

## Chapter One

### Introduction

#### 1.1 Background to the Study

Mental Well-being is characterised as ‘positive human functioning, extending beyond a physiological or biomedical notion of health to encompass the emotional, social, and spiritual dimensions of what it means to be human’<sup>1</sup>. It encompasses positive traits that correspond with human flourishing rather than simply surviving. Historical conceptualisations of well-being, originally drawn from classical Greek studies denote *eudaimonic* elements of well-being as happiness and prosperity, later assuming a more hedonic, interpretation of the maximum happiness for the greatest number of people<sup>2</sup>. Modern conceptions of well-being, in addition to the *eudaimonic* and hedonic approaches, include psychological, social, spatial, environmental, and economic considerations, which provide a contextual background to the meaning of well-being.

Mental well-being is a broad concept that encompasses mental health and the spectrums of mental states occurring within and beyond this range. Mental health is often associated with optimum functioning within individuals and with their external environment, denoting an absence of illness and the importance of social, psychological, and environmental influences in maintaining balance<sup>3</sup>. While the construction of mental health remains wedded to bio-psychiatry domains and reduced to representations of illnesses, contemporary understanding of mental health demonstrated the move towards a more integrated approach, encompassing ecology, epidemiology, arts, humanities, trans-cultural health, and social psychology. Mental health, at its fundamental level, involves an individualised construction of capacity for exercising choice in

connecting with society<sup>4</sup>. This posits a modern bioethical understanding of agency, and autonomy in forming or disengaging from society or the outside world; an essential component in determining the wellbeing of the person in relation to achieving personal goals in life. For the purpose of the discussion, the term “Mental well-being” is preferred over mental health, as the former is more inclusive to adequately accommodate the multitude of potential factors that affect its equilibrium, and influence how mental well-being is shaped and understood according to the context in which it is assumed.

However, chronic pain is a medical disease that can be made worse by environmental and psychological factors. Chronic pain persists over a long period and can be challenging to manage. People with chronic pain often suffer from more than one painful condition. They also have an increased risk of developing problems with physical functioning, cognition and emotion reactions<sup>6</sup>.

There are emerging narratives of how mental well-being is affected by chronic pain. For example, research has shown that pain in children and adolescents is associated with depression, anxiety, being bullied, unhappiness, and reduced overall health rating during adolescence<sup>5</sup>. Also, there is a link between abdominal pain and a debilitating symptom for youth with Inflammatory Bowel Diseases (IBDs), which in turn produces both anxiety symptoms and low moods<sup>6</sup>. More still, the result of a study on the impact of chronic pain (CP) indicated close to 20% of the CP cohort reported recurrent CP across all 3-time points. Participants with current CP reported poorer health-related quality of life (HRQoL) compared to participants with remitted CP who reported poorer HRQoL compared to Control participants.

The CP cohort reported higher health-related anxiety compared to the control cohort, regardless of current pain status. CP compared to control participants reported greater emotional

problems and fewer conduct problems in their children<sup>7</sup>. Furthermore, it has been reported that experiencing chronic pain at any one-time point is associated with increased odds of depression and/or anxiety disorder at 18. Also, a dose-response relationship and each additional marker of CP were associated with a 26% (CI: 7% to 47%) increase in the risk of having a mood and/or anxiety disorder. Individuals who attribute adversity to global, stable, or personal factors were at amplified risk<sup>8</sup>.

From the foregoing, it is evident that chronic pain significantly impacts mental wellbeing and this could be due to the complex interplay between the mind and the body. The effects can vary depending on the severity, frequency, and underlying cause of the pain. Given the challenges and impact of chronic pain on the well-being of individuals suffering from the medical condition, most of them seek means to achieve mental wellness while managing the medical condition. One of the factors that could help in this regard is their perception of the medical illness.

Illness Perceptions have proven to be predictive of coping and adjustment in many chronically ill patients<sup>9</sup>. Illness perceptions refer to the cognitive and emotional beliefs and attitudes that individuals have about their health condition or illness. It encompasses how a person interprets and understands their illness, including its cause, timeline, consequences, and controllability<sup>10</sup>. These perceptions can significantly influence how individuals cope with and adapt to their health condition, affecting their treatment adherence, emotional well-being, and overall health outcomes. Illness perceptions are the central concept of the common-sense model (CSM) of self-regulation of health and illness<sup>11</sup>. It emerges as a result of people's beliefs about illness and what illness means in the context of their lives. A person might have her/his own thoughts about how an illness is caused, how long it will last, how it will affect her/his life, and

how it can be controlled or cured<sup>12</sup>. Illness perceptions focuses on how an individual experiences and mentally frames living with a disease or a medical condition.

The concept of illness perceptions is made up of seven components, including coherence, concern, consequences, control (personal and treatment), emotional representation, identity, and timeline (acute/chronic and cyclical)<sup>13</sup>.

Identity: This component refers to how individuals label and recognize their symptoms and the specific health condition they believe they have. Accurate identification of the illness is crucial for seeking appropriate medical care and treatment.

Cause: Patients may have different beliefs about the cause of their illness, ranging from biological factors (e.g., genetics, infection) to psychological or lifestyle factors (e.g. stress, diet).

Timeline: Illness perceptions include perceptions of how long the illness is expected to last, whether it is acute or chronic, and the likelihood of recovery.

Consequences: Patients form beliefs about the potential impact of their illness on their lives, including physical, emotional, social, and financial consequences.

Controllability/Treatment: This component relates to the extent to which individuals believe they can control or manage their illness, as well as their beliefs about the effectiveness of available treatments and their ability to adhere to them.

Emotional representation: Illness perceptions include emotional responses to the illness, such as fear, anxiety, or worry about the condition and its implications.

Coherence: Coherence refers to how well the patient understands their illness and whether the illness fits into their existing knowledge and beliefs about health and disease.

Causal attributions: Patients may attribute their illness to specific factors, either internal (e.g. personal behaviour, genetics) or external (e.g., environmental factors)<sup>13</sup>.

Several studies have shown an association between illness perceptions and managing or living with different chronic illnesses. For instance, it has been found that individuals who negatively perceived their illness experienced greater levels of perceived stress<sup>14</sup>. Also, illness perceptions have been associated with self-care management and clinical outcomes among individuals with haemodialysis patients. Moreover, negative illness perceptions and depression are significantly and more strongly associated with lower health-related quality of life (HRQoL) among inflammatory bowel disease (IBD) patients<sup>15</sup>. Illness perceptions play a vital role in the way individuals cope with their health condition. As could be seen in the studies above, someone who perceives their illness as highly controllable and with a good chance of recovery, may be more motivated to adhere to treatment recommendations and adopt healthier lifestyle habits.

On the other hand, individuals who believe their illness has severe and uncontrollable consequences may experience increased stress and a lower sense of well-being. The relationship between illness perceptions and the mental wellbeing of patients with chronic pain would be tested in this present study. Another variable that could influence the mental well-being of patients with chronic pain is coping strategies.

Coping is a concept used in different disciplines, not just in Psychology. Coping is defined as ongoing cognitive and behavioural efforts to manage specific (external and/or internal) demands that are appraised as taxing or exceeding the resources of the individual. It is the constantly changing cognitive and behavioural efforts necessary to manage, master, reduce or tolerate a troubled person-environment relationship<sup>16</sup>. Furthermore, coping is about how we manage or overcome problems and difficulties<sup>17</sup>.

Coping efforts serve two main functions: the management or change of the source of stress (problem-focused coping) and the regulation of the individual's emotional responses to the

problem or stressful situation (emotion-focused coping) <sup>16</sup>. Folkman stated, that there are three key features of Coping:

First, coping is process oriented, meaning that it focuses on what the person actually thinks and does in a specific stressful situation. Coping is a dynamic and multifaceted process that individuals engage in when faced with stressful or challenging situations. This process-oriented approach emphasizes the active and intentional nature of coping, focusing on the thoughts, emotions, and actions that individuals employ to manage stressors effectively. At its core, coping involves cognitive and behavioral responses aimed at reducing the impact of stressors and restoring a sense of balance and well-being. Cognitive coping strategies involve the way individuals perceive, interpret, and appraise stressful situations. This may include cognitive reappraisal, where individuals reinterpret the meaning of a stressful event in a more positive or adaptive light, or problem-solving, where they actively seek solutions to address the underlying causes of stress<sup>17</sup>.

Behavioral coping strategies, on the other hand, encompass the actions and behaviors individuals engage in to cope with stress. This may involve seeking social support from friends or family members, engaging in relaxation techniques such as deep breathing or meditation, or engaging in physical activities like exercise to alleviate stress and promote relaxation. The process-oriented nature of coping recognizes that coping responses can vary across different situations and individuals. It emphasizes the importance of considering the context in which coping occurs, as well as the individual's unique characteristics, resources, and coping style. For example, what may be an effective coping strategy for one person may not be as effective for another, depending on factors such as personality, past experiences, and available resources<sup>17</sup>.

Furthermore, coping is not a one-time event but rather an ongoing and adaptive process that unfolds over time. Individuals may employ different coping strategies at different stages of a stressful situation, and coping efforts may evolve as the situation changes or new stressors arise. The process-oriented approach to coping underscores the dynamic and context-dependent nature of coping responses. By focusing on what individuals actually think and do in specific stressful situations, this approach provides valuable insights into the mechanisms underlying effective coping and informs the development of interventions aimed at promoting resilience and well-being.

Secondly, coping is contextual, meaning that particular personal and situational variables together shape coping efforts. Coping is contextual, implying that coping efforts are influenced by a myriad of personal and situational factors that interact to shape individuals' responses to stressors. This contextual perspective underscores the dynamic and multifaceted nature of coping, recognizing that coping strategies are not solely determined by individual characteristics but are also shaped by the specific circumstances in which they occur. On a personal level, individual characteristics such as personality traits, cognitive appraisal processes, coping styles, and past experiences play a crucial role in shaping coping responses<sup>16</sup>. For example, individuals with a more optimistic outlook may be more likely to employ positive reappraisal strategies, reframing stressful situations in a more positive light. Similarly, individuals with high levels of self-efficacy may be more inclined to engage in problem-solving strategies, believing in their ability to effectively manage challenges. Additionally, situational factors such as the nature and severity of the stressor, available resources and support systems, cultural norms and values, and environmental conditions also influence coping efforts. For instance, individuals may employ different coping strategies when faced with acute stressors, such as a sudden loss or trauma,

compared to chronic stressors, such as ongoing financial difficulties. Similarly, the presence of social support networks and access to resources may facilitate adaptive coping, whereas social isolation or resource scarcity may hinder coping effectiveness<sup>17</sup>.

Moreover, the interaction between personal and situational variables further complicates the coping process. Individuals may adapt their coping strategies based on the specific demands of a given situation, drawing upon a repertoire of coping skills and strategies that they have developed over time. For example, an individual may rely on problem-focused coping strategies in situations where they perceive a high level of control while turning to emotion-focused coping strategies when they perceive a lack of control. The contextual nature of coping highlights the importance of considering the dynamic interplay between personal and situational factors in understanding individuals' responses to stress. By recognizing the influence of these factors, interventions aimed at promoting effective coping can be tailored to address the unique needs and circumstances of individuals, ultimately enhancing resilience and well-being in the face of adversity.

Third, coping is defined independently of its outcome, i.e. Coping refers to efforts to manage demands, regardless of the success of those efforts<sup>18</sup>. Coping is defined independently of its outcome, meaning that it encompasses the efforts individuals make to manage stressors or demands, irrespective of the effectiveness or success of those efforts. In other words, coping refers to the various strategies and behaviors individuals employ to deal with challenging situations, regardless of whether these efforts ultimately lead to the desired outcome or resolution of the stressor.

