.

These findings fit the Transactional Model of Stress and Coping put forward by Lazarus & Folkman (1984), this offers a basic justification for these discoveries. According to

the paradigm, people evaluate environmental stresses and their accessible resources to manage rather than only reacting to a stimulus; stress is rather a dynamic process. Often under high-stress workplaces and emotionally taxing circumstances, healthcare professionals may feel more vulnerable to their mental health when they feel unprepared or under supported. Particularly with depression and anxiety, the substantial connections found in this study—especially 0.775 with depression and 0.696 with anxiety—reflect the idea of bad mental health effects resulting from people evaluating stress as either overwhelming or beyond their control. Lack of sufficient coping mechanisms for healthcare professionals under constant stress can lead to damaged mental health that over time may show up as anxiety, depression, or chronic stress.

Moreover, these findings coincide with current empirical research highlighting the mental health issues healthcare practitioners deal with. As such, Meng, Zhang, & Zan (2023) investigated frontline healthcare professionals in high-stress situations and discovered that anxiety and depressed symptoms were much raised by extended stressor exposure. This study emphasizes, in line with the mediation functions of resilience and self-efficacy, the presence of these psychological resources helps to offset the effect of stress on mental health outcomes. Emphasizing the need of resilience and self-efficacy as protective elements, the results of Zhang et al. (2023) confirm the conclusions of the present study. Healthcare professionals show better psychological results when they think they can efficiently handle obstacles (self-efficacy) and are resilient in the face of adversity. They also manage stress in a way that reduces its negative impacts on mental health.

Furthermore, a 2015 longitudinal study by Shoji & Cieslak (2015) looked at the total impacts of work-related stress among healthcare professionals and discovered that continuous exposure to emotionally charged events and traumatic events caused persistent anxiety and depressed symptoms. This result emphasizes the chronic character of mental health problems among healthcare professionals in high-stress professions in line with the strong correlation values of the present research. Research by Shoji et al. highlights the long-term effects of insufficient recuperation and support in hospital settings, therefore underlining the importance of treatments encouraging resilience and mental health throughout time.

These strong relationships also show the need of strategic mental health treatments catered to medical environments. Interventions should especially concentrate on raising resilience and self-efficacy of their shown function as mediators in the link between stress and mental health. Resilience—that is, the capacity to bounce back from or adjust favorably to difficulty—helps people reduce the psychological effects of stress. (Windle, 2011) emphasizes the need of resilience in highly sought-after fields since those who possess more resilience can keep psychological well-being in demanding surroundings. The results of this study confirm Windle's point of view: even in cases of extreme stress, healthcare professionals with higher degrees of resilience have better mental health results. Furthermore, emphasized by Bandura's (1997) Self-Efficacy Theory is the fact that those who feel they can control and face stress are more successful in coping, which results in better mental health effects. Strong self-efficacy indicates in this study substantial negative associations between self-efficacy and mental health outcomes (e.g., -0.485 with depression). This suggests that healthcare professionals with strong self-efficacy are better suited to manage stress, therefore reducing the chance of bad mental health impacts.

The results of this study expose numerous significant new directions on the impact of demographic variables—gender, age, and monthly income—on the experiences of caregivers linked to stressful life events, mental health outcomes, resilience, and perceived self-efficacy. Though age does seem to play a role in resilience, overall the data imply that these demographic factors have no appreciable effect on the degrees of stress, mental health problems, or self-efficacy among caregivers. These results complement the more general body of research on caregiving, which frequently emphasizes, regardless of personal background, the universally demanding character of this responsibility. Theoretical approaches on stress, resilience, and self-efficacy provide a framework for evaluating these data and help one to understand why some demographic variables may or may not greatly affect these dimensions in caregivers.

