

TITLE PAGE

**MODERATING ROLE OF RESILIENCE IN THE RELATIONSHIP BETWEEN
PERCEIVED STRESS AND PSYCHOLOGICAL WELL-BEING AMONG RENAL
PATIENTS**

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**A PROJECT REPORT SUBMITTED TO
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BACHELOR OF SCIENCE (B. Sc.) HONOURS DEGREE IN PSYCHOLOGY**

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CERTIFICATION

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APPROVAL PAGE

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DEDICATION

This research work is dedicated to God Almighty.

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ABSTRACT

This study examined the moderating role of resilience in the relationship between perceived stress and psychological well-being among renal patients in Enugu metropolis. A correlational cross-sectional research design was adopted, and data were collected from 104 patients undergoing treatment in selected hospitals. The participants comprised 78(75%) males and 26(25%) females. Standardized instruments, including the Perceived Stress Scale (PSS-10), Brief Resilience Scale (BRS-6), and Ryff's Psychological Well-Being Scale, were used for data collection. Data were analyzed using Pearson correlation, hierarchical regression, and Hayes PROCESS macro. Perceived stress was significantly related to psychological well-being, showing negative associations with resilience ($r = -.40$, $p < .01$), positive relations ($r = -.35$), self-acceptance ($r = -.36$), and autonomy ($r = -.17$). Resilience was significantly and positively related to psychological well-being, including positive relations ($r = .44$, $p < .001$), autonomy ($r = .27$, $p < .01$), environmental mastery ($r = .25$, $p < .01$), and self-acceptance ($r = .26$, $p < .01$). However, resilience did not significantly moderate the relationship between perceived stress and psychological well-being, as the interaction terms were not significant ($p > .05$) across the tested models. The study concludes that perceived stress acts as a risk factor, while resilience functions as a direct protective factor rather than a buffering variable among renal patients. It is recommended that psychological interventions targeting stress reduction and resilience enhancement be integrated into renal care to improve patients' psychological well-being.

CHAPTER ONE

Introduction

Background to the Study

The increasing prevalence of chronic illnesses has shifted healthcare attention beyond physical treatment outcomes to include the psychological functioning of patients. Among these conditions, chronic kidney disease represents one of the most demanding due to its progressive nature, long-term treatment requirements, and dependence on continuous medical interventions such as dialysis or transplant of the kidney (Chen et al., 2023). These demands expose patients to persistent physical strain, emotional burden, and social limitations, making psychological well-being a critical aspect of overall health among renal patients.

Psychological well-being is a central concept in understanding how individuals function and adapt to life challenges, particularly in the context of chronic illness. It has been defined as the extent to which individuals experience positive emotional states, life satisfaction, and a sense of fulfillment in their daily lives (Ryff, 1989). This perspective emphasizes the subjective evaluation of one's life and overall happiness. In a more comprehensive sense, psychological well-being refers to optimal psychological functioning and the realization of one's potential, rather than merely the absence of mental illness (Onyedibe & Ugwu, 2021). According to Ryff (1989; 2014), psychological well-being is a multidimensional construct that captures how individuals perceive themselves, manage their environment, and find meaning in life. This definition expands the concept beyond emotional experiences to include cognitive evaluations, personal growth, and social functioning. These definitions highlight that psychological well-being is both subjective and functional, involving how individuals feel about their lives as well as how effectively they operate

within them. In the context of renal patients, this dual perspective is particularly important, as individuals are required not only to manage emotional distress but also to adapt to the practical and psychological demands of chronic illness. He is being attributed for the most widely accepted framework for understanding psychological well-being is the multidimensional model, which conceptualizes well-being as comprising six core dimensions. These dimensions reflect different aspects of positive psychological functioning and provide a comprehensive basis for examining mental health beyond the absence of distress.

The first dimension, self-acceptance, refers to an individual's ability to maintain a positive attitude towards oneself, including acceptance of both strengths and weaknesses as well as past life experiences. It involves a realistic awareness of personal limitations without excessive self-criticism or denial. In the context of renal patients, self-acceptance is particularly critical, as individuals must come to terms with a chronic condition that may alter their physical abilities, social roles, and sense of identity (Ryff, 1989). Patients who develop self-acceptance are more likely to adjust psychologically to their condition, whereas those who struggle with acceptance may experience feelings of frustration, shame, or hopelessness.

The second dimension, autonomy, describes the capacity for self-determination and independence in thought and behavior. It reflects the ability to regulate one's actions based on personal values rather than external pressures. Among renal patients, autonomy is often challenged due to dependence on medical procedures such as dialysis, adherence to strict treatment routines, and reliance on healthcare providers or caregivers. Despite these limitations, maintaining a sense of autonomy is essential for preserving personal dignity and psychological stability. Patients who retain a degree of independence in decision-making tend to experience better psychological

outcomes compared to those who feel controlled or restricted by their condition (Deci & Ryan, 1985).

The third dimension, environmental mastery, refers to the ability to effectively manage one's environment and utilize available resources to meet personal needs and goals. It involves a sense of competence in handling everyday responsibilities and adapting to changing circumstances. For renal patients, environmental mastery includes the ability to organize daily life around treatment schedules, manage dietary restrictions, attend medical appointments, and navigate healthcare systems (Chen et al., 2023). Individuals with high environmental mastery are more likely to feel in control of their situation, whereas those with low mastery may feel overwhelmed by the demands of their condition.

The fourth dimension, positive relationships with others, emphasizes the importance of forming and maintaining warm, trusting, and supportive interpersonal relationships. This includes the capacity for empathy, intimacy, and mutual care. In chronic illness contexts, social relationships become a vital source of emotional and practical support. Renal patients often depend on family members, friends, and healthcare professionals for assistance and encouragement (Almutary & Bonner, 2020). Strong social connections help reduce feelings of isolation and psychological distress, while weak or strained relationships may increase vulnerability to stress and negatively affect well-being.

The fifth dimension, purpose in life, refers to having a sense of direction, meaningful goals, and a belief that life has value and significance. It reflects the extent to which individuals perceive their lives as purposeful rather than empty or aimless. Chronic kidney disease may threaten this dimension, particularly when patients experience uncertainty about their future or limitations in

achieving long-term goals (Ryff, 1989). However, individuals who are able to maintain a sense of purpose through personal aspirations, family responsibilities, or spiritual beliefs are more likely to demonstrate emotional resilience and maintain psychological stability despite their condition.

The final dimension, personal growth, reflects a sense of continuous development and the realization of one's potential. It involves openness to new experiences, self-improvement, and the ability to grow psychologically over time. Among renal patients, personal growth may be expressed through the development of new coping strategies, increased emotional strength, and a re-evaluation of life priorities (Ehrler et al., 2025). Patients who experience personal growth are more likely to adapt positively to their condition, whereas those who feel stagnant may experience reduced motivation and diminished psychological well-being.

Collectively, these six dimensions demonstrate that psychological well-being is a multidimensional construct encompassing emotional, cognitive, and social functioning. It reflects not only how individuals feel but also how they think, relate to others, and find meaning in life. In the context of renal patients, psychological well-being plays a crucial role in shaping adjustment to chronic illness, influencing treatment adherence, emotional stability, and overall quality of life (Kalfoss et al., 2019; Chen et al., 2023). As such, understanding psychological well-being within this multidimensional framework provides a strong foundation for examining the psychological experiences of individuals living with chronic kidney disease. However, the level of psychological well-being experienced by individuals is not static; rather, it is significantly influenced by various psychological and environmental factors, among which perceived stress is particularly prominent. Chronic illness conditions such as kidney disease expose individuals to persistent stressors, including treatment demands, financial burden, and uncertainty about health outcomes. These

stressors shape how individuals evaluate and respond to their experiences, thereby affecting their overall psychological functioning.

Perceived stress, therefore, becomes a central psychological factor in understanding how individuals respond to such challenging life conditions. It refers to the degree to which individuals evaluate situations in their lives as unpredictable, uncontrollable, and overwhelming (Cohen et al., 1983). Unlike objective stress, which focuses on external events, perceived stress is subjective and depends on how individuals interpret and respond to those events. This means that individuals exposed to similar circumstances may experience different levels of stress depending on their cognitive appraisal and coping capacity (Lazarus & Folkman, 1984). Stress is generally categorized into two broad types: eustress and distress. Eustress refers to positive or beneficial stress that motivates individuals and enhances performance, while distress refers to negative stress that overwhelms an individual's coping ability and leads to adverse psychological outcomes (Selye, 1956). In the context of chronic illness, particularly among renal patients, stress is predominantly experienced as distress due to the persistent and demanding nature of the condition. The continuous need for medical care, lifestyle adjustments, and uncertainty about health outcomes makes it difficult for patients to perceive stress as beneficial (Mariotti, 2015). Perceived stress manifests through a range of symptoms that affect individuals physically, emotionally, cognitively, and behaviorally. Physically, individuals may experience fatigue, sleep disturbances, headaches, and general body weakness. Among renal patients, these symptoms may be intensified by the physiological effects of the illness and treatment procedures such as dialysis. Emotionally, perceived stress is associated with feelings of anxiety, depression, frustration, irritability, and hopelessness (Yaribeygi et al., 2017; Mariotti, 2015). These emotional responses are common among patients dealing with long-term health conditions and can significantly affect their mental

stability. From a cognitive perspective, stress may lead to difficulty concentrating, negative thinking patterns, excessive worry, and a sense of helplessness. Renal patients may constantly worry about disease progression, treatment outcomes, and financial implications, which reinforces their perception of stress (McEwen & Akil, 2020). Behaviorally, stress may result in withdrawal from social activities, reduced motivation, poor adherence to treatment, and unhealthy coping behaviors. These behavioral responses further complicate health outcomes and reduce overall functioning (McEwen & Akil, 2020).