This perspective highlights the process-oriented nature of coping, focusing on the actions, thoughts, and emotions individuals engage in as they navigate stressful circumstances. Coping

efforts may involve cognitive strategies such as problem-solving, cognitive reappraisal, or acceptance of the situation. They may also entail behavioral strategies such as seeking social support, engaging in relaxation techniques, or engaging in distraction activities.

Importantly, the definition of coping as independent of outcome acknowledges that individuals may use a variety of coping strategies, some of which may be more adaptive or effective than others. While some coping efforts may successfully alleviate stress and lead to positive outcomes, others may be less effective or even counterproductive. Nonetheless, all coping efforts, regardless of their outcome, are considered within the scope of coping.

By defining coping independently of its outcome, this perspective underscores the importance of understanding the process of coping itself, rather than solely focusing on the end result. It recognizes that individuals may employ different coping strategies based on their unique circumstances, resources, and coping style, and that the effectiveness of coping efforts may vary across situations and individuals.

Ultimately, this definition allows for a more nuanced understanding of coping as a dynamic and multifaceted process that unfolds over time, influenced by a myriad of factors. It highlights the complexity of human responses to stress and emphasizes the importance of considering coping efforts within their broader context when studying and intervening in the realm of stress and coping.

When individuals encounter stress, they often rely on coping mechanisms to manage the challenges they face. Coping mechanisms can be broadly categorized into two main types: problem-focused coping and emotion-focused coping. Problem-focused coping involves efforts to directly address the underlying cause of the stressor or to change the stressful situation itself.

This type of coping focuses on problem-solving and taking practical steps to alter the circumstances contributing to the stress. For example, someone experiencing work-related stress may engage in problem-focused coping by brainstorming potential solutions, seeking advice from colleagues or supervisors, or taking proactive steps to improve their work environment. In contrast, emotion-focused coping involves efforts to manage the emotional distress or discomfort associated with the stressor, rather than directly addressing the stressor itself. This type of coping focuses on regulating emotions, seeking emotional support, and finding ways to cope with the emotional impact of the stressor<sup>17</sup>. For example, an individual experiencing relationship difficulty may engage in emotion-focused coping by talking to a friend or therapist about their feelings, engaging in relaxation techniques such as deep breathing or mindfulness, or engaging in activities that provide comfort or distraction.

Both problem-focused and emotion-focused coping strategies can be adaptive and effective in managing stress, depending on the nature of the stressor and the individual's resources and coping style. Problem-focused coping may be more appropriate when the stressor is controllable and can be effectively addressed through practical solutions. Emotion-focused coping, on the other hand, maybe more suitable when the stressor is uncontrollable or when immediate resolution is not possible, allowing individuals to regulate their emotional responses and find ways to cope with the distress. It's important to note that individuals may use a combination of problem-focused and emotion-focused coping strategies depending on the situation and their own preferences and resources. Additionally, the effectiveness of coping strategies may vary depending on factors such as the nature and severity of the stressor, the individual's coping style, and the availability of social support and resources. Ultimately, the

goal of coping is to help individuals manage stress and adapt to challenging circumstances in ways that promote their overall well-being and resilience.<sup>19</sup>

Coping strategies, sometimes called “coping skills/styles”, refer to the specific psychological or behavioural efforts directed at reducing stress and strain caused by particular stressors<sup>19</sup>. They are as numerous and varied as the stressors that precede them. They play an integral role in psychological adjustment to many types of diseases and injuries, including chronic pain<sup>20</sup>.

However, it was categorized that the coping strategies of acceptance, emotional social support, humour, positive reframing, and religion are emotion-focused coping strategies. On the other hand, active coping, instrumental support, and planning are considered problem focused coping strategies<sup>35</sup>. Behavioural disengagement, denial, self-distraction, self-blaming, and substance use and venting are considered as dysfunctional or avoidant coping strategies<sup>21</sup>. Problem-focused coping involves efforts to modify the problem at hand and typically includes elements such as generating options to solve the problem, evaluating the pros and cons of different options, and implementing steps to solve the problem<sup>20</sup>. Emotion-focused coping is usually defined as aiming to manage the emotional distress, that is associated with the situation through some strategies which include; rumination, emotional expression, and self-blame<sup>22</sup>. The more common perspective in stress and coping studies is that emotion-focused coping measures are maladaptive<sup>23</sup>. The problem-focused coping style, which aims to eliminate the stressor has been found to be related to better psychological outcomes including higher mental well-being<sup>24,25,26,27</sup>. On the other hand, emotion-focused coping style has been related to worse psychological outcomes including lower mental wellbeing<sup>28</sup>.

Coping skills are a core component of mental well-being and a central protective mechanism supporting mental well-being across a variety of illnesses, risks, ages, and cultures.<sup>29</sup> Specific coping strategies known to facilitate mental well-being include reappraising a situation more positively, regulating emotions, utilising social support, accessing tangible resources, and planning.<sup>30</sup> Therefore, the relationship between coping strategies and mental well-being would be tested among patients with chronic pains in this study.

Apart from illness perceptions and coping strategies, another variable that could correlate with mental well-being is the locus of control (LOC).

Locus of control refers to an individual's beliefs about the extent of control that they have over things that happen to them<sup>31</sup>. The more anxious or depressed a person is, the more external their locus of control tends to be, and a greater external locus of control is associated with a greater vulnerability to physical illness<sup>32</sup>. It proposes that health behaviours are predicted by the extent to which an individual believes they can perform the behaviour and that it will be effective. Individuals with an internal locus of control are more likely to take action to manage their symptoms, than an individual with more external LOC, who believes their symptoms are as a result of chance and looks to other sources, such as the doctor, to manage their symptoms<sup>33</sup>. This contrasts with the perception of external circumstances, by which control is in the hands of powerful others (doctors), or outcomes are due to the vagaries of fate, luck, or chance<sup>34</sup>. Some research suggests that what underlies the internal locus of control is the concept of “self as agent.<sup>35-39</sup>”. This means that our thoughts control our actions and that when we apply this executive function of thinking, we can positively affect our beliefs, motivation, and performance. We can control our own destinies and we are more effective in influencing our environments in a wide variety of situations.

For example, the social learning theory postulates that a particular behaviour is more likely to occur if it is associated with high reinforcement value and expectancy<sup>40</sup>. Reinforcement value is here defined as the degree of preference for a particular reinforcement if various alternative reinforcements are available, and expectancy is the probability that the particular reinforcement will occur as a result of an individual's behaviour<sup>41</sup>. According to Rotter's theory, people's behaviour can be predicted from knowledge of how they view a situation, their expectancies about their behaviour, and how they value the outcomes that might occur as a result of their behaviour in that situation<sup>42</sup>. Internal health locus of control (HLOC) refers to the generalized belief or expectancy that health outcomes are primarily determined by one's own actions, decisions, or behaviors. Individuals with a strong internal HLOC tend to believe that they have a significant degree of control over their health and well-being. They may attribute positive health outcomes, such as recovery from illness or maintenance of good health, to their own efforts, choices, and behaviors. This internal orientation suggests a sense of personal responsibility and agency in managing one's health. In contrast, external health locus of control involves the belief that health outcomes are largely influenced by external factors beyond one's control. This may include attributing health outcomes to factors such as other people (e.g., healthcare professionals, family members), fate, luck, or chance. Individuals with a strong external HLOC may feel that their health is determined by external forces or circumstances, rather than their own actions or behaviors.

The distinction between internal and external HLOC reflects different belief systems about the degree of control individuals perceive they have over their health. While internal HLOC emphasizes individual agency and responsibility, external HLOC highlights the influence of external factors on health outcomes. These beliefs can influence individuals' health-related

behaviors, attitudes, and decisions, as well as their responses to health challenges and setbacks. Health locus of control exists on a continuum, and individuals may exhibit varying degrees of both internal and external orientations depending on the situation and context. Additionally, HLOC beliefs can be influenced by a range of factors, including personal experiences, cultural norms, and social influences. Understanding an individual's HLOC orientation can provide valuable insights into their health-related beliefs, motivations, and behaviors, and may inform personalized approaches to health promotion and intervention<sup>43</sup>.

Several studies have explored HLOC beliefs in patients with chronic illnesses. Burish reports, that belief in personal control over a chronic disease can be maladaptive in the face of repeated failures to gain control over the disease and may be especially harmful, when the disease is more severe and relinquishing some control to others may be adaptive<sup>44</sup>. In a group of inpatients with rheumatoid arthritis, Affleck et al found that the relation between perceived control over illness and mood was moderated by the severity of the disease<sup>45</sup>. Other findings indicate that the perception of control over the course of illness, including human immunodeficiency virus (HIV), is associated with fewer depressive symptoms and less anxiety about death and that realistic acceptance is associated with more comprehensive planning for death, but also with greater hopelessness<sup>46</sup>.

Similarly, beliefs that attribute control to chance factors have been associated with high levels of depression and problems with psychological adjustment<sup>45</sup>. All of these studies suggest that belief in personal control can be helpful. Jenkins and Patterson on the other hand, studied a population of HIV-positive military medical beneficiaries and reported high levels of depression in “believers of control”. They found that locus of control oriented to external persons or forces

generally appeared more adaptive<sup>43</sup>. The relationship between locus of control and mental well-being was tested in this study.

## **1.2 Statement of the Problem**

Chronic pains are prevalent health issue affecting a substantial number of individuals in Ibadan, Oyo State, Nigeria<sup>47</sup>. The experience of living with chronic pains can significantly impact an individual's mental well-being, leading to emotional distress, anxiety, and depression. Several studies have explored the impact of chronic illness and pains on psychological well-being<sup>35,38,43</sup>. For example, it was reported that dealing with the challenges of managing a chronic illness can lead to increased emotional distress. The uncertainty, fear, frustration, and sadness associated with the condition can take a toll on a person's mental health, leading to feelings of anxiety and depression<sup>48</sup>. Also, reduced quality of life has been linked to chronic pain which impacts patients' ability to engage in everyday activities and pursue their interests, affecting their lives. This loss of independence and autonomy can contribute to feelings of helplessness and hopelessness<sup>43</sup>. Despite the increasing recognition of the psychological consequences of chronic pain, there is a paucity of research exploring factors associated with chronic pain and Mental well-being.

Also, while literature exists on the impact of predictors of mental well-being among patients of chronic illnesses for other sample populations, to the best of the knowledge of the researcher, there is no known study for the Nigerian population sample. This is evident in the large number of research work credited to researchers from developed countries that will come up once this topic and other related matters are inputted into any of the online search engines.

Furthermore, there is no known study that has explored the interplay between illness perceptions, coping strategies, locus of control, and their impact on mental well-being among

private hospital patients with chronic pains in the Ibadan, Oyo State, Nigeria. Hence, this study seeks to investigate the relationship between illness perceptions, coping strategies, locus of control, and their impact on mental well-being among private hospital patients with chronic pains in the Ibadan, Oyo State, Nigeria.

### **1.3 Aim and Objectives of the Study**

The major aim of this study is to identify and throw up variables that are associated with the mental well-being of private hospital patients with chronic pains in Ibadan, Oyo State, Nigeria and also to shed light on the complex interplay between illness perceptions, coping strategies, locus of control, and mental well-being in the context of chronic pains.