In terms of stressful life events, the lack of significant gender, age, or income-based differences reinforces the notion that caregiving-related stress is a pervasive experience. Caregiving literature frequently emphasizes that the nature of caregiving work inherently involves high-stress levels, often due to the emotional and physical demands of providing care, limited respite opportunities, and the unpredictability of the

caregiving role (Pearlin & Skaff, 1990). Pearlin et al. propose the Stress Process Model, which holds that, independent of personal demographic factors, the cumulative effects of caregiving responsibilities often result in stress since the difficulties experienced by caregivers are often strongly ingrained in the caregiving environment itself rather than in external personal characteristics. This result is in line with earlier studies implying that rather than demographic traits of the caregiver, stress levels in caregiving are more significantly influenced by elements including caregiver burden, frequency of caregiving tasks, and the degree of the condition of the care recipient (Pinquart & Sörensen, 2003).

The results of mental health outcomes similarly show no appreciable variations depending on income, age, or gender. This constancy across demographic factors indicates that, independent of age or wealth, male and female caregivers are equally susceptible to mental health problems including stress, anxiety, and depression. These results coincide with research emphasizing the universally difficult nature of providing mental health care (Schulz & Sherwood, 2008). Emphasizing the need of situational assessment and coping tools instead of demographic determinants, the Transactional Model of Stress and Coping by Lazarus and Folkman (1984) helps to explain this universality. This paradigm holds that the great demands placed on caregivers and their frequently limited resources for successful coping cause harmful mental health effects from caregiving stresses. The severe demands of caregiving that exceed the possible moderating effects of personal traits like age or money may explain the lack of notable demographic variations in mental health outcomes in this study.

The noted notable age-related variations in resilience—older caregivers show more resilience than younger ones—fit studies indicating that resilience frequently rises with age. This could be the result of accumulating life experience, which helps to provide more emotional stability and adaptive coping mechanisms in response to demands of care (Diehl & Hay, 2010). The Socioemotional Selectivity Theory (SST) by theoretical perspective by Carstensen (1992) implies that elderly people may have more sophisticated coping mechanisms to manage stress and give emotional significant events top priority. Older caregivers show more resilience, which may be explained by this prioritizing and expertise in handling life events. Moreover, resilience is sometimes connected with psychological and personal development, which could accompany

experience and aging. The results of this study match other studies showing that, compared to younger caregivers who could lack these developed skills, older caregivers may be more suited to adjust to the caring position because of their more refined emotional control ability (van Kessel, 2013).

Regarding perceived self-efficacy, this study shows no appreciable demographic variations, implying that caregivers from different backgrounds have comparable degrees of confidence in their capacity for caring. Bandura's (1997) theory of self-efficacy offers a theoretical framework for comprehending this result since it holds that personal mastery events rather than demographic elements define self-efficacy most of all. Self-efficacy may be more strongly associated for caregivers with training, exposure, and direct care experiences than with natural demographic traits. Studies have also indicated that, when they acquire successful caregiving techniques and see their competency in handling caregiving responsibilities, many caregivers find that the challenges of the role over time help them develop strong sense of self-efficacy (Schwarzer & Knoll, 2007). These results imply that self-efficacy could be a universal quality of the caregiving experience that transcends demographic variations and rather molded by personal experiences inside the caregiving role itself.

Taken together, these findings highlight the complex and generally demanding nature of caregiving as well as the fact that self-efficacy, mental health issues, and caregiver stress seem to cut across demographic lines. Although resilience rises with age, gender or money seems to have no bearing on other facets of the caring experience. The lack of notable demographic variations for stressful life events, mental health outcomes, and self-efficacy indicates that the demands of the caring position may be so great that they affect caregivers in a basically uniform manner, independent of personal history. Designing caregiver support programs that meet stress and mental health requirements across the caregiving population as a whole depends on this result in great relevance. Moreover, improving resilience-building tools could help especially for younger caregivers. Future studies should investigate the possible moderating influences of variables such social support, coping strategies, and access to mental health resources, so clarifying elements that help caregivers to be resilient, self-efficacious, and well-off.