The impact of perceived stress on psychological well-being is well established in psychological and health research. According to the transactional model of stress and coping (Lazarus & Folkman, 1984), stress occurs when individuals perceive that environmental demands exceed their available coping resources. This imbalance leads to emotional strain and reduced psychological functioning. High levels of perceived stress are consistently associated with negative psychological outcomes such as anxiety, depression, reduced life satisfaction, and poor emotional regulation (Chen et al., 2023; Chen et al., 2023). Among renal patients, perceived stress plays a particularly significant role due to the chronic and demanding nature of the illness. Studies have shown that increased perceived stress among renal patients is linked to poor psychological adjustment, reduced treatment adherence, and lower quality of life (Chen et al., 2023; Chen et al., 2023). Patients who perceive their condition as overwhelming are more likely to experience emotional distress and reduced psychological well-being.

Several factors determine how individuals perceive and experience stress and one major determinant is illness-related factors, including disease severity, duration of illness, and complexity of treatment. Renal patients undergoing frequent dialysis or experiencing complications are more likely to perceive higher levels of stress. Another important determinant

is financial burden. The cost of treatment, medication, and transportation creates economic pressure that significantly contributes to stress perception, especially in contexts where healthcare costs are high (Almutary & Bonner, 2020). Social support also plays a critical role in shaping perceived stress. Individuals with strong support systems from family, friends, and healthcare providers are better able to cope with stress and are less likely to perceive situations as overwhelming. In contrast, lack of support increases vulnerability to stress and psychological distress. Coping strategies further influence stress perception. Individuals who adopt adaptive coping mechanisms, such as problem-solving and emotional regulation, tend to experience lower perceived stress, while those who rely on maladaptive strategies are more likely to feel overwhelmed (Smith et al., 2020).

Additionally, personal psychological resources such as emotional stability, optimism, and self-efficacy play a significant role in shaping how individuals interpret and respond to stress. Individuals with strong internal resources are more likely to perceive stressful situations as manageable challenges, whereas those with limited resources tend to view them as threatening and uncontrollable. These differences help explain why individuals facing similar health conditions, such as chronic kidney disease, may experience varying levels of perceived stress and psychological strain (Bandura, 1997). Importantly, these variations in stress perception highlight the role of deeper adaptive capacities that enable individuals to effectively manage stress and maintain psychological functioning. One such capacity is resilience, which serves as a critical psychological mechanism through which individuals regulate their responses to stress. In this sense, resilience does not operate independently of stress but rather influences how stress is appraised, experienced, and managed, ultimately shaping psychological well-being outcomes.

Resilience has therefore emerged as a central construct in understanding how individuals cope with stress and maintain well-being under adverse conditions. It refers to the capacity of individuals to adapt positively, recover from difficulties, and maintain psychological stability in the face of stress, adversity, or trauma (Southwick et al., 2014). Rather than being a fixed personality trait, resilience is widely regarded as a dynamic and multifaceted process that evolves over time through the interaction of personal characteristics and environmental influences (Fletcher & Sarkar, 2013).

From a broader perspective, resilience encompasses a set of cognitive, emotional, and behavioral processes that enable individuals to withstand stress and continue functioning effectively despite ongoing challenges. This perspective is particularly relevant in the context of chronic illness, where individuals are exposed to prolonged and repeated stressors. Among renal patients, resilience reflects the ability to manage treatment demands, adjust to lifestyle changes, and maintain emotional balance despite the continuous burden of the disease. Resilience is often conceptualized through key components that explain how individuals develop and sustain adaptive functioning. The Resilience in Youth and Life (RIYL) framework identifies six core principles: self-awareness, self-regulation, optimism, mental agility, strengths of character, and connection (Southwick et al., 2014; Southwick et al., 2014). Self-awareness involves recognizing and understanding one's emotional responses to stressful situations, while self-regulation refers to the ability to manage and control these emotional reactions to maintain psychological stability.

Optimism reflects a positive outlook and the expectation that challenges can be managed successfully, which helps reduce the intensity of stress perception. Mental agility involves flexible thinking and the ability to adapt to changing circumstances, a quality that is essential for individuals managing chronic conditions. Strengths of character, such as perseverance and

discipline, support sustained effort in the face of adversity, while connection emphasizes the importance of social relationships and support systems in coping with stress. In the context of renal patients, these components are particularly important due to the chronic and demanding nature of kidney disease. Patients are required to adapt continuously to treatment routines, dietary restrictions, and physical limitations. Individuals who demonstrate strong self-regulation and optimism are more likely to manage emotional distress effectively, while mental agility enables them to adjust to changing health conditions. Social connection provides emotional and practical support, which is essential for coping with the long-term challenges associated with renal disease.

Resilience has significant implications for psychological well-being. Individuals with high resilience are better able to regulate their emotions, maintain a positive outlook, and engage in adaptive coping strategies. As a result, they experience lower levels of psychological distress and higher levels of life satisfaction and emotional stability (Smith et al., 2020; Chen et al., 2023). Among renal patients, resilience has been associated with improved psychological adjustment, better treatment adherence, and enhanced quality of life. In contrast, individuals with low resilience are more vulnerable to the negative effects of stress. They are more likely to experience emotional instability, adopt maladaptive coping strategies, and perceive situations as overwhelming. This increases the likelihood of anxiety, depression, and reduced psychological well-being. In chronic illness contexts, low resilience can significantly impair an individual's ability to adapt to treatment demands and maintain functional well-being (Chen et al., 2023).

Several factors influence the development and expression of resilience. One important determinant is emotional regulation, which refers to the ability to manage emotional responses in stressful situations. Individuals with strong emotional regulation are less likely to experience overwhelming

distress and are better able to maintain psychological balance. Among renal patients, effective emotional regulation reduces anxiety and improves adjustment to treatment (Chen et al., 2023).

Another key determinant is coping strategy. Adaptive coping strategies, such as problem-solving and positive reframing, enhance resilience by enabling individuals to manage stress effectively. In contrast, maladaptive coping strategies, such as avoidance or denial, weaken resilience and increase vulnerability to stress (Smith et al., 2020). Optimism also plays a crucial role in resilience. Individuals with a positive outlook are more likely to expect favorable outcomes and remain hopeful even in difficult situations. This reduces perceived stress and supports emotional stability (Carver et al., 2010). Similarly, social support contributes significantly to resilience by providing emotional comfort, practical assistance, and a sense of belonging. Renal patients with strong support networks are better able to cope with the demands of their condition.

Self-efficacy, or the belief in one's ability to manage situations effectively, is another important factor influencing resilience (Bandura, 1997). Patients with high self-efficacy are more confident in handling treatment demands and are less likely to perceive situations as uncontrollable. This strengthens resilience and enhances psychological well-being. The role of resilience becomes particularly important when examining its relationship with perceived stress and psychological well-being. While perceived stress has a direct negative effect on psychological well-being, resilience acts as a protective factor that reduces this impact. Individuals with high resilience are more likely to interpret stressful situations as manageable rather than overwhelming, which lowers the intensity of perceived stress and its negative consequences (Chen et al., 2023).

This protective function introduces the concept of moderation. A moderating variable influences the strength or direction of the relationship between two variables (Baron & Kenny, 1986). In this

study, resilience functions as a moderator in the relationship between perceived stress and psychological well-being. This means that the effect of perceived stress on psychological well-being depends on the level of resilience. When resilience is high, the negative impact of perceived stress on psychological well-being is weakened. Individuals are better able to regulate emotions, adopt effective coping strategies, and maintain a positive outlook despite stress. As a result, they experience better psychological outcomes even in the presence of significant stressors. In contrast, when resilience is low, perceived stress exerts a stronger negative influence, leading to increased emotional distress and reduced psychological well-being.

This moderating role can be explained through several mechanisms. First, cognitive appraisal plays a key role. Resilient individuals are more likely to interpret stressors as challenges rather than threats, which reduces the intensity of stress perception (Fletcher & Sarkar, 2013). Second, emotional stability enables individuals to maintain balance and avoid extreme emotional reactions under stress. Third, behavioral adaptation allows individuals to engage in health-promoting behaviors, adhere to treatment plans, and seek support when needed. Through these mechanisms, resilience operates at cognitive, emotional, and behavioral levels to reduce the negative effects of stress and enhance psychological well-being (Fletcher & Sarkar, 2013). In the context of renal patients, this interaction is particularly important because it explains why individuals exposed to similar levels of stress experience different psychological outcomes.

The interaction between perceived stress, resilience, and psychological well-being represents a dynamic process that shapes the overall mental health outcomes of individuals living with chronic illness (Denovan & Macaskill, 2020). While perceived stress reflects how individuals evaluate and respond to the demands of their condition, psychological well-being captures their level of positive functioning and adjustment. However, the relationship between these variables is not uniform

across individuals, as internal psychological resources such as resilience significantly influence how stress is experienced and managed (Chen et al., 2023). In the context of renal patients, this interaction becomes particularly important due to the chronic and demanding nature of kidney disease. Patients are required to undergo continuous treatment, often in the form of dialysis, adhere to strict dietary and medical regimens, and cope with uncertainty regarding disease progression and survival (Chen et al., 2023). These conditions create a persistent source of stress that can negatively affect emotional stability and overall psychological functioning. Beyond the physical burden of the illness, renal patients also face significant socioeconomic challenges. The high cost of treatment, especially in developing healthcare systems, places considerable financial strain on patients and their families. In many cases, access to consistent and adequate treatment is limited, further increasing uncertainty and psychological distress (Almutary & Bonner, 2020).

Additionally, the frequent need for hospital visits and dependence on caregivers may reduce patients' sense of autonomy and limit their participation in normal social and occupational activities. These challenges highlight the importance of understanding not only the direct effect of perceived stress on psychological well-being but also the role of resilience as a protective factor. Patients with higher resilience are more likely to interpret stressors as manageable, maintain emotional balance, and engage in adaptive coping strategies. This reduces the negative impact of stress and supports better psychological outcomes (Smith et al., 2020; Chen et al., 2023; Bonanno, 2021). Conversely, patients with lower resilience are more vulnerable to stress and are more likely to experience emotional distress and reduced psychological well-being.