Specifically, the objectives of the study were to:

- i. explore different illness perceptions on the mental well-being of private hospital patients with chronic pains in the Ibadan, Oyo state, Nigeria;
- ii. examine the role of coping strategies on the mental well-being of private hospital patients with chronic pains in the Ibadan, Oyo state, Nigeria;
- iii. find out the impact of locus of control on the mental well-being of private hospital patients with chronic pains in the Ibadan, Oyo state, Nigeria;
- iv. explore any significant interaction effect of coping strategies and locus of control on the mental well-being of private hospital patients with chronic pain in Ibadan, Oyo State, Nigeria; and
- v. investigate differences in gender on the mental well-being of private hospital patients with chronic pains in the Ibadan, Oyo state, Nigeria.

### **1.4 Research Questions**

The following questions would this research question:

1. In what way would illness perceptions influence mental well-being of private hospital patients with chronic pains in Ibadan, Oyo State, Nigeria?
2. To what extent will coping strategies influence mental well-being of private hospital patients with chronic pains in Ibadan, Oyo State, Nigeria?
3. How will internal and external locus of control influence mental well-being of private hospital patients with chronic pains in Ibadan, Oyo State, Nigeria?
4. Will there be any significant interaction effect of coping strategies and locus of control on mental well-being of private hospital patients with chronic pain in Ibadan, Oyo State, Nigeria?
5. What differences will gender play on mental well-being of private hospital patients with chronic pains in Ibadan, Oyo State, Nigeria?

### **1.5 Hypotheses**

The following hypotheses were tested in the current study:

- Ha1 Participants with high illness perception will score significantly higher on mental well-being than participants with low illness perceptions.
- Ha2 Participants who are high in coping strategies will score significantly higher on mental well-being than participants who are low in coping strategies.
- Ha3 Participants with internal locus of control will score significantly higher on the measure of mental well-being than their counterparts with external locus of control.
- Ha4 There will be significant interaction effect of coping strategies and locus of control on mental well-being.

Ha5 Female participants with chronic pain will score significantly high on mental well-being than male participant.

## **1.6 Significance of the Study**

This study holds significant relevance due to its potential to shed light on the psychological aspects of chronic pain in patients and its impact on mental well-being. Chronic pain is a common medical condition that affects a substantial portion of the population worldwide, leading to significant physical and emotional distress. Therefore, understanding the psychological factors associated with chronic pain in patients can offer valuable insights for healthcare professionals, clinical psychologists, psychotherapists, policymakers, and researchers alike, leading to improved patient care and quality of life.

Specifically, the following are the relevance of the study:

First, identification of intervention support. The understanding that will be gleaned from examining the relationships between variables of interest would aid in providing adequate, tailored, and empirical-based interventions and support for patients with chronic pain. Recognising the psychological impact of chronic pain can help medical practitioners adopt a more holistic approach, encompassing not just physical symptoms, but also addressing mental health aspects, ultimately leading to better patient outcomes and improved adherence to treatment.

Second, by enhancing patient self-care and understanding how the perception of their medical condition, the coping strategy, and the locus of control they adopt affects their mental well-being, the patients will adopt better ways to manage and care for themselves.

Finally, contribution to literature. Empirical literature on the impact of pain on mental well-being is scarce, hence the findings of this present study will contribute to a body of

scientific literature on the psychological aspects of chronic pain. It may lead to further investigations and studies, refining the understanding of the relationship between illness perceptions, coping strategies, locus of control, and mental well-being.

This, in turn, can pave the way for new discoveries and treatment modalities in the field of psychosomatic medicine and pain management.

### **1.7 Scope of the Study**

This study covers illness perceptions, coping strategies, and locus of control as factors influencing mental well-being among private hospital patients with chronic pain. This study focuses basically on patients' perceptions about their illnesses, the strategies used to cope with the illnesses they believe (internal or external) on how to overcome the illnesses in their lives, and the impact on their overall mental well-being.

### **1.8 Limitation of the Study**

This study is limited to private hospital outpatients with chronic pain in Ibadan, Oyo State, Nigeria. The research method is also within the boundary of making an effort to figure out the illness perceptions, coping strategies, and locus of control as predictors of mental well-being among private hospital patients with chronic pain residing in the Ibadan metropolis.

### **1.9 Operational Definition of Terms**

**Illness Perception:** This refers to organized cognitive representations or beliefs that patients have about the nature, consequences, timeline, controllability, and causes of the illness. In this study, Illness perception will be determined and measured using the reversed illness perceptions questionnaire (IPQ), which was developed by Moss-Morris, Horne and Weinman in 2002. IPQ is an 84-item self-completed instrument developed to provide a quantitative measurement of the

components of illness representations, as described by Leventhal's common-sense model (CSM) of self-regulation.

**Coping Strategy:** This refers to the specific psychological or behavioural efforts directed at reducing stress and strain caused by particular stressors. In this study, coping strategy will be determined and measured using the coping strategies scale, which was developed by Hamby, Grych, and Banyard<sup>49</sup>. It is a 13-item scale that assesses cognitive, emotional, and behavioural methods of dealing with problems and stressful situations.

**Locus of Control:** This refers to an individual's beliefs about the extent of control that they have over things that happen to them. In this study, locus of control will be determined and measured using the LOC questionnaire, which was developed by Rotter<sup>49</sup>. It is a 13-item scale that measures generalised expectancies of external control of reinforcement.

**Mental Well-being:** This refers to a holistic positive state of mental health that enable people to cope with life's adversity and being resilient when face with stress, worry, loneliness, anger and sadness. In this study, mental well-being will be determined and measured using the Warwick-Edinburgh mental well-being scale (WEMWBS), which was developed by Tennant et al<sup>50</sup>. It is a 14-item scale, measuring both hedonic and eudemonic aspects of mental health including positive affect (feelings of optimism, cheerfulness, relaxation), satisfying interpersonal relationships and positive functioning (energy, clear-thinking, self-acceptance, personal development, competence, and autonomy)

**Chronic Pain:** This is persistent or intermittent pain that lasts for more than three months. This pain can be there all the time or it may come and go and it can happen anywhere in the body.

**Patient:** This is a person who requires a medical care and attention.

**Gender:** This is a male or female sex, especially when considered with reference to social and cultural differences.

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## Endnotes

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## Chapter Two

### Literature Review

#### 2.1 Conceptual Review

##### 2.1.1 Illness Perceptions

Illness perceptions, as conceptualized by various scholars, capture the organized cognitive representations or beliefs that individuals hold about their illness<sup>1</sup>. This comprehensive framework encompasses several dimensions that shape an individual's understanding and response to their health condition. These dimensions include beliefs regarding the nature, consequences, timeline, controllability, and causes of the illness<sup>1</sup>. Firstly, the aspect of identity involves labeling the symptoms and experiences as indicative of an illness. This recognition is crucial as it signifies the acknowledgment of the presence of a health issue. Secondly, the cause dimension pertains to attributing reasons or explanations for the onset or development of the illness. Understanding the perceived cause of the illness can influence an individual's sense of control and the perceived controllability of their condition<sup>30</sup>. The timeline dimension refers to how individuals perceive the duration or trajectory of their illness. This includes beliefs about whether the illness is acute, chronic, or cyclical, which can impact expectations regarding recovery or management<sup>1</sup>.

Consequences encompass the evaluation of the impact that the illness has on various aspects of life, including physical health, emotional well-being, social interactions, and daily functioning. Perceived consequences can influence emotional reactions, coping strategies, and adjustment to the illness. Lastly, controllability involves beliefs about the ability to manage or control the illness and its outcomes. This dimension encompasses perceptions of personal control,

treatment efficacy, and the possibility of cure or symptom management<sup>2</sup>. According to this conceptualization, illness perceptions play a crucial role in shaping individuals' coping strategies, adherence to treatment regimens, and health-related behaviors. Understanding and addressing these perceptions can inform healthcare interventions aimed at promoting adaptation, adherence, and overall well-being among individuals living with chronic or acute health conditions.

This definition succinctly captures the essence of illness perceptions, describing them as cognitive representations or beliefs that patients hold about their illness. These perceptions encompass a spectrum of dimensions, including beliefs about the nature, causes, consequences, timeline, and controllability of the illness. Overall, the definition provides a clear and concise framework for understanding how individuals interpret and make sense of their health condition<sup>2</sup>.

The strength of this conceptualization lies in several factors. The comprehensiveness of the definition of Illness Perceptions is exemplified by its incorporation of multiple dimensions, namely identity, cause, timeline, consequences, and controllability. This multifaceted approach acknowledges the intricate and nuanced nature of individuals' beliefs regarding their health condition, as well as the diverse ways in which these beliefs influence their thoughts, emotions, and behaviors. Firstly, the dimension of identity refers to the process by which individuals label their symptoms and experiences as indicative of an illness. This recognition of illness identity is a crucial initial step in the illness perception process, as it signifies the acknowledgment of the presence of a health issue and the need for attention or intervention. Secondly, the cause dimension delves into individuals' attributions regarding the reasons or explanations for the onset or development of their illness. This dimension recognizes that individuals may hold varying beliefs about the underlying causes of their condition, which can range from biomedical factors such as genetics or infection to psychosocial factors such as stress or lifestyle habits. The

timeline dimension pertains to individuals' perceptions of the duration or trajectory of their illness. This includes beliefs about whether the illness is acute, chronic, or cyclical in nature, as well as expectations regarding the prognosis, course of treatment, and potential for recovery or remission<sup>1</sup>. Consequences encompass individuals' evaluations of the impact that the illness has on various aspects of their lives, including physical health, emotional well-being, social relationships, and daily functioning. This dimension acknowledges the diverse ways in which illness can affect individuals' quality of life, self-esteem, sense of identity, and overall sense of well-being. Lastly, the controllability dimension addresses individuals' beliefs about their ability to manage or control the illness and its outcomes. This includes perceptions of personal control, treatment efficacy, self-efficacy, and the availability of resources and support systems for coping with the illness<sup>1</sup>.

By incorporating these multiple dimensions, the definition of illness perceptions offers a comprehensive understanding of individuals' beliefs about their illness and its impact on their lives. This multifaceted approach recognizes the complexity and variability of illness perceptions across individuals and contexts, highlighting the need for personalized and patient-centered approaches to healthcare and support. Secondly, patient-centered perspective<sup>68</sup>. The patient-centered perspective embedded within the definition of illness perceptions underscores a fundamental shift in healthcare towards acknowledging and valuing the subjective experiences and perspectives of individuals facing illness. By emphasizing that illness perceptions are held by patients themselves, this approach places the individual at the center of their healthcare journey, recognizing them as experts in their own experiences and needs. In embracing this patient-centered perspective, healthcare providers acknowledge the uniqueness of each patient's experience and the importance of understanding their beliefs, values, and preferences. This

recognition fosters a more collaborative and respectful relationship between patients and providers, where decisions regarding care and treatment are made in partnership, taking into account the patient's goals, priorities, and concerns<sup>69</sup>. Furthermore, the patient-centered perspective acknowledges that patients' beliefs and interpretations of their illness significantly influence their responses to illness and treatment. By recognizing the subjective nature of illness perceptions, healthcare providers gain insight into the patient's emotional, psychological, and behavioral responses to their condition, allowing for more tailored and effective interventions. This approach also highlights the importance of communication and shared decision-making in healthcare. By engaging patients in open and honest discussions about their illness perceptions, providers can address misconceptions, clarify information, and collaboratively develop care plans that align with the patient's values and preferences. Moreover, the patient-centered perspective extends beyond the clinical encounter to encompass the broader healthcare system. It emphasizes the importance of creating supportive environments that empower patients to actively participate in their care, access relevant information and resources, and navigate the complexities of the healthcare system with confidence and autonomy. Overall, the patient-centered perspective inherent in the definition of illness perceptions reflects a commitment to humanizing healthcare, promoting dignity and respect for patients, and ensuring that care is truly person-centered. By valuing patients' experiences and perspectives, healthcare providers can enhance the quality, effectiveness, and outcomes of care, ultimately leading to improved patient satisfaction and well-being. Third, clarity and conciseness. The clarity and conciseness of the definition of Illness Perceptions contribute to its accessibility and utility across diverse audiences within the healthcare landscape. This clarity ensures that the concept can be readily understood and applied by healthcare professionals, researchers, and patients alike, facilitating effective

communication and engagement with the topic. By presenting the definition clearly and succinctly, complex concepts related to illness perceptions are distilled into easily digestible information. This clarity enables healthcare professionals to incorporate the concept into their clinical practice, research endeavors, and educational initiatives with confidence and ease. Whether discussing patient care plans, designing research studies, or delivering educational materials, the straightforward nature of the definition fosters clarity of communication and understanding among healthcare professionals. Furthermore, the simplicity of the definition enhances its accessibility to patients, empowering them to actively participate in discussions about their illness perceptions and engage in shared decision-making with their healthcare providers. Patients can easily grasp the key dimensions of illness perceptions, such as identity, cause, timeline, consequences, and controllability, and recognize the relevance of these dimensions to their own experiences and beliefs about their health condition.