4.2 Recommendations

These results lead the researcher to advise the following steps to handle mental health issues and improve resilience and self-efficacy among medical professionals:

- Medical facilities should provide mental health support systems to assist in the reduction of symptoms connected to stress, anxiety, and depression resulting from regular demanding life situations. Supporting the general well-being of healthcare professionals, these initiatives can comprise easily available counseling services, stress management seminars, and "decompression zones" for mental rest and relaxation.
- Resilience is a protective quality against stress; hence institutions should provide training in adaptive coping mechanisms especially for younger medical professionals who could have less resilience levels. Emotional control strategies, mindfulness, and work-life balance tools might all be part of this training, thereby arming caregivers to handle demanding situations.
- • Healthcare professionals should have frequent chances for skill development in order to encourage self-efficacy. Mastery events include mentoring, role-playing, and skill development help caregivers develop confidence, therefore enhancing their ability to control stress and handle difficult circumstances.
- • Caregiver support programs should be comprehensive and globally applicable since demographic elements revealed little effect on stress levels, mental health, and self-efficacy. Offering mental health services, flexible scheduling, and peer support groups guarantees that these tools are available to caregivers from many backgrounds.
- Understanding that resilience usually rises with age, age-specific interventions help to meet the different requirements of caregivers. While senior caregivers may practice advanced resilience techniques targeted on managing long-term stresses, younger caregivers could gain from basic resilience training.
- Research on moderating elements in relation to resilience and self-efficacy including social support, coping strategies, and access to mental health resources should be further. This study could offer vital new perspectives for creating more focused and successful treatments for medical professionals.

4.3 Suggestion

Future directions of research: enlarging the model of inquiry.

This research highlights the need to explore additional moderating factors such as social support, workplace culture, and access to mental health services. Future studies could:

- Track how resilience and self-efficacy change across time under ongoing stress by use of longitudinal studies.
- Look at how different healthcare professionals cope depending on their gender.
- Examine the effectiveness of mental health policies across different healthcare institutions and their impact on workforce well-being.

List of Abbreviations

Abbreviation	Meaning
CBT	Cognitive behavioral therapy
CHD	coronary heart disease
DHS	Daily Hassles Scale
GAS	General Adaptation Syndrome
HCPs	Health care providers
HPA	Hypothalamic-pituitary-adrenal
SCT	Social Cognitive Theory
SDT	Self-Determination Theory
SES	Socioeconomic status
SRRS	Social Readjustment Rating Scale
ZPD	Zone of Proximal Development

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Appendices

Appendix A

Questioners

Stressful Life Events Questioner

التدريج			الفقرة	الرقم
لا ينطبق علي بتاتا	ينطبق علي بعض الشيء أو قليلاً من الأوقات.	ينطبق علي بدرجة ملحوظة أو بعض الأوقات.		
			أشعر أن مزاجي معكر وكأني على حافة الهاوية	1
			أواجه صعوبات في النوم	2
			أعاني من نوبات غضب	3
			أحاول ابعاد الخبرات المؤلمة عن تفكيري	4
			أنفعل واغضب بسهولة	5
			فقدت الاهتمام بأنشطة كانت ممتعة بالنسبة لي	6
			اتجنب مواقف واشياء معينة تذكرني بخبرات مؤلمة مررت بها	7
			اشعر وكان الخبرات التي مررت بها لم تحدث وكأني لا اصدق حدوثها	8
			أشعر وكان الخبرات المؤلمة التي مررت بها تجتاح تفكيري	9
			اعاني من صعوبات في الانتباه والتركيز	10
			أشعر كما لو أنني متأهب وغير قادر على الاسترخاء	11
			أواجه صعوبة في تذكر اجزاء من الخبرات المؤلمة التي مررت بها	12
			أجد صعوبة في البقاء نائماً	13