Therefore, examining the interplay between perceived stress, resilience, and psychological well-being provides a more comprehensive understanding of the psychological experiences of renal patients. It moves beyond simple cause-and-effect relationships and emphasizes the importance of

internal psychological resources in shaping health outcomes. This understanding is essential for developing effective interventions aimed at improving the mental health and quality of life of individuals living with chronic kidney disease.

Statement of the Problem

Despite advances in medical care, renal patients continue to experience significant psychological challenges that negatively affect their well-being (Chen et al., 2023). The chronic nature of kidney disease, coupled with demanding treatment routines such as dialysis, strict lifestyle adjustments, and uncertainty about health outcomes, exposes patients to persistent stress. This stress often results in emotional distress, reduced life satisfaction, and poor psychological functioning (Mariotti, 2015; Mariotti, 2015). However, not all renal patients experience the same level of psychological difficulty despite being exposed to similar stressors, while some individuals report high levels of anxiety, depression, and poor adjustment, others maintain emotional stability and continue to function effectively (Chen et al., 2023). This variation suggests that factors beyond perceived stress alone influence psychological well-being. One such factor is resilience, which reflects the ability to adapt positively and recover from stress (Bonanno, 2021; Bonanno, 2021). Although previous studies have established a relationship between perceived stress and psychological well-being, limited attention has been given to how resilience influences this relationship, particularly among renal patients. As a result, it remains unclear why individuals with similar stress levels experience different psychological outcomes. This gap highlights the need to examine the moderating role of resilience in the relationship between perceived stress and psychological well-being (Alshraifeen et al., 2024; Chen et al., 2023). Understanding this interaction is essential for identifying psychological mechanisms that can improve mental health outcomes and support effective intervention strategies among renal patients. This study therefore

seeks to examine the moderating role of resilience in the relationship between perceived stress and psychological well-being among renal patients, with the aim of providing answers to the following questions;

1. Will perceived stress significantly relate with psychological well-being among renal patients?
2. Will resilience significantly relate with psychological well-being among renal patients?
3. Will resilience significantly moderate the relationship between perceived stress and psychological well-being (Autonomy, Environmental Mastery, Personal Growth, Positive Relationship with Others, Purpose in Life, Self-acceptance)?

Purpose of the Study

The purpose of this study is to investigate the moderating role of resilience on perceived stress and psychological well-being. Specifically, the study aims to;

1. Examine the relationship between perceived stress and psychological well-being among renal patients
2. Ascertain the relationship between resilience and psychological well-being among renal patients
3. Determine whether resilience will moderate the relationship between perceived stress and psychological well-being (Autonomy, Environmental Mastery, Personal Growth, Positive Relationship with Others, Purpose in Life, Self-acceptance) among renal patients.

Operational Definition of Key Study Variables

Perceived Stress: Perceived Stress is the Degree to which Individuals Perceive their life Situations as Stressful as Measured by Scores on the 10-item Perceived Stress Scale (Cohen et al., 1983)

Psychological Well-being: Refers to a Multidimensional Construct Reflecting the Human Capacity to Grow, Adapt, and Evolve as Measured by Scores on the 20-item Psychological Well-Being Scale (Ryff, 1989).

Resilience: This is a Construct Composed of Several Traits that reflect on the Ability of an Individual to Bounce back from Adversity, Trauma, or Significant Stress as Measured by Scores on the 6-item Brief Resilience Scale (Smith et al., 2008).

Conceptual Framework

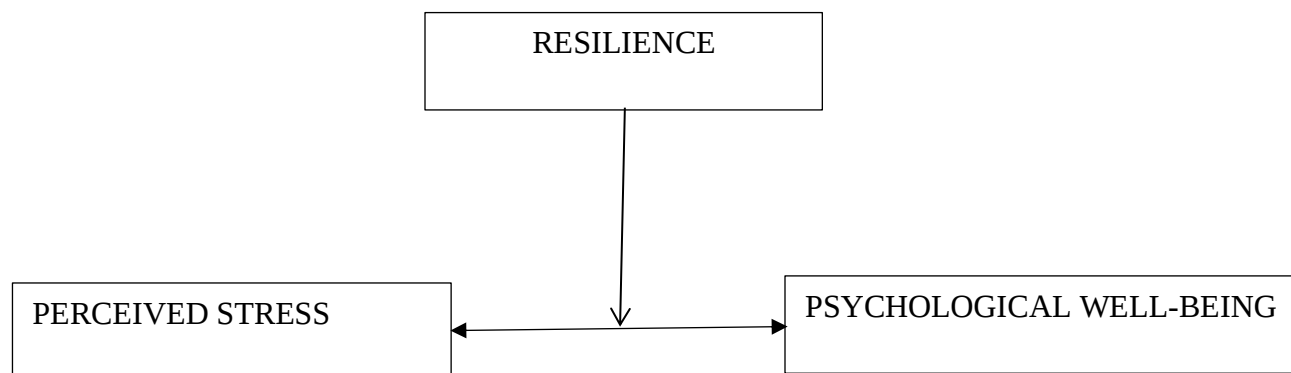


Figure 1. This diagram depicts the moderating role of resilience in the relationship between perceived stress and psychological well-being among renal patients.

CHAPTER TWO

Review of Relevant Literature

The review of literature is examined from two perspectives, theoretical and empirical reviews.

Theoretical Review

Perceived Stress Theories

- Transactional Model of Stress and Coping (Lazarus & Folkman, 1984).
- General Adaptation Syndrome (Selye, 1956).
- Conservation of Resources Theory (Hobfoll, 1989).

Resilience Theories

- Resilience Theory (Masten, 2001).
- Protective Factor Model (Rutter, 1987).
- Stress-Buffering Model (Cohen & Wills, 1985).

Psychological Well-Being Theories

- Psychological Well-Being Theory (Ryff, 1989).
- Self-Determination Theory (Deci & Ryan, 1985).
- PERMA Model of Well-Being (Seligman, 2018).

Transactional Model of Stress and Coping

Lazarus and Folkman's (1984) Transactional Model of Stress and Coping provides the most widely used framework for understanding psychological stress. The theory explained stress as a dynamic process between individuals and their environment rather than a simple stimulus-response reaction. It is grounded in the idea that stress depends on how individuals evaluate and respond to life events. The theory is built on key assumptions that explain how stress develops and influences psychological outcomes:

1. **Cognitive Appraisal:** The model proposes that stress depends on cognitive evaluation, which occurs in two stages. Primary appraisal involves assessing whether an event is threatening, harmful, or challenging. Secondary appraisal involves evaluating available coping resources and options. Among renal patients, this process determines whether dialysis and illness-related demands are perceived as manageable or overwhelming (Lazarus & Folkman, 1984).
2. **Subjective Nature of Stress:** The theory emphasizes that stress is not determined by the event itself but by individual perception. Two patients with similar medical conditions may experience different stress levels depending on their coping ability, emotional stability, and support systems (Lazarus & Folkman, 1984). This explains differences in perceived stress among renal patients.
3. **Coping Strategies:** The model identifies coping as the key response to stress and is divided into problem-focused coping, which targets the stressor, and emotion-focused coping, which regulates emotional responses. Patients who adopt adaptive coping strategies are more likely to maintain psychological well-being despite illness-related stress (Chen et al., 2023).

The theory is important to this study because it explains how perceived stress is formed and how it influences psychological well-being among renal patients. However, it does not fully explain why some individuals remain psychologically stable despite high stress levels, which introduces the relevance of resilience.

General Adaptation Syndrome

The General Adaptation Syndrome developed by Selye (1956) explains the biological response of the body to prolonged exposure to stress. The theory suggests that stress follows a predictable

pattern across three stages: alarm, resistance, and exhaustion. In the alarm stage, the body reacts immediately to a stressor by activating physiological defenses. For renal patients, this may occur at diagnosis or during the initiation of dialysis treatment, where shock and emotional distress are common.

The resistance stage follows, where the body attempts to adapt to ongoing stress. During this stage, renal patients adjust to treatment routines, dietary restrictions, and lifestyle changes. Although individuals may appear to cope, internal stress remains active.

The exhaustion stage occurs when the body can no longer maintain adaptation due to prolonged stress exposure. This stage is associated with emotional breakdown, fatigue, depression, and reduced psychological well-being (McEwen et al., 2020). Among renal patients, this may occur when treatment demands become overwhelming without adequate coping resources.

The theory is useful in explaining the physiological consequences of long-term stress. However, it focuses more on biological processes and gives limited attention to psychological and social factors influencing stress perception.

Conservation of Resources Theory

Hobfoll's (1989) conservation of resources theory explains stress in terms of resource loss and protection. The theory assumes that individuals strive to obtain, retain, and protect resources that are valuable to their survival and well-being. Resources include physical health, energy, social support, financial stability, and psychological strength. Stress occurs when there is actual resource loss, threat of loss, or failure to gain expected resources (Westman et al., 2021). Among renal patients in Nigeria, resource loss is a central issue. Chronic kidney disease leads to loss of physical

strength, financial strain due to treatment costs, reduced work capacity, and limited social participation (Almutary & Bonner, 2020). These losses increase perceived stress and reduce psychological well-being.

The theory also assumes that individuals with greater resources are more capable of coping with stress, while those with fewer resources are more vulnerable to psychological distress. This explains differences in stress response among renal patients. Although the theory provides a strong explanation of stress accumulation, it does not fully address individual psychological interpretation of stress, which makes it less complete without cognitive appraisal theories.

Resilience Theories

Resilience Theory, as proposed by Masten (2001), explains resilience as a dynamic process of positive adaptation despite significant adversity. The theory challenges earlier perspectives that viewed resilience as a rare or extraordinary trait, instead presenting it as a common human capacity that emerges from ordinary adaptive systems. These systems include cognitive functioning, emotional regulation, biological processes, and environmental support structures.