Moreover, the clarity and conciseness of the definition facilitate interdisciplinary collaboration and knowledge exchange within the healthcare community. Researchers from various disciplines can utilize the concept of illness perceptions as a common framework for investigating the psychological, social, and behavioral aspects of illness experience. This shared understanding promotes synergy and innovation in research efforts aimed at improving patient outcomes and quality of care. Additionally, the accessibility of the definition extends beyond healthcare professionals and researchers to include policymakers, educators, and other stakeholders involved in shaping healthcare policy and practice. By providing a clear and concise definition of illness perceptions, policymakers can better understand the importance of addressing patients' beliefs and interpretations in healthcare policy development and resource allocation. The clarity and conciseness of the definition of illness perceptions enhance its

usability and relevance across diverse contexts within the healthcare landscape. By fostering clear communication, understanding, and engagement, this definition serves as a valuable tool for advancing patient-centered care, research, and education in healthcare.

Fourth, the foundation for intervention. The recognition of illness perceptions as influential factors in shaping coping strategies, treatment adherence, and health-related behaviors lays a solid foundation for the development of targeted interventions aimed at enhancing patient well-being and adjustment. By understanding and addressing patients' illness perceptions, healthcare providers can tailor interventions to align with individuals' unique needs, preferences, and beliefs, ultimately fostering positive outcomes and improving the overall quality of care.

One key area where interventions informed by illness perceptions can make a significant impact is in coping strategies. Patients' beliefs about their illness, including its nature, consequences, and controllability, shape how they cope with the challenges associated with their condition<sup>21</sup>. For example, individuals who perceive their illness as controllable may be more likely to engage in problem-solving strategies, while those who perceive it as uncontrollable may benefit from emotion-focused coping techniques. Interventions that target these illness perceptions can help individuals develop adaptive coping strategies that enhance resilience and promote psychological well-being. Similarly, addressing illness perceptions can also improve treatment adherence. Patients' beliefs about the necessity and effectiveness of their treatment, as well as their concerns about potential side effects or long-term consequences, influence their adherence to prescribed regimens. Interventions that address misconceptions, provide accurate information, and address patients' concerns can improve treatment adherence and optimize health outcomes. Moreover, interventions informed by illness perceptions can promote health-related behaviors that support overall well-being. By understanding patients' beliefs about their illness

and its impact on their health, healthcare providers can tailor interventions to address specific areas of concern and promote behaviors that enhance physical and emotional health<sup>29</sup>. For example, individuals who perceive their illness as having serious consequences may be motivated to adopt healthier lifestyle habits, such as exercise and nutrition, to mitigate these risks. The recognition of illness perceptions as a foundation for intervention underscores the importance of taking a patient-centered approach to care. By understanding and addressing patients' beliefs and interpretations of their illness, healthcare providers can develop personalized care plans that empower individuals to manage their illness in a positive light.

Despite the strengths inherent in the concept of illness perceptions, several areas of concern warrant attention. While the definition provides a foundational understanding of illness perceptions, it could benefit from further elaboration on the specific components of these cognitive representations. For example, while it mentions key dimensions such as identity, cause, timeline, consequences, and controllability, it lacks detailed explanations of each dimension and how they interact to shape individuals' perceptions of their illness experiences<sup>1</sup>. Furthermore, the definition places a primary focus on "cognitive representations," thereby overlooking the crucial role of emotions in shaping patients' perceptions of their illnesses. By incorporating the emotional dimension of illness perceptions, the definition could be strengthened to provide a more holistic understanding of how individuals interpret and respond to their health conditions. Emotions such as fear, anxiety, hope, and sadness can profoundly influence individuals' perceptions of their illnesses, affecting their coping strategies, treatment adherence, and overall well-being<sup>69</sup>. In this study, the researchers harnessed the strengths of the existing conceptualization of illness perceptions while addressing the observed gaps. This would involve conducting a comprehensive examination of the concept, exploring both its cognitive and

emotional dimensions, and their interplay in shaping patients' illness experiences. By adopting a multidimensional approach, the researcher could gain deeper insights into the complexities of illness perceptions and their implications for patient care and outcomes. Additionally, the study explored potential interventions aimed at addressing both cognitive and emotional aspects of illness perceptions to promote positive adjustment and well-being among patients. By developing tailored interventions that address patients' beliefs, emotions, and coping strategies, healthcare providers could enhance patient-centered care and improve outcomes for individuals living with chronic or acute health conditions. In sum the concept of illness perceptions offers valuable insights into patients' interpretations of their health conditions, there are opportunities for further refinement and exploration. By acknowledging and addressing the cognitive and emotional dimensions of illness perceptions, researchers and healthcare providers can develop more comprehensive and effective approaches to supporting patients in their illness experiences.

### **2.1.2 Coping Strategies**

Coping strategies, sometimes called “coping skills/styles,” has been conceptualised as the specific psychological or behavioural efforts directed at reducing stress and strain caused by particular stressors<sup>2</sup>. This definition emphasises that coping strategies are essential psychological tools used by individuals to manage and adapt to stress, adversity, and challenging life circumstances<sup>70</sup>. It was stated that coping strategies can be broadly classified into problem-focused and emotion-focused approaches. Problem-focused coping involves efforts to directly address the stressor or problem at hand, often through problem-solving and seeking support. Emotion-focused coping, on the other hand, centres on managing the emotional distress

associated with the stressor, focusing on regulating emotions or finding ways to reduce the emotional impact<sup>16</sup>.

The conceptualisation of coping strategies as "specific psychological or behavioural efforts directed at reducing stress and strain caused by particular stressors" is a concise and accurate definition that captures the core essence of coping<sup>16</sup>. It emphasises two fundamental aspects of coping: its targeted nature and its goal of mitigating the negative effects of stressors. The strength of this conceptualization of coping strategies lies in the following factors:

First, is clarity. The clarity of the definition of coping strategies is a notable strength, as it offers a clear and straightforward understanding of how individuals manage and navigate the challenges they encounter. By delineating coping as purposeful and intentional behavior aimed at addressing specific stressors, the definition leaves little room for ambiguity and provides a concise framework for understanding how individuals respond to adversity. The emphasis on purposeful and intentional action highlights the proactive nature of coping, underscoring that individuals actively engage in strategies to manage stressors and alleviate their impact on well-being. This clarity helps individuals recognize and understand their coping behaviors, empowering them to take ownership of their responses to challenging situations. Moreover, by focusing on specific stressors, the definition of coping strategies emphasizes the targeted nature of coping behaviors. Rather than employing generic or one-size-fits-all approaches, individuals tailor their coping strategies to the unique demands of each stressor, thereby enhancing their effectiveness in addressing the challenges they face. This specificity enables individuals to deploy coping resources more efficiently and adaptively, leading to better outcomes and improved resilience in the face of adversity. The clarity of the definition of coping strategies facilitates a deeper understanding of how individuals navigate stress and adversity in their lives.

By providing a clear framework for conceptualizing coping behaviors as purposeful, intentional, and targeted responses to specific stressors, the definition empowers individuals to actively engage in strategies that promote well-being and resilience<sup>71</sup>.

Secondly, focus on stress reduction. The focus on stress reduction inherent in the definition of coping strategies is a fundamental aspect that underscores the primary objective of coping behaviors<sup>70</sup>. By emphasizing the aim of coping as reducing stress and strain caused by stressors, the definition highlights the adaptive nature of coping and the importance of finding constructive ways to manage difficult situations. The recognition of stress reduction as a key objective of coping strategies reflects an understanding of the detrimental effects that prolonged or excessive stress can have on individuals' physical, emotional, and psychological well-being. Coping behaviors are viewed as proactive responses aimed at alleviating the negative impact of stressors, thereby promoting resilience and adaptive functioning in the face of adversity<sup>70</sup>. Furthermore, by focusing on stress reduction, the definition emphasizes the role of coping strategies in fostering psychological well-being and enhancing overall quality of life. Coping behaviors are seen as constructive and proactive efforts to mitigate the harmful effects of stress, rather than passive or avoidant responses that may exacerbate distress in the long run. Moreover, the emphasis on stress reduction underscores the dynamic and flexible nature of coping strategies, which can vary depending on the nature of the stressor and individual preferences and resources. Coping behaviors may encompass a wide range of adaptive strategies, including problem-solving, seeking social support, engaging in relaxation techniques, and reframing negative thoughts, all aimed at reducing stress and promoting emotional resilience<sup>67</sup>. The focus on stress reduction within the definition of coping strategies highlights the adaptive and proactive nature of coping behaviors. By acknowledging the importance of finding constructive ways to manage stressors,

the definition provides a framework for understanding how individuals can effectively navigate challenging situations and promote their well-being in the process.

Thirdly, the inclusion of both psychological and behavioral dimensions in the conceptualization of coping strategies represents a comprehensive understanding of how individuals manage stress and adversity. By recognizing that coping can manifest in various forms, the conceptualization acknowledges the multifaceted nature of coping responses and the diverse ways in which individuals adaptively navigate challenging situations. The psychological dimension of coping strategies encompasses internal processes and cognitive mechanisms that individuals employ to regulate their emotions, thoughts, and perceptions in response to stressors<sup>53</sup>. Psychological efforts may include cognitive reappraisal, where individuals reinterpret the meaning of a stressor in a more positive or adaptive light, acceptance of the situation as it is without attempting to change it, or emotional regulation techniques aimed at modulating emotional arousal and intensity. These psychological coping strategies reflect individuals' efforts to manage their internal experiences and promote emotional well-being in the face of adversity. In contrast, the behavioral dimension of coping strategies involves outward actions and behaviors that individuals engage in to address or mitigate the impact of stressors on their lives. Behavioral efforts may encompass problem-solving, where individuals actively seek solutions to the challenges they encounter, seek social support from friends, family, or other sources, engage in leisure activities or hobbies to promote relaxation and enjoyment or adopt healthy lifestyle behaviors such as exercise or mindfulness practices. These behavioral coping strategies reflect individuals' efforts to take practical steps to manage external stressors and enhance their resilience and adaptive functioning. By encompassing both psychological and behavioral aspects, the conceptualization of coping strategies acknowledges the diversity of coping responses and

the complex interplay between internal processes and external behaviors in the coping process. This broad perspective recognizes that individuals may draw on a range of coping strategies depending on the nature of the stressor, their personal preferences and resources, and the specific context in which they find themselves. By embracing this diversity, the conceptualization provides a comprehensive framework for understanding and supporting individuals in effectively managing stress and promoting well-being<sup>54</sup>.