				أشعر وكأني منعزل عن الآخرين	14
				أشعر وكأني مشاعري وانفعالي أصبحت متجمدة	15
				أتجنب التفكير والحديث عن الخبرات المؤلمة التي مررت بها	16
				تردد الى ذهني صور وتخيلات حول الخبرات التي مررت بها	17
				اشعر كما واني فقدت السيطرة على نفسي	18
				أشعر كما لو ان الخبرات المؤلمة التي حدثت معي كما لو انها تحدث الآن	19
				تذكر الخبرات المؤلمة التي مررت بها يتسبب بشعوري بضيق تنفس وزيادة في دقات القلب وتعرق والام في البطن	20
				اشعر كما لو ان نهايتي أصبحت قريبة في هذه الحياة	21
				اشعر كما لو أنني لا أستطيع تبادل المشاعر الايجابية مع هؤلاء القريبين مني	22
				أعاني من احلام مزعجة	23
				أشعر كما لو أنني اعايش الان تلك الخبرات المؤلمة التي مررت بها	24
				لدي مشاعر سلبية مرتبطة بالخبرات التي مررت بها	25
				احاول منع نفسي من الحزن عن التفكير بتلك الخبرات التي مررت بها	26
				اشعر وكأني لم أعد مهتم بأي شيء في هذه الحياة	27

Appendix B

Depression Anxiety and Stress Scale 21 (DASS-21)

الرقم	الفقرة	التدرج		
		لا ينطبق علي بتاتاً	ينطبق علي بعض الشيء أو قليلاً من الأوقات.	ينطبق علي بدرجة ملحوظة أو بعض الأوقات.
1	كان لدي صعوبة في الشعور بالراحة			
2	شعرت بجفاف في حلقي			
3	لم يكن بإمكانني الإحساس بمشاعر إيجابية			
4	شعرت بصعوبة في التنفس على الرغم من عدم قيامي بمجهود جسدي			
5	وجدت صعوبة في المبادرة للقيام بالأعمال			
6	قمت بردود فعل مبالغ بها تجاه المواقف المختلفة			
7	شعرت برجفة (باليدين مثلاً)			
8	شعرت بتوتر عصبي شديد			
9	كنت أخشى من التعرض لمواقف قد أشعر فيها بالذعر مما يسبب لي إحراجاً			
10	شعرت بأنني فقدت طموحي			
11	شعرت بأنني مضطرب ومنزعج			
12	وجدت صعوبة في الاسترخاء			
13	كان يبتابني الحزن والهم			
14	لم أستطع تحمل أي شيء يمنعني من القيام بما أريد به			
15	شعرت بالخوف والذعر			
16	فقدت حماسي لعمل أي شيء			
17	شعرت أنني شخص غير فعال			
18	شعرت بالحساسية الزائدة			
19	كنت أشعر بنبضات قلبي على الرغم من			

				أنني لم أكن أقوم بمجهود جسدي (زيادة في معدل النبض)	
				كنت أشعر بالخوف دون وجود سبب واضح	20
				شعرت بأن الحياة ليس لها معنى	21