The theory is grounded on several key assumptions:

Normal Developmental Systems: Masten (2001) assumes that resilience arises from normal developmental processes rather than exceptional abilities. Individuals develop resilience through everyday interactions with family, school, peers, and broader social environments. Among renal patients, this means that resilience is shaped through continuous interaction with healthcare systems, caregivers, and personal coping experiences.

Adaptation to Adversity: The theory emphasizes that resilience reflects successful adaptation in the presence of significant risk or adversity. In the context of renal patients, adversity includes

chronic illness, dialysis treatment, physical limitations, and emotional distress. Despite these challenges, some individuals maintain stable psychological functioning due to adaptive processes.

Interaction of Internal and External Systems: Masten (2001) explains that resilience results from the interaction between internal psychological strengths and external environmental resources. Internal factors include emotional regulation, optimism, and coping skills, while external factors include social support, healthcare access, and family stability. These combined systems determine how effectively individuals manage stress.

The theory further explains that resilience is not static but changes over time depending on exposure to stress and availability of protective resources. Among renal patients, resilience may increase through continuous adaptation to treatment routines or decrease when stress becomes overwhelming without adequate support.

Although the theory provides a strong developmental explanation of resilience, it does not explicitly explain how resilience interacts with stress perception and psychological outcomes, which limits its application in moderating models.

Protective Factor Model

The Protective Factor Model developed by Rutter (1987) explains resilience as the outcome of interactions between risk factors and protective factors. The theory assumes that resilience is not the absence of risk but the ability of protective mechanisms to reduce the negative effects of risk exposure.

The model is based on the following assumptions:

Presence of Risk and Protection: Rutter (1987) assumes that individuals are constantly exposed to risk factors such as illness, poverty, or psychological stress. However, protective factors such as strong social support, effective coping skills, and positive self-beliefs reduce the impact of these risks. Among renal patients, chronic illness serves as a major risk factor, while family support and emotional strength act as protective factors.

Buffering Effect of Protective Factors: The theory posits that protective factors do not eliminate stress but buffer its effects. This means that even when renal patients experience high perceived stress, strong protective factors reduce the severity of psychological distress and improve adjustment outcomes.

Interactional Nature of Resilience: Rutter emphasizes that resilience emerges from the interaction between multiple factors rather than a single cause. This includes biological, psychological, and social influences working together to determine outcomes. Among renal patients, resilience depends on how these factors combine to influence stress response and mental health.

The model highlights that individuals with stronger protective systems are more likely to maintain psychological well-being despite exposure to chronic stress. However, it does not provide a detailed explanation of internal cognitive processes involved in resilience development.

Stress-Buffering Model

The Stress-Buffering Model developed by Cohen and Wills (1985) explains how psychological and social resources reduce the negative impact of stress on health outcomes. The model is widely

used in health psychology to explain how individuals maintain well-being under stressful conditions.

The model is based on several key assumptions:

Direct and Indirect Effects of Stress: The theory proposes that stress has a direct negative effect on psychological well-being. However, this effect can be weakened or moderated by the presence of buffering resources such as resilience, coping skills, and social support. Among renal patients, perceived stress from treatment and illness directly affects mental health outcomes.

Buffering Role of Psychological Resources: The model explains that resilience acts as a buffer that reduces the strength of the relationship between stress and psychological distress. Patients with high resilience are less affected by stress because they interpret stressful situations more positively and manage emotional responses more effectively (Bonanno, 2021).

Conditional Impact of Social and Personal Resources: The theory assumes that the protective effect of resilience becomes more visible under high-stress conditions. When stress levels are low, differences in resilience may have less impact on psychological outcomes. However, under high stress, resilience becomes a critical determinant of mental health.

Among renal patients, this model explains why some individuals maintain psychological well-being despite severe treatment demands, while others experience emotional breakdown under similar conditions. The strength of this model lies in its clear explanation of moderation effects between stress and psychological outcomes. However, it focuses more on buffering mechanisms and less on how resilience is developed or strengthened over time.

Psychological Well-Being Theories

Ryff's (1989) psychological well-being theory provides a multidimensional framework for understanding positive psychological functioning. The theory moves beyond the absence of mental illness and focuses on optimal functioning and life satisfaction. It identifies six core dimensions: self-acceptance, autonomy, environmental mastery, positive relationships, purpose in life, and personal growth. The theory is grounded on the assumption that psychological well-being is achieved when individuals function effectively across these six dimensions. Self-acceptance involves having a positive evaluation of oneself and one's life experiences. Among renal patients, this reflects acceptance of chronic illness and treatment demands without excessive self-blame or denial.

According to Ryff (1989), Autonomy refers to the ability to make independent decisions and regulate behavior based on personal values rather than external pressure. In the context of renal patients, autonomy may be reduced due to dependence on medical treatment and caregiver support. Environmental mastery reflects the ability to manage life situations and demands effectively. Renal patients with high environmental mastery are better able to adapt to treatment schedules, lifestyle changes, and hospital routines. Positive relationships involve maintaining warm, trusting, and supportive social connections. For renal patients, strong relationships with family, caregivers, and healthcare providers contribute to emotional stability and reduced stress. Purpose in life refers to having meaningful goals and direction. Chronic illness may challenge this dimension, especially when patients struggle with uncertainty about future health outcomes. Personal growth involves continuous development and self-improvement despite challenges. Renal patients who maintain personal growth often find meaning in their experiences and develop stronger coping abilities.

The theory is relevant to this study because it explains psychological well-being as a multidimensional construct affected by stress and resilience. However, it does not fully explain the role of stress perception, which limits its ability to capture stress-related dynamics among renal patients.

Self-Determination Theory

Deci and Ryan's (1985) Self-Determination Theory explains psychological well-being based on the fulfillment of three basic psychological needs: autonomy, competence, and relatedness.

Autonomy refers to the need to feel in control of one's actions and decisions. Among renal patients, autonomy is often challenged due to dependence on medical procedures such as dialysis and strict treatment schedules. Competence refers to the need to feel effective in managing tasks and challenges. Chronic illness may reduce perceived competence, especially when patients experience physical limitations or treatment fatigue. Relatedness refers to the need for meaningful social connections. Renal patients may experience social withdrawal or reduced participation in activities, which can weaken this psychological need.

The theory assumes that when these three needs are satisfied, individuals experience higher psychological well-being. When they are frustrated, psychological distress increases (Chen et al., 2023). In renal patients, stress related to illness often undermines these needs, leading to reduced well-being. The strength of the theory lies in its focus on motivation and psychological needs. However, it does not fully account for external stressors such as medical burden and financial constraints.

PERMA Model of Psychological Well-Being

Seligman's (2018) PERMA Model provides a comprehensive framework for understanding well-being through five elements: positive emotions, engagement, relationships, meaning, and accomplishment. Positive emotions involve experiencing joy, hope, and satisfaction. Among renal patients, positive emotions may be limited due to ongoing treatment challenges. Engagement refers to being fully involved in meaningful activities. Chronic illness may reduce engagement due to physical fatigue and treatment schedules. Relationships involve social connections that provide emotional and practical support. Strong relationships improve psychological well-being among renal patients. Meaning refers to having a sense of purpose in life. Patients who find meaning in their illness experience often report better psychological adjustment. Accomplishment involves achieving goals and experiencing success. For renal patients, accomplishment may include managing treatment effectively or maintaining stable health conditions.

The PERMA model is important because it connects psychological well-being to practical life experiences. However, it may not fully capture the negative impact of chronic illness-related stress.

Theoretical Framework

This study is anchored on the psychological well-being theory developed by Ryff (1989). The theory provides a comprehensive framework for understanding positive psychological functioning beyond the absence of mental illness. It conceptualizes psychological well-being as a multidimensional construct that reflects individuals' ability to function effectively, maintain meaningful relationships, and achieve personal growth despite life challenges. This makes the theory highly relevant for examining psychological well-being among renal patients, who are required to continuously adapt to the physical, emotional, and social demands of chronic illness.

The theory is based on several key assumptions. Psychological well-being is not a single construct but a combination of six core dimensions: These dimensions represent different aspects of optimal psychological functioning including renal patients. For example, environmental mastery may be reduced due to difficulties in managing treatment routines, while autonomy may be limited by reliance on healthcare systems. The theory emphasizes that psychological well-being is influenced by individuals' ability to adapt to life circumstances. Renal patients must cope with repeated medical procedures, physical discomfort, and emotional strain. Their ability to maintain psychological well-being depends on how effectively they adapt to these conditions. The theory highlights the role of personal growth and purpose in sustaining psychological well-being. Individuals who perceive their lives as meaningful and continue to develop psychologically despite adversity are more likely to maintain high levels of psychological well-being. In the context of renal patients, maintaining a sense of purpose—such as family responsibilities, personal goals, or spiritual beliefs, can enhance resilience and support psychological adjustment.

Within the framework of this study, perceived stress represents a key factor that can disrupt resilience and psychological well-being. High levels of perceived stress, arising from treatment demands, financial burden, and uncertainty about disease progression, can negatively affect all six dimensions of well-being. For instance, excessive stress may reduce environmental mastery by making daily activities feel overwhelming, weaken positive relationships through social withdrawal, and diminish purpose in life due to feelings of hopelessness (Chen et al., 2023; Chen et al., 2023). Conversely, lower levels of perceived stress are associated with better emotional stability, improved functioning, and higher psychological well-being (Chen et al., 2023).

Resilience is integrated into this theoretical framework as a critical psychological resource that supports the maintenance of psychological well-being. It influences how individuals adapt to stress

and maintain functioning across the six dimensions of psychological well-being. Resilience enhances individual's capacity for self-acceptance, strengthens their ability to manage environmental demands, and supports the development of positive relationships and a sense of purpose (Connor & Davidson, 2003; Fletcher & Sarkar, 2013).

The theory further supports the moderating role of resilience in the relationship between perceived stress and psychological well-being. The effect of perceived stress on psychological well-being varies depending on the level of resilience. When resilience is high, individuals are better able to maintain functioning across the six dimensions of well-being despite experiencing stress. However, when resilience is low, stress has a stronger negative impact, leading to reduced emotional stability, impaired functioning, and lower overall well-being (Smith et al., 2020; Fletcher & Sarkar, 2013).