This conceptualisation although informative, is not without weaknesses. A few of them are as follows: Firstly, limited focus on individual differences. While the definition of coping strategies underscores the universal goal of reducing stress caused by specific stressors, it may inadvertently overlook the significant individual differences that exist in coping styles, preferences, and effectiveness<sup>70</sup>. People's coping responses are shaped by a myriad of factors, including personality traits, cognitive appraisals, past experiences, and cultural backgrounds. This limited focus on "specific" efforts may downplay the importance of understanding and acknowledging these individual variations in coping. Individual differences in coping styles can be profound, with some individuals gravitating towards problem-focused coping strategies that involve actively seeking solutions to stressors, while others may prefer emotion-focused strategies that prioritize managing emotional reactions to stress. Moreover, personality traits such as extraversion, neuroticism, and resilience can influence the types of coping strategies individuals are inclined to use and their effectiveness in doing so<sup>30</sup>.

Additionally, cognitive appraisals play a crucial role in shaping coping responses, as individuals' interpretations of stressors and their perceived ability to manage them can significantly influence their coping behaviors<sup>70</sup>. For example, individuals who perceive stressors as challenges to be overcome may be more likely to engage in approach-oriented coping

strategies, whereas those who perceive stressors as threats may be more prone to avoidance-oriented coping strategies. Past experiences also inform coping styles, as individuals draw upon their previous successes and failures in managing stress to inform their current coping behaviors. Cultural backgrounds further shape coping responses, with cultural norms, values, and beliefs influencing the types of coping strategies that are deemed acceptable or effective within a given cultural context<sup>14</sup>. By focusing solely on "specific" coping efforts, the definition may fail to adequately capture the nuanced ways in which individuals navigate stress and adversity. Emphasizing the universality of coping efforts to reduce stress, while important, should not overshadow the need to recognize and understand individual differences in coping styles, preferences, and effectiveness. Acknowledging these variations is essential for tailoring interventions and support services to individuals' unique needs and promoting positive coping outcomes across diverse populations.

Secondly, overemphasis on stress reduction. While the definition of coping strategies rightly highlights the importance of stress reduction as a primary goal, it may inadvertently overemphasize this aspect to the exclusion of other crucial functions of coping<sup>13</sup>. While stress reduction is undeniably a common and essential component of coping, it represents only one facet of the broader spectrum of coping functions. Coping encompasses a range of adaptive responses aimed not only at reducing stress and strain but also at facilitating adaptation, fostering resilience, promoting personal growth, and finding meaning in adversity. While stress reduction focuses on alleviating immediate distress, other coping functions may involve navigating challenges in a way that promotes long-term adjustment and well-being. For example, coping strategies aimed at adaptation may involve reframing negative experiences in a more positive light, finding alternative solutions to persistent problems, or adjusting one's goals and

expectations in response to changing circumstances. These adaptive coping responses may not necessarily lead to immediate stress reduction but can contribute to long-term resilience and well-being by fostering flexibility and adaptability in the face of adversity. Similarly, coping strategies focused on personal growth may involve seeking opportunities for self-reflection, learning, and self-improvement in the midst of challenging circumstances. These coping efforts may not eliminate stressors entirely but can lead to transformative experiences that enhance individuals' sense of self-efficacy, purpose, and fulfillment.

Moreover, coping strategies aimed at finding meaning in adversity recognize that some stressors may be unavoidable or beyond one's control. In such cases, coping involves reframing adversity as an opportunity for personal growth, spiritual development, or connection with others, rather than solely focusing on stress reduction<sup>71</sup>. By broadening the conceptualization of coping beyond mere stress reduction, we can better capture the diverse ways in which individuals navigate and make sense of challenging experiences. While stress reduction remains an important goal of coping, it is essential to recognize and appreciate the multifaceted nature of coping functions, which encompass adaptation, resilience, personal growth, and finding meaning in adversity.

Thirdly, lack of consideration for long-term outcomes. The definition of coping strategies focuses on the immediate objective of alleviating stress and strain resulting from specific stressors, yet it overlooks the critical aspect of considering the long-term repercussions of these coping efforts. While stress reduction is undoubtedly a central goal of coping, it's essential to recognize that the impact of coping strategies can extend far beyond the immediate moment and may have enduring effects on individuals' well-being, resilience, and adaptive functioning over time. By failing to explicitly address the long-term outcomes of coping strategies, the definition

neglects to acknowledge their potential to influence individuals' psychological adjustment and overall quality of life in the extended trajectory. Coping efforts aimed solely at providing short-term relief from stressors may inadvertently miss opportunities to develop sustainable coping skills and resources that foster resilience and psychological health over the long term. Moreover, coping strategies that prioritize immediate stress reduction may inadvertently hinder individuals' ability to effectively navigate future challenges and adversities by neglecting the development of adaptive coping mechanisms that promote sustained coping and adjustment. A more comprehensive understanding of coping acknowledges the importance of fostering coping strategies that not only address immediate stressors but also equip individuals with the skills and resources needed to cope effectively with ongoing and future stressors.

Furthermore, the definition's oversight of the long-term consequences of coping strategies fails to recognize the potential for coping efforts to contribute to positive psychological outcomes such as post-traumatic growth, resilience, and flourishing in the face of adversity. Coping strategies that foster meaning-making, personal growth, and a sense of mastery over challenging circumstances can have profound and enduring effects on individuals' well-being and overall quality of life in the long term. Conclusively, while the definition of coping strategies appropriately emphasizes the importance of stress reduction, it falls short of explicitly addressing the broader and longer-term outcomes of coping efforts. By considering the enduring impact of coping strategies on individuals' resilience, adaptation, and psychological well-being over time, we can develop a more comprehensive understanding of coping and its role in promoting positive outcomes in the face of adversity.

### **2.1.3 Locus of Control (LOC)**

The term “locus of control” has been conceptualised as an individual's beliefs about the extent of control that they have over things that happen to them<sup>3</sup>. It proposes that health behaviours are predicted by the extent to which an individual believes they can perform the behaviour and that it will be effective<sup>4</sup>. The conceptualisation of locus of control as "an individual's beliefs about the extent of control that they have over things that happen to them" is a foundational and widely accepted definition in the field of psychology. It provides a clear and concise description of the central concept, which has been extensively studied and applied in various domains. Although, a clear-cut concept, it has some strengths and weaknesses. Some of the strengths include the following: Firstly, it is simple and easy to understand. The simplicity and accessibility of the definition of locus of control make it highly effective in conveying the core concept to a wide audience. By presenting the idea in straightforward language, the definition ensures that it can be easily understood by individuals with varying levels of familiarity with psychology, including researchers, practitioners, and those with limited background in the field. The clarity of the definition allows individuals to grasp the fundamental concept of locus of control without the need for specialized knowledge or extensive training in psychology. This accessibility is particularly valuable in educational settings, where instructors can introduce the concept to students across disciplines, fostering a basic understanding of psychological principles and their applications. Furthermore, the simplicity of the definition enhances its utility in practical contexts, such as counseling, therapy, and organizational development. Practitioners can use the concept of locus of control to help clients and employees understand their beliefs about the causes of events in their lives and explore how these beliefs may influence their behavior, emotions, and outcomes.

Additionally, the straightforward language of the definition facilitates communication and collaboration among professionals from diverse fields who may be interested in applying the concept of locus of control in their work. Researchers studying topics ranging from health behavior to educational attainment can easily incorporate the concept into their studies, enhancing the interdisciplinary exchange of ideas and insights. Moreover, the accessibility of the definition empowers individuals to reflect on their own locus of control and its implications for their lives. By understanding whether they attribute control over events to internal or external factors, individuals can gain insight into their decision-making processes, coping strategies, and overall well-being, potentially leading to positive personal growth and development. In sum, the simplicity and ease of understanding of the definition of locus of control make it a valuable tool for conveying complex psychological concepts to a broad audience. By making the concept accessible to individuals from diverse backgrounds and disciplines, the definition facilitates learning, application, and personal reflection, ultimately contributing to greater understanding and well-being.

Secondly, emphasis on beliefs. The emphasis on beliefs inherent in the conceptualization of locus of control is a key strength, as it underscores the psychological nature of the construct and highlights the subjective aspect of individuals' perceptions of control over life events. By emphasizing that locus of control is rooted in an individual's beliefs, the conceptualization recognizes that control is not an objective reality but rather a subjective interpretation of one's experiences. This focus on beliefs acknowledges that individuals' perceptions of control are shaped by their cognitive processes, attitudes, and interpretations of the world around them. Beliefs about control may be influenced by a variety of factors, including past experiences, cultural influences, and socialization processes. For example, individuals who have experienced

success and positive outcomes in the past may develop internal beliefs about control, attributing their achievements to their efforts and abilities. In contrast, those who have faced repeated setbacks or adversity may develop external beliefs, attributing outcomes to factors outside of their control.

Moreover, by highlighting the subjective aspect of control beliefs, the conceptualization of locus of control recognizes that individuals may vary in their interpretations of control over different domains of life. For example, an individual may believe they have internal control over their academic performance but external control over their health outcomes. These beliefs can significantly impact individuals' attitudes, behaviors, and emotional responses in various life situations. Furthermore, the focus on beliefs in the conceptualization of locus of control emphasizes the role of cognition in shaping behavior and psychological functioning. Individuals' beliefs about control influence their coping strategies, decision-making processes, and overall well-being. By understanding and addressing these beliefs, individuals can gain insight into their thought patterns and develop more adaptive ways of coping with life's challenges. The emphasis on beliefs in the conceptualization of locus of control enriches our understanding of how individuals perceive and interpret control over life events. By recognizing the subjective nature of control beliefs, the conceptualization highlights the complex interplay between cognition, perception, and behavior in shaping individuals' experiences of control and influence in their lives.

Thirdly, application versatility. The versatility of the locus of control concept is highlighted by its applicability across diverse contexts and populations. The definition offers a robust framework that can be applied effectively in various fields, including personality psychology, educational psychology, health psychology, and organizational behavior, making it

a valuable tool for studying human behavior and motivation across different domains. In personality psychology, the locus of control concept serves as a fundamental construct for understanding individual differences in personality traits, particularly in terms of individuals' beliefs about the extent to which they control the outcomes in their lives. Researchers and practitioners use measures of locus of control to assess personality characteristics and predict various behaviors, such as achievement motivation, risk-taking propensity, and coping strategies. In educational psychology, the locus of control concept is applied to understand students' beliefs about their academic success and failure. Individuals with an internal locus of control are more likely to attribute academic achievements to their own efforts and abilities, whereas those with an external locus of control may attribute success or failure to external factors such as luck or the difficulty of the task. Understanding students' locus of control beliefs can inform educational interventions aimed at promoting academic motivation, self-efficacy, and achievement. In health psychology, the locus of control concept is utilized to study individuals' beliefs about their health outcomes and behaviors. Internal locus of control beliefs are associated with proactive health behaviors, such as exercise, healthy eating, and adherence to medical treatments, whereas external locus of control beliefs may lead to passive health behaviors and reduced engagement in health-promoting activities. Health interventions targeting individuals' locus of control beliefs aim to empower individuals to take an active role in managing their health and well-being.

In organizational behavior, the locus of control concept is applied to understand employees' beliefs about their work environment and job outcomes. Internal locus of control beliefs are associated with a sense of personal responsibility, initiative, and job satisfaction, whereas external locus of control beliefs may lead to feelings of powerlessness and reduced motivation. Organizational interventions focus on fostering an internal locus of control among

employees to enhance job performance, productivity, and organizational commitment. The versatility of the locus of control concept lies in its ability to provide a common framework for understanding human behavior and motivation across diverse contexts and populations. By applying the concept in various fields, researchers and practitioners can gain insights into the psychological mechanisms underlying individuals' beliefs, attitudes, and behaviors, ultimately leading to more effective interventions and strategies for promoting well-being and success.