Appendix C

Resilience Scale

ابدا	نادرا	أحيانا	غالبا	دائما	البنود	
					أستطيع تحقيق أهدافي رغم وجود العقبات	1
					أعتقد بأن لحياتي معنى أعيش لأجله	2
					لدي قيم ومبادئ اهتم بها وأحافظ عليها	3
					أشارك في أي نشاط يخدم المجتمع الذي أعيش فيه	4
					ألقي اللوم على الآخرين فيما يحدث لي	5
					أهتم بما يجري حولي من قضايا وأحداث	6
					الحياة بكل ما فيها تستحق أن نحيها	7
					أشعر بالمسؤولية اتجاه الآخرين وأبادر لمساعدتهم	8
					أشارك بقضايا العامة	9
					لدي القدرة على تحمل المسؤولية اتجاه أي حدث	10
					يعتمد نجاحي في حياتي (عمل ودراسة و.....الخ) على مجهودي وليس على الحظ	11
					أعتقد أن الفشل يعود الى أسباب تكمن في الشخص نفسه	12
					أستطيع التحكم في مجرى أمور حياتي	14
					أستطيع اختيار القرار المناسب لموقف ما دون تردد	15
					أعتقد أن تأثيري ضعيف على الأحداث التي تقع لي	16
					أتعلم من أخطاء الماضي	17
					أفضل طرق حل المشكلات هي اهمالها	18
					أعتقد أن متعة الحياة وإثارتها تكمن في قدرة الفرد على مواجهة تحدياتها	19
					أنظر إلى متاعب الحياة على أنها فرصة تقيد مواجهتها في تطوري الشخصي	20
					أشعر أنني قادر على حل أي مشكلة تواجهني	21
					لدي القدرة على المثابرة حتى أنتهي من حل أي مشكلة تواجهني	22
					تستنزف المشكلات قواي وقدرتي على التحدي	23
					أعتقد أن مواجهة المشكلات اختبار لقوة تحملي وقدرتي على المثابرة	24
					أعتقد أن الحياة التي لا تتطوي على تغيير، هي حياة مملّة وروتينية	25

					أخاف من تغييرات الحياة، فكل تغيير قد ينطوي على تهديد لي ولحياتي	26
					أشعر بالخوف من مواجهة أي مشكلات	27
					أشعر أنني متقل بالأمور التي تحدث في حياتي	28

Appendix D

Self-Efficacy Scale

لا تنطبق تماماً	لا تنطبق تماماً	لا تنطبق الى حدّ ما	ينطبق الى حدّ ما	ينطبق تماماً	البنود	
					يمكنني دائماً التمكن من حل المشاكل الصعبة إذا بذلت جهداً كافياً	1
					عندما يقف شخص ما في تحقيق ما أسعى إليه، فأني قادر على إيجاد الطرق والوسائل المناسبة لتحقيق ما أريد	2
					من السهل بالنسبة لي الالتزام بأهدافي وتحقيقها	3
					أنا واثق بقدرتي على التعامل بكفاءة مع الأحداث غير المتوقعة	4
					بفضل قدرتي على التصرف بحكمة، أعرف كيفية التعامل مع المواقف غير المتوقعة.	5
					عندما أواجه مشكلة، غالباً ما أكون قادراً على إيجاد عدة حلول ممكنة	6
					باستثمار الجهد اللازم، يمكنني حل معظم المشاكل	7
					أستطيع البقاء هادئاً عند مواجهة الصعوبات لأنني أثق في قدرتي على التكيف والتأقلم	8
					إذا وُضعت في موقف صعب، فعادةً ما أكون قادراً على التفكير في شيء ما للقيام به	9
					بغض النظر عن الصعوبات التي تواجهني، عادةً ما أستطيع التعامل معها	10

Appendix E

Tables

Table 11

Modification Indices

	M.I.	Par Change
Resilience Self-efficacy -->	69.772	.501

Table 12

Regression Coefficients for Causal Paths: Standardized and Unstandardized Values, and Statistical Significance for the Optimal Model After Adjustment

path			Regression Weights		S.E.	C.R.	p-value
			Standardized	Unstandardized			
Stressful life events	-->	Self-efficacy	-.455	-.307	.043	-7.184	.000
Stressful life events	-->	Resilience	-.257	-.181	.035	-5.171	.000
Self-efficacy	-->	Resilience	.632	.660	.052	12.739	.000
Resilience	-->	Depression	-.245	-.363	.076	-4.766	.000
Stressful life events	-->	Depression	.635	.663	.054	12.365	.000
Stressful life events	-->	Stress	.691	.743	.057	13.102	.000
Stressful life events	-->	Anxiety	.596	.594	.060	9.819	.000
Resilience	-->	Stress	-.149	-.228	.081	-2.834	.005
Resilience	-->	Anxiety	-.163	-.231	.086	-2.691	.007