Therefore, the psychological well-being theory provides a strong foundation for this study by explaining how individuals maintain positive functioning across multiple dimensions despite exposure to stress. It highlights the importance of adaptation, personal growth, and psychological resources such as resilience in shaping mental health outcomes. The theory also supports the examination of perceived stress as a disruptive factor and resilience as a moderating variable in the relationship between stress and psychological well-being among renal patients.

Empirical Review

The review of relevant empirical studies is organized under two sub-headings:

1. Perceived stress and psychological well-being
2. Resilience and psychological well-being

Perceived Stress and Psychological Well-Being

A systematic review by Cruz and Pereira (2026) examined interventions aimed at improving psychosocial well-being among women exposed to gender-based violence. The study adopted a systematic review design following PRISMA guidelines and analyzed 13 studies involving 1,813 participants. The findings revealed that psychosocial interventions such as mindfulness, counseling, and expressive therapies significantly reduced stress, anxiety, depression, and post-traumatic stress symptoms while improving resilience, self-esteem, and overall psychological well-being. Importantly, the study demonstrated that reductions in perceived stress were directly associated with improvements in psychological well-being outcomes, reinforcing the role of stress as a key determinant of mental health.

A study by Laradhi et al. (2025) examined psychological well-being and treatment adherence among patients undergoing hemodialysis. The study adopted a quantitative research design using standardized psychological assessment tools to measure psychological well-being, anxiety, and depressive symptoms among participants. The sample consisted of patients receiving regular dialysis treatment in a clinical setting, making the findings particularly relevant to chronic kidney disease populations. The results revealed that a substantial proportion of the patients experienced moderate to high levels of psychological distress, which significantly affected their psychological well-being. Patients with elevated stress levels reported reduced emotional stability, difficulty adjusting to treatment routines, and diminished life satisfaction. The study further demonstrated that poor psychological well-being was significantly associated with lower levels of treatment adherence, indicating that psychological distress can negatively influence patients' ability to follow medical recommendations.

Fuertes et al. (2025) investigated the role of psychological stress in influencing quality of life among patients with chronic kidney disease. The study employed a cross-sectional design involving 112 patients receiving treatment in a hospital setting. Data were collected using structured questionnaires assessing psychological distress, social support, and quality of life indicators. The findings indicated a significant negative relationship between psychological stress and quality of life, with higher stress levels predicting poorer psychological well-being outcomes. Specifically, patients experiencing high stress reported lower levels of emotional well-being, reduced satisfaction with life, and increased difficulty coping with the demands of their illness. The study also revealed that psychological stress negatively affected treatment satisfaction and adherence, suggesting that stress extends beyond emotional distress to influence patients' engagement with healthcare. These findings highlight the impact of perceived stress on both psychological and functional outcomes. The authors emphasized that effective stress management strategies are essential for improving overall well-being and enhancing treatment outcomes among renal patients.

Qader and Rimawi (2024) examined perceived stress among patients undergoing dialysis using a survey research design. The study involved 112 renal patients and assessed stress levels in relation to demographic variables such as age, gender, and social support. The findings revealed that perceived stress levels were generally high among patients, reflecting the demanding nature of chronic kidney disease and its treatment processes. Significant variations were observed across demographic groups, with younger patients and those with limited social support reporting higher levels of stress. This suggests that both personal and social factors play a role in shaping stress perception. Importantly, the study highlighted that elevated perceived stress contributes to emotional strain, anxiety, and reduced psychological functioning. Patients experiencing higher

stress levels were more likely to report feelings of helplessness and reduced ability to cope effectively with their condition. The authors concluded that perceived stress is a major psychological burden among dialysis patients and recommended the implementation of stress reduction interventions to improve psychological well-being.

Kodali et al. (2024) explored the relationship between perceived stress and health outcomes among patients undergoing hemodialysis. The study utilized a clinical observational design and assessed perceived stress alongside sleep quality and general health indicators. The findings showed that higher levels of perceived stress were significantly associated with poor sleep quality, increased fatigue, and heightened psychological distress. These factors collectively contributed to reduced psychological well-being and impaired daily functioning. The study further demonstrated that patients experiencing high stress levels were less likely to maintain emotional balance and more likely to experience symptoms of anxiety and depression. This highlights the indirect pathways through which stress affects well-being, particularly through its impact on physical health and daily functioning. The authors concluded that perceived stress is a critical determinant of both physical and psychological outcomes, reinforcing the need for comprehensive care approaches that address both medical and psychological needs of renal patients.

Cukor et al. (2024) investigated psychological distress and perceived stress among patients with chronic kidney disease. The study used a clinical survey design involving patients at different stages of renal failure. Data were collected using validated scales assessing perceived stress, depression, anxiety, and mental health status. The results showed that perceived stress is strongly associated with poor psychological well-being. Patients reporting higher stress levels experienced greater emotional distress, reduced coping ability, and impaired social functioning. The study further revealed that uncertainty about disease progression and fear of mortality were major

contributors to elevated stress levels. The authors concluded that psychological interventions targeting stress reduction are essential for improving mental health outcomes in renal patients.

Zyoud et al. (2024) examined stress and psychological outcomes among patients with chronic kidney disease. The study used a hospital-based cross-sectional design involving renal patients undergoing different treatment modalities. Standardized questionnaires were used to assess perceived stress, anxiety, depression, and quality of life. The findings revealed a significant negative relationship between perceived stress and psychological well-being. Patients with higher stress levels experienced poorer emotional health, reduced life satisfaction, and higher levels of anxiety and depression. The study further showed that lack of social support and financial constraints intensified stress levels among patients. The study concluded that perceived stress significantly impairs psychological well-being in renal populations.

Badhe et al. (2023) conducted a study on hemodialysis patients to assess the relationship between stress perception and psychological well-being. The study adopted a quantitative design and involved patients receiving long-term dialysis treatment. Psychological well-being was measured alongside perceived stress, fatigue, and depressive symptoms. The findings indicated that higher perceived stress is significantly associated with lower psychological well-being. Patients with elevated stress levels reported increased depression, fatigue, sleep disturbances, and reduced quality of life. The study highlighted that treatment burden and physical limitations contribute significantly to stress perception. The study concluded that perceived stress is a major predictor of psychological distress among dialysis patients.

Fade and Rafii (2023) conducted a study on hemodialysis patients to examine psychological well-being and stress-related outcomes. The study used a descriptive correlational design involving

patients receiving dialysis treatment in hospital settings. Data were collected using validated psychological instruments measuring stress, depression, and quality of life. The findings showed that perceived stress is negatively associated with psychological well-being among renal patients. Patients reporting higher stress experienced lower emotional stability, reduced social functioning, and poor quality of life. The study also found that duration of illness and treatment frequency increased stress levels. The study concluded that managing perceived stress is essential for improving psychological well-being among hemodialysis patients.

Yu et al. (2022) conducted a study on chronic kidney disease patients to examine psychological adjustment and stress levels. The study used a quantitative design involving patients undergoing different stages of kidney disease management. Standardized instruments were used to assess perceived stress, emotional functioning, and social well-being. The findings revealed that perceived stress negatively affects both emotional and social dimensions of psychological well-being. Patients with higher stress levels showed reduced interpersonal relationships, lower life satisfaction, and poor emotional functioning. The study concluded that stress significantly impairs psychological adjustment in renal patients and affects overall quality of life.

Park et al. (2021) examined perceived stress and psychological well-being among patients with chronic kidney disease. The study adopted a cross-sectional research design and involved patients receiving medical care across different stages of kidney disease progression. Participants were selected from clinical settings where routine renal care and monitoring were provided. The study measured perceived stress alongside psychological well-being indicators such as anxiety, depression, and life satisfaction using validated psychological assessment instruments. The findings revealed that perceived stress significantly predicts psychological well-being among renal patients. Patients with higher perceived stress reported higher levels of psychological distress,

including anxiety and depressive symptoms. The study also found reduced emotional stability and lower life satisfaction among patients experiencing high stress levels. The authors explained that disease uncertainty, frequent hospital visits, treatment dependence, and lifestyle limitations contribute strongly to stress perception. The study concluded that perceived stress is a major determinant of psychological well-being among individuals with chronic kidney disease.

Zhang et al. (2021) examined psychological outcomes among chronic kidney disease patients using a cross-sectional design. The study focused on the relationship between stress perception and mental health outcomes. Participants were assessed using standardized measures of perceived stress, anxiety, depression, and psychological well-being. The results showed that perceived stress is a strong predictor of poor psychological well-being. Patients with higher stress levels reported lower emotional stability, reduced coping ability, and higher levels of anxiety and depression. The study also found that prolonged illness duration and treatment demands increase vulnerability to stress-related psychological distress. The authors concluded that stress perception plays a critical role in determining mental health outcomes in renal patients.

Smith et al. (2020) investigated psychological outcomes among patients with chronic illnesses, including renal conditions. The study adopted a survey design and assessed perceived stress, coping ability, and psychological well-being using standardized scales. The participants were drawn from clinical populations managing long-term health conditions. The findings showed that perceived stress is strongly associated with reduced psychological well-being. Patients with higher stress levels reported increased emotional distress, reduced coping capacity, and lower life satisfaction. The study further revealed that stress negatively affects emotional regulation and increases vulnerability to depression. The authors concluded that stress management is essential

for improving psychological outcomes among patients with chronic illnesses, including renal patients.