However, there are areas in which the construct can be improved a few of them are as follows:

Firstly, there is a need for cultural and contextual considerations. Recognizing the influence of culture and context on locus of control beliefs is crucial for developing a comprehensive understanding of this construct. Cultural norms, societal structures, and contextual factors can significantly shape individuals' perceptions of control over their lives, influencing the manifestation and interpretation of locus of control beliefs. Therefore, incorporating cultural and contextual considerations is essential for ensuring the validity and applicability of the concept across diverse populations and settings. Cultural norms play a significant role in shaping individuals' beliefs about control and influence. In some cultures, collectivist values may emphasize the importance of external factors such as fate, luck, or social connections in determining life outcomes, leading to a more external locus of control orientation. In contrast, individualistic cultures may promote beliefs in personal agency, self-determination, and internal control over life events, resulting in a more internal locus of control orientation. Accounting for these cultural differences is essential for understanding variations in locus of control beliefs across different cultural groups. Societal structures and contextual factors also influence individuals' perceptions of control.

Socioeconomic status, access to resources, political systems, and historical experiences can all shape individuals' beliefs about their ability to control and influence outcomes in their lives. For example, individuals living in marginalized or oppressed communities may develop more external locus of control beliefs as a coping mechanism in response to systemic barriers and inequalities. Conversely, individuals with greater access to resources and opportunities may be more likely to perceive themselves as having internal control over their lives. Considering cultural and contextual factors is essential for ensuring the cross-cultural validity of the locus of control construct. By examining how cultural norms and societal contexts shape individuals' beliefs about control, researchers and practitioners can develop more culturally sensitive measures and interventions that accurately capture and address the diversity of locus of control orientations across different populations. Moreover, acknowledging the influence of culture and context enhances our understanding of the complex interplay between individual psychology and sociocultural factors in shaping human behavior and beliefs. Ultimately, incorporating cultural and contextual considerations enriches our understanding of locus of control and promotes more inclusive and culturally competent research and practice in psychology.

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Thirdly, the relationship between coping and behaviour. The relationship between locus of control and coping strategies, decision-making, and behavioral outcomes is complex and

multifaceted, with locus of control beliefs playing a significant role in shaping individuals' responses to challenges and opportunities in their lives. Understanding this relationship can offer valuable insights for interventions and support aimed at promoting adaptive coping and positive behavioral outcomes. Locus of control beliefs influences individuals' coping strategies by shaping their perceptions of control over stressors and their ability to effectively manage them. Individuals with an internal locus of control orientation tend to believe that they have control over their own destinies and are more likely to use active coping strategies, such as problem-solving and seeking social support, to address challenges. In contrast, individuals with an external locus of control orientation may perceive themselves as having little control over their circumstances and may rely on more passive coping strategies, such as avoidance or resignation. Understanding individuals' locus of control orientations can inform the selection of coping interventions tailored to their beliefs and preferences, thereby enhancing the effectiveness of coping support. Moreover, locus of control beliefs influence decision-making processes by shaping individuals' perceptions of the likelihood of success and failure in various endeavors. Individuals with an internal locus of control orientation are more likely to take personal responsibility for their decisions and actions, believing that their efforts will lead to positive outcomes. In contrast, individuals with an external locus of control orientation may be more likely to attribute success or failure to external factors beyond their control, leading to a more passive approach to decision-making. Recognizing individuals' locus of control orientations can help identify potential barriers to effective decision-making and guide interventions aimed at promoting a sense of agency and empowerment in decision-making processes.

Furthermore, locus of control beliefs have implications for a wide range of behavioral outcomes, including academic achievement, health behaviors, work performance, and

interpersonal relationships. Individuals with an internal locus of control orientation are more likely to exhibit proactive behaviors, take initiative, and persist in the face of challenges, leading to greater success and satisfaction in various domains of life. In contrast, individuals with an external locus of control orientation may be more prone to feelings of helplessness, passivity, and learned helplessness, which can impede their ability to achieve their goals and fulfill their potential. Understanding individuals' locus of control orientations can inform the design of interventions aimed at promoting positive behavioral outcomes by fostering a sense of personal agency, empowerment, and resilience. The relationship between locus of control and coping strategies, decision-making, and behavioral outcomes is dynamic and reciprocal, with individuals' beliefs about control influencing their coping responses, decision-making processes, and ultimately, their behavioral outcomes. Recognizing and understanding this relationship can inform the development of interventions and support strategies that empower individuals to effectively cope with challenges, make informed decisions, and achieve positive behavioral outcomes in their lives.

#### **2.1.4. Mental Well-being**

The concept of mental well-being transcends traditional biomedical notions of health by encompassing various dimensions of human experience beyond physiological aspects. It integrates emotional, social, and spiritual dimensions, reflecting a holistic understanding of human flourishing. Mental well-being is not merely the absence of illness but entails positive human functioning and thriving. As Chan highlights, mental well-being entails more than just survival; it encompasses positive traits and qualities that contribute to human flourishing. These may include resilience, optimism, self-esteem, purpose in life, and a sense of belonging. Mental

well-being is characterized by the ability to cope with stress, maintain satisfying relationships, adapt to change, and experience a sense of fulfillment and meaning in life.

Emotionally, mental well-being involves experiencing a wide range of positive emotions, such as happiness, joy, gratitude, and contentment, while also acknowledging and effectively managing negative emotions. Socially, it involves fostering meaningful connections with others, experiencing social support, and engaging in healthy social interactions and relationships. Spiritually, it encompasses finding meaning, purpose, and connection to something greater than oneself, whether through religious beliefs, personal values, or a sense of transcendence. By conceptualizing mental well-being in this holistic manner, we recognize that it is not a static state but a dynamic process that fluctuates over time and is influenced by various factors, including individual characteristics, life experiences, social environment, and cultural context. Promoting mental well-being involves fostering resilience, building supportive environments, promoting social inclusion, addressing stigma, and providing access to mental health resources and services. Mental well-being encompasses positive human functioning across emotional, social, and spiritual dimensions. It emphasizes not only the absence of illness but also the presence of positive qualities and experiences that contribute to human flourishing and overall quality of life. By adopting a holistic perspective on Mental well-being, we can better understand and promote the factors that support individuals' mental health and well-being<sup>5</sup>.

The definition of mental well-being provided is indeed comprehensive and takes a holistic approach to understanding mental health. By emphasizing the positive aspects of human functioning, it acknowledges that Mental well-being encompasses more than just the absence of illness or dysfunction. Instead, it recognizes that Mental well-being is a multidimensional construct that includes emotional, social, and spiritual dimensions, in addition to physiological or

biomedical factors. This holistic perspective on mental well-being aligns with contemporary understandings of health as not merely the absence of disease, but as a state of complete physical, mental, and social well-being. It underscores the importance of considering the whole person and their experiences, rather than focusing solely on pathology or deficits. By recognizing the positive traits and qualities associated with mental well-being, such as resilience, optimism, and a sense of purpose, the definition highlights the potential for individuals to thrive and flourish, even in the face of challenges or adversity. This reframing of mental health from a deficit-based model to a strengths-based approach promotes empowerment, resilience, and self-determination.

Moreover, the acknowledgment that mental well-being extends beyond a narrow view of health limited to physical or biomedical factors is particularly important in addressing the complexities of mental health and well-being. It opens the door to exploring the influence of social determinants, cultural factors, environmental conditions, and personal beliefs on individuals' mental health experiences. The definition of mental well-being provided offers a comprehensive and inclusive framework for understanding and promoting mental health and well-being. By taking a holistic approach and emphasizing the positive aspects of human functioning, it encourages a shift towards a more holistic, person-centered approach to mental health promotion and intervention.

The strength of this concept lies in the following factors: Firstly, it encompasses a holistic perspective. The definition of mental well-being embraces a holistic perspective by acknowledging the interconnectedness of multiple dimensions, including emotional, social, and spiritual aspects. This comprehensive outlook recognizes that mental health is influenced by a multitude of factors beyond purely biomedical considerations and emphasizes that well-being encompasses more than just the absence of illness. By considering emotional dimensions, the

definition highlights the importance of understanding and addressing individuals' emotional experiences, such as happiness, fulfillment, and the ability to cope with stressors. Social dimensions are also recognized, emphasizing the significance of interpersonal relationships, social support networks, and a sense of belonging in contributing to mental well-being. Additionally, the inclusion of spiritual dimensions underscores the role of meaning, purpose, and connection to something greater than oneself in promoting mental health and resilience.

By embracing this holistic perspective, the definition acknowledges that mental well-being is a complex and multifaceted construct that is influenced by a variety of interconnected factors. It emphasizes the importance of addressing the broader context in which individuals live and experience their lives, including social, cultural, and environmental factors. This holistic approach underscores the need for interventions and support systems that consider the whole person and their unique circumstances, rather than focusing solely on symptom management or pathology. The adoption of a holistic perspective in the definition of mental well-being reflects a recognition of the multidimensional nature of mental health and the importance of considering a range of factors in promoting well-being and resilience. By embracing this comprehensive outlook, individuals, practitioners, and policymakers can work together to create environments and systems that support mental health and foster flourishing across the lifespan.

Secondly, positive orientation. The characterization of mental well-being as "positive human functioning" represents a transformative shift in how we perceive mental health. This framing goes beyond the traditional view of mental health as merely the absence of mental illness, instead emphasizing the importance of cultivating positive psychological states and experiences. By adopting a positive orientation, the definition encourages a strengths-based perspective that focuses on enhancing individuals' well-being and promoting psychological

flourishing. This reframing of mental well-being underscores the significance of acknowledging and nurturing individuals' strengths, virtues, and positive qualities. It highlights the potential for growth, resilience, and self-actualization, even in the presence of adversity or challenges. Rather than solely addressing deficits or pathology, a positive orientation directs attention toward fostering positive emotions, relationships, and personal growth. Furthermore, by emphasizing positive human functioning, the definition promotes a holistic approach to mental health that considers the full spectrum of human experiences. It recognizes that well-being encompasses not only the absence of distress but also the presence of positive states such as happiness, fulfillment, and purpose. This holistic perspective encourages interventions and practices that support individuals in leading meaningful and fulfilling lives.

Moreover, the adoption of a positive orientation in the definition of mental well-being aligns with contemporary research in positive psychology, which emphasizes the importance of cultivating strengths, resilience, and well-being. This approach emphasizes the promotion of positive mental health outcomes and the prevention of mental illness, thereby contributing to a more comprehensive and proactive approach to mental health promotion. By describing mental well-being as "positive human functioning," the definition encourages a shift towards a strengths-based perspective that prioritizes the cultivation of positive psychological states and experiences. This positive orientation not only enhances our understanding of mental health but also informs interventions and practices aimed at promoting well-being and flourishing across individuals and communities.

Thirdly, the emphasis on social and emotional aspects in the definition of mental well-being underscores the significance of relationships and emotional intelligence in promoting overall well-being. By acknowledging the importance of these dimensions, the definition

recognizes that mental health is intricately linked to social connections, support systems, and emotional regulation.

Social connections play a vital role in mental well-being, providing individuals with a sense of belonging, support, and companionship. Strong social networks have been consistently linked to better mental health outcomes, including lower rates of depression, anxiety, and stress. By fostering meaningful relationships with others, individuals can experience increased resilience, happiness, and overall life satisfaction.