Table 13

Mediation Test Values for Direct, Indirect, and Total Effects and Their Statistical Significance in the Optimal Model After Adjustment

Effects		Stressful life events	Self-efficacy	Resilience
Direct Effects	Self-efficacy	-.307*	.000	.000
	Resilience	-.181*	.660*	.000
	Anxiety	.594*	.000	-.231*
	Stress	.743*	.000	-.228*
	Depression	.663*	.000	-.363*
Indirect Effects	Self-efficacy	.000	.000	.000
	Resilience	-.203*	.000	.000
	Anxiety	.089*	-.152*	.000
	Stress	.087*	-.151*	.000
	Depression	.139*	-.239*	.000
Total Effects	Self-efficacy	-.307*	.000	.000
	Resilience	-.383*	.660*	.000
	Anxiety	.682*	-.152*	-.231*
	Stress	.831*	-.151*	-.228*
	Depression	.802*	-.239*	-.363*

Note. * p <.05

Table 14

Means and Standard Deviations of the Study Sample Responses on the Stressful Life Events Scale by Gender, Age, and Monthly Income.

Variables	Categories	Stressful life events	
		M	SD
Gender	Male	2.76	.845
	Female	2.68	.704
Age	23-33	2.75	.712
	44-34	2.80	.793
	and above45	2.53	.918
Monthly income	Less than 2000 shekels	2.86	.669
	Between 2000-4000 shekels	2.78	.690
	More than 4000 shekels	2.63	.863

Table 15

Three-way ANOVA (without Interaction) for the Stressful Life Events Scale among the Study Sample based on Gender, Age, and Monthly Income

Source	Type III Sum of Squares	df	Mean Square	F	p-value	η^2
Gender	.538	1	.538	.901	.344	.005
Age	1.229	2	.615	1.028	.360	.011
Monthly income	1.440	2	.720	1.205	.302	.012
Error	115.334	193	.598			

Table 16

Means and Standard Deviations of the Study Sample Responses on the mental health outcomes Scale by Gender, Age, and Monthly Income

	Categories	Statistics	Depression	Stress	Anxiety	Total score
Gender	Male	M	1.13	1.24	.89	1.09
		SD	.820	.830	.769	.764
	Female	M	1.19	1.34	1.05	1.19
		SD	.800	.837	.771	.758
Age	23-33	M	1.19	1.35	1.01	1.19
		SD	.806	.836	.777	.754
	44-34	M	1.23	1.38	1.05	1.22
		SD	.752	.785	.785	.746
	45 and above	M	.98	1.03	.76	.92
		SD	.871	.843	.723	.777
Monthly income	Less than 2000 shekels	M	1.39	1.45	1.14	1.33
		SD	.698	.749	.678	.608
	Between 2000-4000 shekels	M	1.23	1.34	1.07	1.21
		SD	.789	.808	.810	.767
	More than 4000 shekels	M	1.05	1.21	.85	1.04
		SD	.840	.874	.748	.782

Table 17

Three-way MANOVA (without Interaction) for the Mental Health Outcomes Scale among the Study Sample based on Gender, Age, and Monthly Income.

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	p-value	η^2
Gender	Depression	.010	1	.010	.016	.901	.000
	Stress	.399	1	.399	.581	.447	.003
	Anxiety	.734	1	.734	1.255	.264	.006
	Total score	.278	1	.278	.487	.486	.003
Age	Depression	1.229	2	.614	.947	.390	.010
	Stress	3.190	2	1.595	2.322	.101	.023
	Anxiety	1.687	2	.843	1.442	.239	.015
	Total score	1.942	2	.971	1.702	.185	.017
Monthly income	Depression	2.294	2	1.147	1.768	.173	.018
	Stress	.691	2	.346	.503	.606	.005
	Anxiety	1.610	2	.805	1.377	.255	.014
	Total score	1.397	2	.699	1.225	.296	.013
Error	Depression	125.200	193	.649			
	Stress	132.589	193	.687			
	Anxiety	112.862	193	.585			
	Total score	110.109	193	.571			