Resilience and Psychological Well-Being

A study by Yiğit and Özişli (2026) examined the role of psychological resilience in influencing health perception among students using a cross-sectional survey design with a sample of 650 participants. The study employed mediation analysis to explore the relationship between exercise motivation, resilience, and perceived health outcomes. The findings revealed that psychological resilience had a significant positive relationship with health perception and overall psychological functioning. More importantly, resilience was found to mediate the relationship between motivational factors and well-being outcomes, indicating that individuals with higher resilience were better able to translate positive behaviors into improved psychological well-being. The study further demonstrated that resilience enhances adaptive coping, emotional regulation, and positive self-evaluation, all of which contribute to improved psychological well-being. These findings support the argument that resilience functions as a critical psychological resource that strengthens individuals' ability to maintain mental stability under stress. Although conducted among students, the implications are highly relevant to clinical populations such as renal patients, who are exposed to continuous stressors. In such contexts, resilience can enhance adjustment to illness, reduce emotional distress, and promote better psychological well-being.

Heinz et al. (2026) examined the relationship between resilience and psychological well-being using a community-based qualitative design. The study employed in-depth interviews and focus group discussions involving participants drawn from diverse socio-cultural backgrounds, allowing for a comprehensive exploration of lived experiences of stress, coping, and adaptation. Data were

analyzed using thematic analysis to identify recurring patterns related to resilience processes and mental health outcomes. The findings revealed that resilience is not a fixed trait but a dynamic process shaped by social support systems, cultural beliefs, and environmental resources. Participants who reported strong social connectedness, positive meaning-making, and access to supportive environments demonstrated higher levels of psychological well-being, including better emotional regulation, adaptability, and life satisfaction. Conversely, individuals with limited support and greater exposure to adverse conditions exhibited lower resilience and poorer psychological outcomes. These findings reinforce the protective role of resilience in promoting psychological well-being and underscore its importance in contexts characterized by prolonged stress. In relation to chronic illness populations such as renal patients, the study suggests that strengthening social and psychological resources can enhance resilience, improve coping capacity, and ultimately lead to better psychological well-being.

Safi et al. (2024) investigated the relationship between psychosocial factors and resilience among patients undergoing hemodialysis. Using a cross-sectional design involving both patients and their families, the study assessed self-efficacy, social support, and family resilience. The findings revealed that resilience is strongly influenced by both individual and social factors, particularly perceived social support and self-efficacy. Patients who reported higher levels of support and confidence in their ability to manage their condition demonstrated greater resilience, which in turn is associated with better psychological functioning. Although the study focused on predictors of resilience, its findings highlight the indirect pathway through which resilience contributes to psychological well-being by strengthening coping capacity and emotional stability among renal patients.

A longitudinal study by Chen et al. (2023) examined the relationship between resilience and well-being among patients with chronic kidney disease. The study adopted a repeated-measures design and assessed resilience, activities of daily living, and psychological well-being over time using standardized instruments. The findings revealed that resilience was a significant predictor of psychological well-being, with higher resilience scores associated with improved well-being outcomes. Specifically, the study showed that for every increase in resilience, there was a corresponding improvement in well-being levels, indicating a strong positive relationship between the two variables. The study also found that patients with higher resilience were better able to maintain daily functioning and adapt to treatment demands. These findings suggest that resilience not only enhances psychological well-being directly but also supports functional independence, which contributes to overall quality of life among renal patients.

Yu et al. (2022) examined resilience and psychological adjustment among patients with chronic kidney disease using a cross-sectional survey design. The study involved patients across different stages of kidney disease management, including those undergoing dialysis and conservative treatment. Data were collected using standardized instruments measuring resilience, perceived stress, emotional functioning, social well-being, and overall psychological well-being. The findings revealed that resilience is significantly associated with improved psychological well-being among renal patients. Patients with higher resilience reported better emotional functioning, stronger social relationships, and higher life satisfaction. The study also showed that resilient patients maintained more stable psychological states despite ongoing treatment demands and illness-related uncertainty. The authors concluded that resilience strengthens adaptation processes and enhances psychological well-being in chronic kidney disease populations.

Lee et al. (2020) conducted a study on hemodialysis patients to assess the relationship between resilience and psychological outcomes. The study used a descriptive correlational design involving patients receiving regular dialysis treatment in clinical settings. Standardized questionnaires were used to measure resilience levels, depressive symptoms, emotional distress, and quality of life. The results showed that resilience is strongly associated with psychological well-being among renal patients. Individuals with higher resilience reported lower levels of depression, reduced emotional distress, and better quality of life. The study further indicated that resilience improves coping capacity and helps patients manage the psychological burden of long-term treatment. The authors concluded that resilience serves as a key psychological protective factor in hemodialysis populations.

Smith et al. (2020) examined resilience and psychological well-being among patients with chronic illnesses, including renal patients, using a quantitative survey design. The study involved individuals receiving long-term medical treatment in hospital-based care settings. Standardized instruments were used to measure resilience, perceived stress, and psychological well-being, focusing on emotional functioning, coping capacity, and life satisfaction. The findings revealed that resilience is positively associated with psychological well-being among chronically ill patients. Patients with higher resilience demonstrated better emotional regulation, stronger coping abilities, and improved quality of life. The study also found that resilience reduces psychological distress by buffering the negative effects of stress and enhancing adaptive responses to illness-related challenges. The authors concluded that resilience is a critical determinant of psychological well-being in chronic illness populations, including renal patients.

Summary of Literature Review

Several theories relevant to the research variables were reviewed. The key theories among them were; the Transactional Model of Stress and Coping developed by Lazarus and Folkman (1984) which provides a foundational explanation of how individuals evaluate and respond to stress through cognitive appraisal processes. The Conservation of Resources Theory proposed by Hobfoll (1989) which offers a complementary perspective by conceptualizing stress as a reaction to the loss or threatened loss of valuable resources. The Stress Buffering Hypothesis by Cohen and Wills (1985) which further extends the understanding of stress by explaining how protective factors reduce the negative effects of stress on psychological well-being. The Resilience Framework proposed by Masten (2001) which conceptualizes resilience as a dynamic process of positive adaptation despite significant adversity. And Psychological Well-Being Theory developed by Ryff (1989) which forms the theoretical of the study. The theory provides a comprehensive framework for understanding positive psychological functioning beyond the absence of mental illness. It conceptualizes psychological well-being as a multidimensional construct that reflects individuals' ability to function effectively, maintain meaningful relationships, and achieve personal growth despite life challenges. This makes the theory highly relevant for examining psychological well-being among renal patients, who are required to continuously adapt to the physical, emotional, and social demands of chronic illness

Hypotheses

The following hypotheses are tested in the study:

1. Perceived stress will significantly relate with psychological well-being across its dimensions (Autonomy, Environmental Mastery, Personal Growth, Positive Relationship with Others, Purpose in Life, Self-acceptance) among renal patients.
2. Resilience will significantly relate with psychological well-being across its dimensions (Autonomy, Environmental Mastery, Personal Growth, Positive Relationship with Others, Purpose in Life, Self-acceptance) among renal patients.
3. Resilience will significantly moderate the relationship between perceived stress and psychological well-being (Autonomy, Environmental Mastery, Personal Growth, Positive Relationship with Others, Purpose in Life, Self-acceptance) among renal patients.

CHAPTER THREE

Method

Participants

The participants in this study consisted of one hundred and four (104) renal patients, comprising of male and female, who are receiving treatment in selected public and private hospitals in Enugu metropolis. The participants comprised 78 (75%) males and 26 (25%) females. They were diagnosed with chronic kidney disease and were undergoing management through dialysis, nephrology consultations, or routine medical monitoring. The inclusion criteria for the study were: patients who had been formally diagnosed with chronic kidney disease, were receiving treatment in any of the selected hospitals, were aged between 28 and 72 years, and were willing to provide informed consent and complete the questionnaire. The exclusion criteria were: patients who were critically ill at the time of data collection, those with evident cognitive or communication difficulties that could hinder valid responses, and those who declined consent or submitted incomplete responses. The study was conducted across five healthcare facilities in Enugu metropolis, namely Neo Hospital, BMC Clinic, Annunciation Hospital, University of Nigeria Teaching Hospital, and Hilton Hospital. These facilities were selected to ensure a diverse representation of renal patients across different healthcare settings, including both public and private institutions. The participants were selected through a multi-stage sampling technique involving balloting, criterion, and availability sampling. Participant ages ranged from 28 to 72 years, with a mean age of 49.28 years ($SD = 10.54$). Other demographic information, including gender, marital status, educational level, duration of illness, and type of treatment, was explored as control variables.

Instruments

A structured questionnaire was used for data collection. It consisted of demographic variables and three standardized instruments measuring perceived stress, resilience, and psychological well-being among renal patients. The instruments are:

1. Perceived Stress Scale (PSS) by Cohen et al. (1983)
2. Brief Resilience Scale (BRS) by Smith et al. (2008)
3. Psychological Well-Being Scale by Ryff (1989)

Perceived Stress Scale (PSS) by Cohen et al. (1983)

The perceived stress scale was used to measure the extent to which renal patients perceived their life situations and treatment experiences as stressful. It assesses the degree to which individuals find their lives unpredictable, uncontrollable, and overloaded. The scale consists of 10 items rated on a 5-point Likert format ranging from “never to very often,” with higher scores indicating higher perceived stress. The PSS has demonstrated strong psychometric properties across diverse populations. Cohen et al. (1983) reported a Cronbach alpha reliability of 0.78. Subsequent studies have reported reliability coefficients ranging from 0.70 to 0.85 (Lee, 2012). In the Nigerian context, the scale has also shown good reliability. For instance, Olaseni et al. (2026) found $\alpha=0.91$ for PSS among polytechnic students, Ondo State, confirming its suitability in local populations. The scale has also demonstrated good construct validity through significant correlations with anxiety, depression, and health outcomes, supporting its use in clinical populations such as renal patients (Lee, 2012).

Brief Resilience Scale (BRS) by Smith et al. (2008)

The brief resilience scale was used to assess participants' ability to recover from stress and bounce back from difficult experiences. It consists of 6 items rated on a 5-point Likert scale ranging from "strongly disagree to strongly agree," with higher scores indicating greater resilience. Smith et al. (2008) reported Cronbach alpha values ranging from 0.80 to 0.91, indicating strong internal consistency. The scale has also demonstrated good construct validity through its association with coping, optimism, and psychological well-being. Although limited studies exist specifically within Nigeria using the Brief Resilience Scale, studies in similar developing and clinical contexts have confirmed its reliability ($\alpha=0.91$) and applicability in health-related populations. Its brevity, clarity, and focus on recovery makes it particularly suitable for use among patients with chronic illnesses, including renal patients (Adebayo et al., 2023).