Additionally, emotional intelligence, or the ability to recognize, understand, and manage one's own emotions as well as those of others, is a key component of mental well-being. Effective emotional regulation allows individuals to cope with stressors, navigate interpersonal relationships, and adapt to changing circumstances. By developing emotional intelligence skills, individuals can enhance their capacity to cope with challenges, build healthy relationships, and thrive in various aspects of their lives.

Furthermore, the inclusion of emotional and social dimensions in the definition of mental well-being highlights the importance of taking a holistic approach to mental health. Rather than focusing solely on symptom management or pathology, this approach considers the broader context in which individuals live and experience their lives. By addressing social and emotional needs, interventions and support systems can promote resilience, foster positive relationships, and enhance overall well-being. The emphasis on social and emotional aspects in the definition of mental well-being underscores the critical role of relationships and emotional intelligence in promoting positive mental health outcomes. By recognizing the importance of these dimensions, we can develop more comprehensive approaches to mental health promotion and intervention that address the social and emotional needs of individuals and communities.

Despite the strengths of this conceptualisation of mental well-being, there are other areas in the concept that can be improved.

Firstly, Understanding the interactions and interconnections between the emotional, social, and spiritual dimensions of Mental well-being is essential for comprehensively addressing individuals' holistic well-being. These dimensions are not isolated; instead, they interact and influence each other in complex ways, shaping individuals' overall mental health and quality of life. Exploring the synergies between these dimensions can provide valuable insights into mental health promotion and intervention strategies. Emotional well-being is closely intertwined with social and spiritual dimensions. Positive emotional experiences, such as joy, gratitude, and contentment, often arise from meaningful social interactions and spiritual connections. Strong social support networks provide individuals with emotional validation, empathy, and comfort during times of distress, contributing to their overall emotional resilience and well-being. Similarly, spiritual practices and beliefs can offer individuals a sense of peace, purpose, and hope, enhancing their emotional well-being and coping abilities.

Social well-being, in turn, is influenced by emotional and spiritual dimensions. Emotional intelligence and regulation skills are crucial for navigating social interactions effectively, fostering empathy, understanding, and communication in relationships. Additionally, spiritual beliefs and practices can foster a sense of community, belonging, and shared values, facilitating meaningful connections and social support networks. These emotional and spiritual resources can strengthen individuals' social connections and contribute to their sense of belonging and inclusion. Similarly, spiritual well-being is intertwined with emotional and social dimensions. Spirituality often provides individuals with a framework for making sense of life's experiences, including their emotions and relationships. Spiritual practices, such as meditation, prayer, or

mindfulness, can promote emotional regulation, stress reduction, and psychological resilience. Additionally, spiritual communities and traditions offer social support, companionship, and opportunities for meaningful connections with others, further enhancing individuals' overall well-being.

By recognizing the interactions between emotional, social, and spiritual dimensions, mental health promotion efforts can adopt a more holistic approach that addresses individuals' multifaceted needs. Interventions aimed at promoting mental well-being can incorporate strategies that target all three dimensions simultaneously, fostering synergies and reinforcing positive outcomes. For example, interventions may involve group therapy sessions that provide emotional support, opportunities for social connection, and spiritual reflection. By integrating these dimensions, mental health promotion efforts can be more effective in enhancing individuals' overall well-being and resilience.

Secondly, Acknowledging the influence of cultural norms, beliefs, and social contexts on mental well-being is crucial for gaining a comprehensive understanding of mental health. Cultural and contextual factors play a significant role in shaping individuals' perceptions of well-being, expressions of distress, help-seeking behaviors, and responses to interventions. Therefore, addressing cultural diversity and context-specific factors is essential for ensuring the relevance, effectiveness, and sensitivity of mental health interventions. Cultural norms and values can profoundly impact individuals' conceptualizations of mental health and well-being. Different cultures may have varying beliefs about the causes of mental illness, the role of family and community support, and acceptable ways of expressing emotions. For example, some cultures may prioritize collectivism and interdependence, emphasizing the importance of family cohesion and social harmony in promoting well-being. In contrast, others may emphasize individualism

and autonomy, valuing personal achievement and self-expression. Understanding these cultural nuances is essential for tailoring interventions that respect individuals' cultural identities and preferences.

Moreover, social contexts, including socioeconomic status, access to resources, discrimination, and social support networks, can significantly influence individuals' mental health experiences. Marginalized communities may face systemic barriers to accessing mental health services, experience stigma and discrimination, and lack supportive social networks. In contrast, privileged individuals may have greater access to resources, social support, and opportunities for self-care. Recognizing these disparities and addressing social determinants of mental health is essential for promoting equity and inclusivity in mental health interventions. Cultural and contextual considerations also influence the delivery and implementation of mental health services. Effective interventions should be culturally sensitive, linguistically appropriate, and tailored to meet the unique needs of diverse populations. This may involve incorporating cultural practices, traditions, and beliefs into treatment approaches, training culturally competent providers, and collaborating with community leaders and organizations to ensure culturally responsive care. Additionally, interventions should consider the structural and systemic factors that contribute to mental health disparities, advocating for policies and practices that promote equity and social justice. Recognizing the influence of cultural and contextual factors on mental well-being is essential for developing culturally sensitive, contextually relevant, and effective mental health interventions. By addressing cultural diversity and context-specific factors, mental health practitioners and policymakers can better meet the diverse needs of individuals and communities, promote inclusivity and equity, and enhance the overall well-being of populations worldwide.

In summary, the concept of the variables in this study captures the ideas it intends to examine. They also possess strengths and some areas of improvement. The researcher, regardless, adopts the concept for this present study.

## **2.2 Theoretical Framework**

### **2.2.1 Self-Determination Theory (SDT)**

Ryan and Deci developed self-determination theory (SDT), which begins with the assumption that individuals possess autonomy, with an innate determination toward psychological growth and development, and strive to be competent in facing ongoing challenges and in integrating their experiences into a coherent sense of self. This natural human tendency requires ongoing support from the social environment toward active engagement and psychological growth<sup>6</sup>. A decade later, Ryan and Deci further improved their theory, incorporating modern conceptions of happiness, including hedonic and eudaimonic perspectives<sup>7</sup>. They view happiness as a symptom rather than a prerequisite of well-being. Being a symptom, happiness is related to the human capability for autonomous self-regulation. Using a self-determination framework, individuals from all cultures use their autonomy to satisfy basic psychological needs for competence and relatedness, and thus to attain psychological well-being and happiness. Ryan and Deci highlight that autonomous self-regulation is dependent on individuals' personal/interpersonal relationships and distal (political, cultural, economic) supports. In supporting the universal need for autonomy in well-being, Yu et al. conducted a comparison study among 36 independent samples (22 from the United States and 14 from East Asian samples including China and Japan) totaling 12,906 participants.

The study showed a moderate correlation between autonomy and subjective well-being and the difference between correlations for studies conducted in the East and West was not significant<sup>6</sup>. A study on the well-being of the aging population also supports the self-determination theory's proposition that autonomy is a universal psychological need<sup>8</sup>.

Mental well-being, as understood through the lens of self-determination theory, refers to the state in which individuals experience psychological fulfillment, autonomy, and personal growth. SDT is a widely studied and influential theory in the field of psychology that posits three innate psychological needs that, when satisfied, contribute to optimal functioning and well-being. These needs are autonomy, competence, and relatedness.

When SDT is applied to mental well-being the following would be the result.

**Autonomy:** This refers to the need for individuals to feel a sense of volition and self-determination in their thoughts, actions, and decisions<sup>6</sup>. In the context of mental well-being, autonomy entails having the freedom to make choices and act in ways that align with one's values and authentic self. When individuals experience autonomy, they are more likely to feel a sense of control over their lives, reducing feelings of helplessness and promoting a positive sense of mental well-being<sup>7</sup>.

**Competence:** This refers to the need for individuals to feel effective and capable in their pursuits and endeavours. Achieving a sense of competence involves engaging in activities that challenge and stretch one's skills and abilities<sup>7</sup>. When individuals experience competence, they develop a sense of mastery and accomplishment, leading to increased confidence and self-esteem. This sense of efficacy contributes to mental well-being, as individuals perceive themselves as capable of handling life's challenges and achieving their goals<sup>7</sup>.

Relatedness: This concept relates to the fundamental human need for social connection, validation, and support within interpersonal relationships. Positive social connections and meaningful relationships play a crucial role in promoting mental well-being. When individuals experience a sense of relatedness, they feel deeply connected to others, valued, and emotionally supported within their social networks. Relatedness encompasses feelings of being understood, cared for, and respected by others in one's social circle. It involves experiencing empathy, compassion, and emotional validation from friends, family members, peers, and other significant individuals in one's life. When individuals feel a strong sense of relatedness, they perceive themselves as belonging to a supportive community or network, where they can openly express themselves, share experiences, and receive support without judgment. This sense of belongingness and connection fosters feelings of trust, intimacy, and security within relationships, which are essential components of mental well-being. When individuals feel emotionally supported and connected to others, they experience greater psychological well-being, resilience, and overall life satisfaction. Positive social interactions and meaningful relationships provide individuals with a sense of purpose, meaning, and fulfillment in life, enhancing their sense of happiness and contentment. Moreover, relatedness promotes adaptive coping mechanisms and stress resilience by providing individuals with a source of emotional support and encouragement during challenging times. When individuals feel connected and valued within their social networks, they are better equipped to navigate life's ups and downs, cope with stressors, and bounce back from adversity. Fostering a sense of relatedness within interpersonal relationships is essential for promoting mental well-being. By nurturing positive social connections, building meaningful relationships, and creating supportive environments,

individuals can cultivate a strong sense of belongingness, trust, and emotional security, which are essential for their overall psychological health and well-being<sup>9</sup>.

While SDT offers valuable insights into human motivation and well-being, it also faces certain criticisms and limitations that need to be addressed.

The following are some critiques of SDT in relation to well-being:

Firstly, cultural bias. One of the key criticisms leveled against SDT is its inherent Western cultural bias. The theory originated from research predominantly conducted in Western societies, which may limit its applicability and relevance to diverse cultural perspectives on well-being. Cultural variations in the significance attributed to the three basic psychological needs proposed by SDT— autonomy, competence, and relatedness—can significantly influence the theory's generalizability across different cultural contexts. In non-western cultures, the emphasis on individual autonomy, or the sense of independence and self-determination, may differ from that in Western societies. Collectivist cultures, for instance, often prioritize interdependence and communal values over individual autonomy. In such cultures, the pursuit of personal goals and autonomy may be perceived differently, and the importance of harmonious relationships and group cohesion may take precedence over individual desires.

Similarly, cultural norms and values regarding competence, or the sense of efficacy and mastery in one's actions, may vary across different cultural contexts. The standards for competence and achievement may differ, and the sources of validation and recognition may vary between individualistic and collectivist cultures. Moreover, the significance of relatedness, or the sense of connection and belongingness within social relationships, may be interpreted differently across cultures. While the importance of social bonds and interpersonal relationships is universally acknowledged, how relatedness is experienced and expressed may vary across

cultural contexts, reflecting cultural norms regarding social roles, family structures, and community dynamics.

As a result, the applicability of SDT's concepts of well-being may be limited in non-western contexts, where cultural values and norms diverge from those prevalent in western societies. Researchers and practitioners need to consider cultural variations in the interpretation and manifestation of autonomy, competence, and relatedness when applying SDT in diverse cultural settings. This necessitates the adaptation of SDT's principles to accommodate cultural nuances and the development of culturally sensitive measures and interventions to promote well-being across different cultural contexts. By addressing cultural bias and incorporating cultural diversity into SDT research and practice, the theory can be more inclusive and relevant to the diverse experiences and perspectives of individuals worldwide.