Table 18

Means and Standard Deviations of the Study Sample Responses on the Resilience Scale by Gender, Age, and Monthly Income

Variables	Categories	Resilience	
		M	SD
Gender	Male	2.74	.581
	Female	2.73	.513
Age	23-33	2.64	.540
	44-34	2.83	.473
	and above45	2.91	.588
Monthly income	Less than 2000 shekels	2.65	.534
	Between 2000-4000 shekels	2.69	.541
	More than 4000 shekels	2.80	.551

Table 19

Three-way ANOVA (without Interaction) for the Resilience Scale among the Study Sample based on Gender, Age, and Monthly Income

Source	Type III Sum of Squares	df	Mean Square	F	p-value	η^2
Gender	.000	1	.000	.000	.995	.000
Age	2.224	2	1.112	3.839	.023*	.038
Monthly income	.361	2	.180	.623	.537	.006
Error	55.892	193	.290			

Note. * p < .05

Table 20

Results of the Scheffe test for post-hoc comparisons between the mean scores on the Resilience scale among caregivers attributed to the age variable.

Dependent variable	Categories	Means	23-33	44-34	45and above
Resilience	23-33	2.64			.27-*
	44-34	2.83			
	45and above	2.91			

Note. * p < .05

Table 21

Means and Standard Deviations of the Study Sample Responses on the Perceived Self-Efficacy Scale by Gender, Age, and Monthly Income

Variables	Categories	Perceived Self-Efficacy	
		M	SD
Gender	Male	3.24	.564
	Female	3.15	.480
Age	23-33	3.14	.558
	44-34	3.28	.474
	and above45	3.23	.452
Monthly income	Less than 2000 shekels	3.09	.569
	Between 2000-4000 shekels	3.18	.478
	More than 4000 shekels	3.23	.548

Table 22

Three-way ANOVA (without Interaction) for the Perceived Self-Efficacy Scale among the Study Sample based on Gender, Age, and Monthly Income

Source	Type III Sum of Squares	df	Mean Square	F	p-value	η^2
Gender	.277	1	.277	1.012	.316	.005
Age	.621	2	.310	1.134	.324	.012
Monthly income	.195	2	.098	.356	.701	.004
Error	52.805	193	.274			



جامعة النجاح الوطنية
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الرعاية: الدور الوسيطي للصلابة النفسية والكفاءة الذاتية المدركة

إعداد

ياسمين كمال لطفي إغبارية

إشراف

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قدمت هذه الرسالة استكمالاً لمتطلبات الحصول على درجة الماجستير في علم النفس الاكلينيكي،
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أحداث الحياة الضاغطة وعلاقتها بمخرجات الصحة النفسية لدى مقدمي الرعاية: الدور الوسيطي للصلابة النفسية والكفاءة الذاتية المدركة

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الملخص

هدفت هذه الدراسة الوصفية الارتباطية إلى استقصاء كيفية تأثير الأحداث الحياتية الضاغطة في المخرجات الصحية النفسية لدى مقدمي الرعاية الصحية في فلسطين، مع التركيز على الصلابة النفسية (Agency) والكفاءة الذاتية المدركة بصفتهما عاملين وسيطين في هذه العلاقة. كما سعت أيضاً إلى فهم أشمل للعوامل المؤثرة في الصحة النفسية من خلال دراسة متغيرات ديموغرافية شملت النوع الاجتماعي والعمر والدخل الشهري. تكوّنت عينة الدراسة من 200 من مقدمي الرعاية الصحية الفلسطينيين العاملين في المستشفيات (96 رجلاً و104 نساء)، وجمعت البيانات عبر زيارات ميدانية للمستشفيات وتوزيع الاستبيانات على الكوادر الصحية، إضافةً إلى طرح الاستبانة إلكترونياً.