Psychological Well-Being Scale by Ryff (1989)

The psychological well-being scale was used to assess overall psychological functioning among renal patients. It measures six dimensions: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Ryff (1989) reported Cronbach alpha values ranging from 0.70 to 0.90 across the six dimensions. Further validation by Ryff and Keyes (1995) confirmed the scale's factorial structure and construct validity. In the Nigerian context, the scale has been used and validated in psychological research. For example, Olaseni et al. (2026) reported acceptable reliability coefficients ($\alpha=0.93$) across the subscales among polytechnic students, Ondo State, supporting its cultural applicability.

Procedure

Data collection took place in five hospital and clinics in Enugu Metropolis and after obtaining permission from hospital authorities and ethical clearance from relevant units, participants were approached during dialysis sessions and outpatient clinic visits. Multi-stage sampling was used, and that is a complex form of cluster sampling where you select samples in stages using progressively smaller sampling units (Sedgwick, 2015). In the first stage, simple random sampling method was employed to select hospitals. A list of hospitals offering renal care services in Enugu was compiled, and they are: Neo Hospital, BMC Clinic, Annunciation Hospital, University of Nigeria Teaching Hospital (UNTH), Hilton Hospital, Niger Foundation Hospital and Diagnostic Centre, Enugu State University Teaching Hospital (ESUTH) and Alpha Specialist Hospital and Urology Centre. Each hospital was assigned a unique identifier. These identifiers were written on pieces of paper, folded, and placed in a container. Simple random sampling balloting method was then used to randomly select the hospitals included in the study, namely; Neo Hospital, BMC Clinic, Annunciation Hospital, University of Nigeria Teaching Hospital, and Hilton Hospital.

In the second stage, criterion sampling was employed within the selected hospitals, medical records and renal clinic registers were used to identify patients who met the inclusion criteria based on confirmed diagnosis of kidney disease. In the third stage, participants who were available during clinic visits and dialysis sessions and who consented to participate in the study were selected. Eligible patients were informed about the purpose of the study, confidentiality of responses, and voluntary participation. Questionnaire were administered after medical procedures or during waiting periods to reduce interference with treatment schedules. Assistance was provided to participants who required help due to fatigue or treatment-related discomfort. A total of 160 questionnaire were distributed. Ten were not returned and forty-seven were discarded due to

incomplete responses. One hundred and four (104) fully completed questionnaire were used for analysis. Completion time ranged between 20 to 30 minutes. They were also encouraged to respond to each item freely and honestly. Participants were informed that they could withdraw at any stage without consequence.

Design and Statistics

The study adopted a correlational cross-sectional research design. Descriptive statistics was used to summarize demographic variables. Moderation analysis was conducted using Hayes PROCESS macro (SPSS version 30) to test whether resilience moderates the relationship between perceived stress and psychological well-being. Interaction terms (Perceived Stress $\times$ Resilience) were computed and tested for significance.

CHAPTER FOUR

Results

This chapter presents the results of the statistical analyses examining the relationships among perceived stress, resilience, and dimensions of psychological well-being. Specifically, the chapter reports descriptive statistics, Pearson product–moment correlations, moderation analyses using Hayes PROCESS macro, and hierarchical regression analyses.

Table 1:

Descriptive Statistics and Pearson Correlations

SN	Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1	Gender	1.34	.48	-									
2	Highest Education	3.47	1.55	-.20	-								
3	Marital Status	2.14	.738	.05	.27	-							
4	Perceived Stress	21.48	4.71	-.05	-.03	-.27	-						
5	Resilience	19.37	3.11	-.13	.19	.15	-	-					
						.40**							
6	Environment	11.22	2.31	.01	.05	-.02	-.09	.25**	-				
7	Personal Growth	10.65	2.13	-.11	.01	.08	-.03	.04	-.01	-			
8	Positive Relations	11.66	3.15	-.19	.16	-.02	-.35	.44***	.08	.04	-		
9	Purpose in Life	10.97	2.33	.17	.08	.05	-.13	.17*	.16*	.24**	.24**	-	
10	Self-acceptance	11.50	2.90	-.31	.09	.02	-.36	.26**	.17*	.04	.39***	.21**	-
11	Autonomy	12.85	2.68	.04	-.07	-.02	-.17*	.27**	.26**	.11	.20**	.25**	.29**

Note: *p<.05; **p<.01; *** p<.001

The results in Table 1 show the means, standard deviations, and inter-correlations among the study variables. The findings revealed that perceived stress was significantly negatively related to resilience ($r = -.40, p < .01$), indicating that individuals with higher stress levels tend to report lower resilience. Perceived stress also showed negative associations with several dimensions of psychological well-being, including autonomy ($r = -.17, p < .05$), positive relations ($r = -.35, p < .05$), and self-acceptance ($r = -.36, p < .05$), suggesting that increased stress undermines psychological well-being. Resilience, on the other hand, demonstrated significant positive relationships with multiple well-being dimensions, including: Positive relations ($r = .44, p < .001$), Self-acceptance ($r = .26, p < .01$), Autonomy ($r = .27, p < .01$), and Environmental mastery ($r = .25, p < .01$). This indicates that resilience is associated with improved psychological well-being. Additionally, the inter-correlations among the psychological well-being dimensions were positive and significant, suggesting that these constructs are related but in distinct aspects of psychological functioning.

Table 2:

Results from the Hayes PROCESS macro examining how perceived stress predicts psychological wellbeing dimensions with resilience as a moderator.

Variable	<i>B</i>	<i>T</i>	95% <i>CI</i>
Autonomy			
Perceived Stress (PS)	.1871	.6054	[-.4261, .8004]
Resilience	.4255	1.3960	[-.1792, 1.0304]
PS X Resilience	-.0110	-.7445	[-.0404, .0183]
Environmental Mastery			

Perceived Stress (PS)	-.0480	-.1785	[-.5815, .4855]
Resilience	.1392	.5250	[-.3869, .6653]
PS X Resilience	.0027	.2079	[-.0229, .0282]
Personal Growth			
Perceived Stress (PS)	-.1580	-.6169	[-.6661, .0282]
Resilience	-.1208	-.4785	[-.6219, .3501]
PS X Resilience	.0074	.6004	[-.0170, .0317]
Positive Relations			
Perceived Stress (PS)	.1027	.3090	[-.5568, .7622]
Resilience	.5957	1.8174	[-.0546, 1.2460]
PS X Resilience	-.0116	-.7289	[-.0432, .0200]
Purpose in Life			
Perceived Stress (PS)	-.3134	-1.1415	[-.8581, .2313]
Resilience	-.1595	-.5892	[-.6966, .3776]
PS X Resilience	.0136	1.0320	[-.0125, .0396]
Self-acceptance			
Perceived Stress (PS)	-.0252	-.0782	[-.6651, .6147]
Resilience	.2807	.8825	[-.3503, .9117]
PS X Resilience	-.0080	-.5153	[-.0386, .0227]

Note: *p<.05; **p<.01; ***p<.001; ****p>.05

Perceived stress did not significantly predict autonomy ($B = .1871$, $p > .05$), and resilience was also not a significant predictor. Importantly, the interaction term (Perceived Stress $\times$ Resilience) was not significant ($B = -.0110$, $p > .05$), indicating that resilience did not moderate the

relationship between perceived stress and autonomy. Neither perceived stress nor resilience significantly predicted environmental mastery. The interaction effect was also not significant ($B = .0027, p > .05$), suggesting no moderating effect of resilience. Perceived stress and resilience were not significant predictors of personal growth, and the interaction effect was not significant ($B = .0074, p > .05$). Thus, resilience did not moderate the relationship between stress and personal growth. Neither perceived stress nor resilience significantly predicted positive relations in the moderation model. The interaction term was also not significant ($B = -.0116, p > .05$), indicating no moderation effect. Perceived stress and resilience did not significantly predict purpose in life, and the interaction term was not significant ($B = .0136, p > .05$). Hence, resilience did not moderate this relationship. Neither perceived stress nor resilience significantly predicted self-acceptance in the moderation model, and the interaction term was not significant ($B = -.0080, p > .05$). This indicates that resilience does not moderate the relationship between perceived stress and self-acceptance. Across all models, resilience did not significantly moderate the relationship between perceived stress and any dimension of psychological well-being. This suggests that while resilience is correlated with well-being, it does not buffer (moderate) the impact of stress in this sample.

Table 3:

Model Summary of Hierarchical Regression

Variable	B	Std. Error	beta	T	Sig.	R	R ²	R ² Change	F Value
Autonomy									
Perceived Stress	-.094	.055	-.165	-1.691	.094	.165 ^a	.027	.027	2.859
Resilience	.209	.090	.242	2.322	.022	.277 ^b	.077	.049	5.393

Environmental Mastery									
Perceived Stress	-.044	.048	-.089	-.907	.367	.089 ^a	.008	.008	.823
Resilience	.192	.078	.258	2.460	.016	.253 ^b	.064	.056	6.053
Personal Growth									
Perceived Stress	-.013	.045	-.030	-.300	.765	.030 ^a	.001	.001	.090
Resilience	.024	.074	.035	.323	.748	.044 ^b	.002	.001	.104
Positive Relations with Others									
Perceived Stress	-.232	.062	-.347	-3.734	.000	.347 ^a	.120	.120	13.945
Resilience	.367	.097	.362	3.802	.000	.480 ^b	.230	.110	14.458
Purpose in Life									
Perceived Stress	-.064	.049	-.129	-1.312	.192	.129 ^a	.017	.017	1.721
Resilience	.107	.080	.143	1.342	.183	.184 ^b	.034	.017	1.801
Self-Acceptance									
Perceived Stress	-.221	.057	-.359	-3.891	.000	.359 ^a	.129	.129	15.138
Resilience	.124	.094	.133	1.325	.188	.380 ^b	.144	.015	1.757

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; **** $p > .05$

Perceived stress did not significantly predict autonomy ($B = -.094$, $p > .05$), whereas resilience did ($B = .209$, $p < .05$). This indicates that resilience independently contributes to autonomy. Perceived stress was not significant, but resilience significantly predicted environmental mastery ($B = .192$, $p < .05$), suggesting resilience enhances environmental control. Neither perceived stress nor resilience significantly predicted personal growth. Perceived stress significantly negatively predicted positive relations ($B = -.232$, $p < .001$), while resilience significantly positively

predicted it ($B = .367, p < .001$). This indicates that: Higher stress reduces interpersonal relationships. Higher resilience enhances relationships. Neither perceived stress nor resilience significantly predicted purpose in life. Perceived stress significantly negatively predicted self-acceptance ($B = -.221, p < .001$), while resilience was not significant. This suggests that stress undermines self-acceptance.

Summary of Findings

1. Perceived stress was significantly related to psychological well-being among renal patients.
In the results, higher perceived stress was associated with poorer psychological well-being, particularly lower positive relations and self-acceptance, showing that stress functions as a risk factor for well-being.
2. Resilience was significantly related to psychological well-being among renal patients. The findings showed that resilience had positive relationships with several dimensions of psychological well-being, especially autonomy, environmental mastery, positive relations, and self-acceptance, indicating that resilience supports better well-being.
3. Resilience did not significantly moderate the relationship between perceived stress and psychological well-being among renal patients. The moderation analyses showed that the interaction term between perceived stress and resilience was not significant across the tested dimensions, meaning resilience did not buffer the effect of stress on psychological well-being in this study.

CHAPTER FIVE

Discussion

This study investigated the relationship between perceived stress, resilience, and psychological well-being among renal patients, with particular emphasis on the moderating role of resilience. The findings are discussed in relation to the study hypotheses, theoretical framework, and previous empirical studies. The first hypothesis stated that perceived stress will significantly relate with psychological well-being across its dimensions (autonomy, environmental mastery, personal growth, positive relationship with others, purpose in life, self-acceptance) among renal patients. The findings revealed that perceived stress was negatively associated with several dimensions of psychological well-being, particularly positive relations with others and self-acceptance. This suggests that higher levels of perceived stress are linked to poorer psychological functioning among renal patients. This result is consistent with the transactional model of stress and coping, which posits that stress negatively affects psychological outcomes when individuals perceive environmental demands as exceeding their coping capacity. Renal patients are exposed to continuous stressors such as dialysis, financial burden, and uncertainty about health outcomes, which likely contribute to reduced psychological well-being. Also, the finding aligns with previous studies (e.g., Chen et al., 2023, Ogunsemi, 2025, Olaseni et al., 2026), which reported that perceived stress significantly predicts psychological distress, reduced life satisfaction, and poor emotional functioning among renal patients. The significant negative effect of stress on positive relations suggests that stress may impair social functioning, possibly due to withdrawal, irritability, or reduced emotional availability. Similarly, the negative effect on self-acceptance indicates that stress may undermine individuals' ability to maintain a positive self-concept, particularly in the context of chronic illness. However, perceived stress did not significantly predict some dimensions

such as autonomy and personal growth. This may suggest that certain aspects of psychological well-being are more stable or influenced by other psychological resources beyond stress alone.

The second hypothesis stated that resilience will significantly relate with psychological well-being across its dimensions (autonomy, environmental mastery, personal growth, positive relationship with others, purpose in life, self-acceptance) among renal patients. The results showed that resilience was positively associated with multiple dimensions of psychological well-being, including autonomy, environmental mastery, and positive relations. This indicates that resilience enhances adaptive functioning among renal patients. This finding supports resilience theory (Masten, 2001) and the protective factor model (Rutter, 1987), which emphasize that resilience enables individuals to adapt positively despite adversity. Renal patients with higher resilience are more likely to regulate emotions effectively, maintain optimism, and engage in adaptive coping strategies. The significant prediction of autonomy suggests that resilient individuals maintain independence despite medical dependence. That of environmental mastery indicates better ability to manage treatment demands. Prediction of positive relations reflects stronger interpersonal functioning. These findings are consistent with empirical studies (Chen et al., 2023), which found that resilience enhances emotional stability, coping capacity, and quality of life among chronic illness populations. However, resilience did not significantly predict personal growth and purpose in life. This may be due to the chronic and restrictive nature of renal disease, which may limit opportunities for growth and long-term goal attainment despite high resilience.

The third hypothesis stated that resilience will significantly moderate the relationship between perceived stress and psychological well-being (autonomy, environmental mastery, personal growth, positive relationship with others, purpose in life, self-acceptance) among renal patients. Contrary to the study hypothesis, the findings revealed that resilience did not significantly

moderate the relationship between perceived stress and psychological well-being across all dimensions. This result contradicts the stress-buffering model (Cohen & Wills, 1985), which posits that resilience weakens the negative impact of stress on psychological outcomes. The absence of moderation suggests that resilience does not function as a buffering variable in this sample. The persistent and demanding nature of renal disease may override the buffering capacity of resilience. Even highly resilient individuals may still experience significant psychological strain due to ongoing treatment demands. The Brief Resilience Scale focuses primarily on “bouncing back” from stress rather than broader adaptive processes, which may limit its ability to capture buffering effects. Moderation effects are often better detected in longitudinal designs. The cross-sectional nature of this study may have limited the detection of dynamic buffering processes. Financial burden, limited healthcare access, and social constraints may reduce the effectiveness of resilience as a protective buffer. The finding suggests that resilience operates more as a direct protective factor rather than a moderator, meaning it independently enhances well-being but does not necessarily weaken the impact of stress.

Implications of the Study

The findings of this study contribute significantly to existing psychological theories, particularly the transactional model of stress and coping, resilience theory, and the stress-buffering model. While the results support the assumption that perceived stress negatively affects psychological well-being and resilience positively enhances it, the absence of a moderating effect challenges the traditional stress-buffering hypothesis. This suggests that resilience may function more as a direct (compensatory) protective factor rather than a moderator in chronic illness contexts. Theoretically, this expands current understanding by indicating that in conditions characterized by persistent and uncontrollable stress—such as chronic kidney disease—the buffering capacity of resilience may

be limited. This implies that future theoretical models should incorporate contextual factors (e.g., illness severity, healthcare access) when explaining resilience processes. Furthermore, the findings reinforce psychological well-being theory by demonstrating that different dimensions of well-being are differentially influenced by stress and resilience, thereby supporting its multidimensional structure.

The study has important implications for clinical psychology and healthcare practice, particularly in the management of renal patients. First, the significant negative effect of perceived stress on psychological well-being highlights the need for routine psychological screening in renal care settings. Healthcare providers should assess stress levels as part of standard treatment protocols, as unmanaged stress can lead to poor emotional adjustment, reduced treatment adherence, and diminished quality of life. Second, the positive role of resilience suggests that psychological interventions should focus on resilience-building strategies, such as: Cognitive restructuring, Stress management training, Emotional regulation techniques, and coping skills enhancement. For example, a renal patient who learns adaptive coping strategies may better manage dialysis-related stress and maintain emotional stability. Third, the absence of a moderating effect implies that resilience alone may not be sufficient to buffer stress, especially in high-burden clinical populations. This suggests the need for integrated interventions, combining: Psychological support, social support systems and medical care. Clinically, healthcare providers should integrate routine psychological assessment and intervention into renal care, with particular emphasis on stress management and resilience enhancement programs. Interventions such as cognitive-behavioral therapy, psychoeducation, and coping skills training should be incorporated to help patients manage stress effectively and improve psychological well-being. Lastly, there is a need for policy integration of mental health services into chronic disease management. Government and

healthcare institutions should subsidize psychological care for renal patients. Policies should support holistic treatment approaches that address both physical and psychological needs. Given the high cost and burden of renal treatment, policies that reduce financial stress may indirectly improve psychological well-being.

Limitations of the Study

This study is not without limitations, first, the use of a cross-sectional correlational research design limits the ability to establish causal relationships among perceived stress, resilience, and psychological well-being. The findings only reflect associations at a single point in time and do not capture changes in psychological functioning over time. Second, the sample size of 104 renal patients drawn from selected hospitals in Enugu metropolis restricts the generalizability of the findings to other populations, particularly those in different geographical or healthcare contexts. Third, the reliance on self-report instruments introduces the possibility of response bias, including social desirability and subjective misinterpretation of questionnaire items. Additionally, the study employed the Brief Resilience Scale, which primarily measures the ability to bounce back from stress and may not fully capture the multidimensional nature of resilience, including social and environmental components. Finally, the study did not control for potentially confounding variables such as social support, severity of illness, duration of treatment, and financial burden, all of which may significantly influence psychological well-being among renal patients.

Suggestion for further studies

From a research perspective, future studies should adopt longitudinal designs to better understand the causal and dynamic relationships among perceived stress, resilience, and psychological well-being. Researchers are also encouraged to use larger and more diverse samples to enhance the

generalizability of findings and to explore additional moderating or mediating variables such as social support, coping strategies, and self-efficacy.

Conclusion

This study examined the moderating role of resilience in the relationship between perceived stress and psychological well-being among 104 renal patients receiving treatment in selected public and private hospitals in Enugu metropolis. The findings revealed that perceived stress negatively affects psychological well-being, while resilience positively contributes to several dimensions of well-being, including autonomy, environmental mastery, and positive relations. However, contrary to expectations, resilience did not moderate the relationship between perceived stress and psychological well-being. This suggests that resilience operates as a direct protective factor rather than a buffering variable in this population. Overall, the study underscores the importance of addressing both stress and resilience in the psychological management of renal patients. It highlights the need for integrated healthcare approaches that combine medical treatment with psychological support to enhance overall well-being and quality of life.

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