أظهرت النتائج وجود علاقة ارتباطية موجبة وذات دلالة إحصائية بين الأحداث الحياتية الضاغطة والاضطرابات النفسية لدى مقدمي الرعاية الصحية، بما في ذلك الاكتئاب والقلق والضغط النفسي. وبلغت قيمة الارتباط 775 لكل من الاكتئاب والضغط النفسي، و696 للقلق، ما يشير إلى أن تزايد شدة أو تكرار تلك الأحداث يرتبط بارتفاع واضح في مستويات هذه الاضطرابات. كما تبين من المعاملات الإحصائية أن هناك ارتباطات دالة تراوحت بين -389 و883، ما يعكس قوة العلاقات الارتباطية في النموذج المقترح ويؤكد الحاجة إلى الاهتمام بالصحة النفسية في بيئات العمل ذات الإجهاد المرتفع.

وقد ظهر دور الفاعلية والكفاءة الذاتية المدركة بوصفهما متغيرين وسيطين أسهما في التخفيف من الأثر السلبي للأحداث الحياتية الضاغطة على الصحة النفسية، إذ كشفت النتائج عن ارتباط سلبي ملموس بين الكفاءة الذاتية والمخرجات النفسية السلبية (مثل -485 مع الاكتئاب).

أوضحت النتائج أيضاً عدم وجود فروق ذات دلالة إحصائية في الأحداث الحياتية الضاغطة أو المخرجات النفسية أو الكفاءة الذاتية تبعاً للنوع الاجتماعي أو الدخل الشهري، فيما ظهرت فروق دالة للعمر في مستويات الصلابة النفسية، حيث ازدادت لدى مقدمي الرعاية الصحية الأكبر سناً، وهو ما قد يُعزى إلى تراكم الخبرة وتطوير مهارات التأقلم الانفعالي مع مرور الوقت. ويدعم ذلك ما أشارت إليه نظريات مثل التوجه الاجتماعي العاطفي (Socioemotional Selectivity Theory)، التي ترى أن الأفراد الأكبر سناً يميلون إلى التركيز على خبراتهم الوجدانية وإدارة الضغوط بشكل أكثر فعالية.

إن ارتباط الأحداث الحياتية الضاغطة بالصحة النفسية يتوافق مع نموذج التعامل مع الضغوط النفسية (Transactional Model of Stress and Coping) للباحثين Lazarus و Folkman، حيث يؤدي تقييم الأفراد لمواردهم ولمدى استعدادهم دوراً مفصلياً في تحديد استجاباتهم للضغوط. وتتسق هذه النتيجة مع دراسات سابقة (مثل Zhang et al., 2023 و Shoji et al., 2021) التي أوضحت أن تعزيز الصلابة النفسية والكفاءة الذاتية يمنح العاملين في القطاع الصحي قدرة أكبر على التكيف مع ظروف العمل ذات الطبيعة الضاغطة، ويسهم في الحد من تطور القلق والاكتئاب على المدى الطويل.

خلصت الدراسة إلى أن الأحداث الحياتية الضاغطة ترتبط بشدة بالمخرجات النفسية السلبية لدى مقدمي الرعاية الصحية في فلسطين، في حين تؤدي الفاعلية والكفاءة الذاتية المدركة دوراً محورياً في الحد من التأثيرات السلبية لهذه الأحداث على الصحة النفسية. وتدعم هذه النتائج تصميم برامج تدخلية تستهدف بناء الصلابة النفسية وتعزيز الكفاءة الذاتية لدى العاملين في المستشفيات، خاصة الأصغر سناً والأقل خبرة، بما ينعكس إيجاباً على صحتهم النفسية وقدرتهم على تقديم رعاية أفضل للمرضى.

الكلمات المفتاحية: الأحداث الحياتية الضاغطة؛ المخرجات النفسية؛ الفاعلية (Agency)؛ الكفاءة الذاتية (Self-Efficacy)؛ فلسطين.