Secondly, one of the criticisms often directed at SDT is its limited emphasis on external factors influencing Well-being. While SDT places significant emphasis on internal motivation and intrinsic psychological needs, such as autonomy, competence, and relatedness, it may underemphasize the impact of external factors on well-being. External factors, including socioeconomic status, environmental conditions, and external opportunities, can play a crucial role in shaping individuals' well-being. Socioeconomic status, for example, can influence access to resources, educational opportunities, and healthcare services, which in turn can impact individuals' overall well-being. Similarly, environmental conditions such as neighborhood safety, air and water quality, and access to green spaces can affect individuals' physical and mental health. Furthermore, external opportunities, such as employment prospects, career advancement, and social support networks, can also influence individuals' well-being. Positive external factors, such as supportive social networks and opportunities for personal and professional growth, can

enhance individuals' sense of well-being, while negative external factors, such as discrimination, economic instability, and social isolation, can undermine well-being.

While SDT acknowledges the importance of social contexts and interpersonal relationships in fulfilling psychological needs, it may not fully account for the broader socioeconomic and environmental factors that shape individuals' well-being. The theory's focus on internal motivation and intrinsic psychological needs may overlook the ways in which external factors interact with internal processes to influence well-being outcomes. To address this limitation, researchers and practitioners may need to adopt a more holistic approach that integrates both internal and external factors in understanding and promoting well-being. This may involve considering the impact of socioeconomic factors, environmental conditions, and external opportunities on individuals' motivation, behavior, and overall well-being. By incorporating a broader range of influences into theoretical frameworks and intervention strategies, we can develop more comprehensive approaches to promoting well-being that address the complex interplay between internal and external factors<sup>11</sup>. Thirdly, overemphasis on autonomy. SDT highlights the importance of autonomy as a central psychological need for well-being.

However, in some cultural contexts or life situations, excessive emphasis on individual autonomy may conflict with collective values and social cohesion<sup>12</sup>. Striking a balance between individual autonomy and collective well-being is a complex challenge that SDT does not address comprehensively. Another Theory that could explain mental well-being within the context of this study is the conservation of resources theory.

### **2.2.2 Conservation of Resources (COR) Theory**

The conservation of resources (COR) theory was developed by Hobfoll in 1988 & 1989. It provides a framework within which to understand the processes involved in experiencing, coping with, and becoming resilient to chronic and traumatic stress. COR theory acknowledges that some circumstances – namely, those that threaten or deplete resources – are objectively stressful. It is an ecological and multileveled Theory that seeks to understand individuals nested within their families, communities, and cultures<sup>13</sup>.

COR Theory begins with the assumption that much of human behaviour and culture is organised around the acquisition and preservation of valued resources. The value of any given resource is determined by the interplay of both phylogenic and ontogenic contingencies. As a result, some resources are essential for survival and are inherently reinforcing across humans, while others are shaped through cultural and personal experiences and so vary cross-culturally, as well as between and within individuals over time. Resources are characterised by their external or internal locus relative to the individual. For example, vigour, hope, and self-efficacy are located within the individual and are key, as they provide the energy and motivation to seek and maintain external resources such as stable employment and supportive relationships. The value of a resource can be explained on a basic level by its necessity for survival. Other resources are less related to survival itself, but to the protection of the individual and their status. Hobfoll and Lilly identified 74 Resources in the conservation of resources evaluation (COR-E).

Primary resources, such as food, health, housing, and clothing are directly related to survival and are valued cross-culturally<sup>14</sup>.

Secondary resources, such as social support, employment, and community environment gain their reinforcing value through their associations with primary resources such as food and

housing. Tertiary resources, such as accomplishment, financial credit, and social status, are culturally constructed and provide access to primary and secondary resources<sup>15</sup>.

Resources tend to be highly correlated and nested within individuals, families, communities, and cultures. Observed correlations across distinct resources are referred to as resource caravans, because resources tend to be accumulated by individuals and groups and carried across the lifespan<sup>15</sup>. The plausible sociocultural mechanisms that explain and facilitate the nesting of resources are referred to as resource caravan passageways. Whereas resource caravans and passageways explain the accumulation and preservation of resources, risk factor caravans refer to the constellations of hazards nested within individuals and communities, which preclude and drain resources<sup>16</sup>. The positive association between social support (external) and self-efficacy (internal) is an example of a resource caravan. Plausible resource caravan passageways that explain this association include the environmental conditioning of adaptive self-talk, modelled social problem solving, and emotion regulation within family, school, and peer groups. Resource caravans and passageways are evident across levels of social interactions, including the individual, family, and community. The family is a particularly salient nexus where cultural, economic, and public policy processes meet to create resource and risk factor caravans.

Socioeconomic status (SES) is a multifaceted concept that encompasses various aspects of individuals' economic and social standing within society. One key component of SES is income, which reflects individuals' earnings from employment, investments, or other sources of financial support. However, SES also encompasses other factors such as education, occupation, and wealth, all of which contribute to individuals' access to resources and opportunities. Wealth, in particular, plays a significant role in shaping health outcomes and socioeconomic disparities.

Wealth is not only a measure of accumulated financial assets but also reflects access to valuable resources such as property, savings, investments, and inheritance. Families often serve as the primary unit for collecting, conserving, and transmitting wealth across generations, thus influencing individuals' socioeconomic trajectories and opportunities.

The transmission of wealth within families is influenced by a complex interplay of factors, extending beyond simple measures of intelligence or heritability. While intelligence may be partly heritable and contribute to individuals' economic success, it only explains a portion of the variance in the transmission of wealth. Other factors, such as education, upbringing, social networks, and financial inheritances, also play crucial roles in bridging wealth across generations. For example, families may invest in better schooling and educational opportunities for their children, providing them with the knowledge, skills, and credentials necessary for economic advancement. Additionally, healthy environments and access to quality healthcare services can contribute to individuals' productivity, earning potential, and overall well-being, thus shaping their socioeconomic status and wealth accumulation over time. Financial inheritances, including gifts, trusts, and bequests, represent another mechanism through which wealth is transferred within families. Inheritance patterns and estate planning decisions can significantly influence individuals' economic prospects and intergenerational wealth disparities. However, it's essential to recognize that access to financial inheritances is not equally distributed across society and may exacerbate existing socioeconomic inequalities<sup>18</sup>.

To explain mental well-being using the conservation of resource (COR) theory, we can understand mental well-being as a function of individuals' resource gains and losses, and the availability of resources to cope with stress and demands. According to COR theory, individuals strive to acquire, retain, and protect resources, which can be both tangible (e.g. material

possessions, financial security) and intangible (e.g. self-esteem, social support). In the context of mental well-being, resource gains can be seen as acquiring and accumulating various psychological and social resources. For example, gaining a sense of purpose, self-efficacy, positive emotions, and social support can contribute to higher levels of mental well-being. These resources act as psychological buffers, enhancing an individual's ability to cope with stressors and fostering a positive outlook on life. Resource losses, on the other hand, can have a negative impact on mental well-being. Experiencing loss of resources, such as social support through relationship breakdowns, loss of employment, or a decline in self-esteem due to failure, can lead to feelings of vulnerability, distress, and reduced well-being. High levels of resource losses without sufficient resource gains can lead to psychological strain and decreased resilience.

While COR theory has been valuable in understanding stress and adaptation, its application to mental well-being has some limitations.

Firstly, COR theory predominantly focuses on resource loss as a major stressor. While resource loss is undoubtedly important in understanding stress and well-being, the theory might not give enough attention to the potential positive impact of resource gain on mental well-being. The acquisition of new resources and opportunities can also contribute significantly to resilience and overall well-being.

Secondly, it does not sufficiently address how individual differences, such as personality traits, coping styles, and social support systems, interact with resource gain or loss to influence mental well-being. People may vary greatly in their responses to stress and resource availability, and a more comprehensive approach should consider these individual differences.

### **2.2.3 Social Cognitive Theory**

Social Cognitive Theory (SCT) started as the Social Learning Theory (SLT) in the 1960s by Albert Bandura. It developed into the SCT in 1986 and posits that learning occurs in a social context with a dynamic and reciprocal interaction of the person, environment, and behavior. It states that “when people observe a model performing a behaviour and the consequences of that behaviour, they remember the sequence of events and use this information to guide subsequent behaviours. Observing a model can also make the viewer get involved in behaviour they learned through the observation<sup>31</sup>.

Mass media play an influential role in society. Hence, an understanding of the psychosocial mechanisms through which symbolic communication influences human thought is very important. Whether one is being rewarded or punished for one’s behaviour and the outcome of the behaviour, the observer may choose to replicate behaviour modelled. Social media is now an important source of models for people<sup>32</sup>.

The social cognitive theory explains psychosocial functioning in terms of “triadic reciprocal causation”<sup>33</sup>. The major concepts of the theory are explained using a “schematization of triadic reciprocal causation”. The schematic shows how the reproduction of observed behaviour is influenced by the interaction of three determinants which are personal factors, behavioural factors, and environmental factors<sup>33</sup>.

### **Personal Factors**

Personal factors encompass a wide range of individual characteristics that influence behavior and are shaped by past experiences and reinforcement patterns. These factors include personality traits, cognitive processes, expectations, beliefs, and unique attributes specific to

each individual. Personality traits, such as extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience, play a significant role in shaping how individuals perceive and respond to their environment. For example, an extroverted individual may seek social interactions and stimulation, while an introverted individual may prefer solitude and reflection.

Cognitive factors, including perception, memory, reasoning, and problem-solving skills, also contribute to how individuals interpret and process information, make decisions, and regulate their behavior. For instance, individuals with high levels of self-awareness may be better able to monitor and control their actions, whereas those with cognitive biases or distortions may exhibit maladaptive behaviors. Expectations and beliefs about oneself, others, and the world can influence behavior by shaping individuals' goals, motivations, and self-efficacy. Positive self-beliefs and high self-efficacy can empower individuals to set challenging goals, persevere in the face of setbacks, and achieve desired outcomes, whereas negative beliefs or low self-efficacy may undermine confidence and motivation. Unique characteristics, such as talents, interests, values, and cultural background, also play a role in shaping behavior and preferences. These individual differences contribute to the diversity of human experiences and interactions, influencing how individuals navigate social situations, form relationships, and pursue personal goals.

Behavior itself is dynamic and context-dependent, influenced by situational factors and the likelihood of reinforcement. Individuals may adapt their behavior based on past experiences and their understanding of the consequences associated with certain actions. For example, a student may learn that their teacher is more likely to reward them for waiting until the end of the school day to misbehave, leading them to tailor their behavior accordingly<sup>34</sup>.

## **Behavioural Factors**

Reciprocal determinism, a key concept in social cognitive theory proposed by psychologist Albert Bandura, suggests that individuals' behavior is shaped by the interaction between personal factors, environmental influences, and behavioral responses<sup>33</sup>. In this dynamic process, cognitive processes, environmental stimuli, and behavior continuously influence and reinforce each other. In the scenario described, the child's behavior of acting out in school is influenced by both personal factors and environmental stimuli. The child's dislike for school, which may stem from various personal factors such as past experiences, temperament, or academic challenges, contributes to their decision to act out as a form of expressing dissatisfaction or seeking attention. Environmental factors, such as the teacher's response to the child's behavior, also play a significant role in shaping subsequent actions. The teacher's reprimand serves as a social stimulus that provides feedback and consequences for the child's behavior. However, if the reprimand is perceived as negative or punitive by the child, it may reinforce the acting-out behavior rather than deter it.

This process of reciprocal determinism continues as the child's behavior elicits further reactions from the environment, which in turn influence the child's subsequent actions. For example, if the teacher's reprimand leads to increased attention from classmates or avoidance of academic tasks, the child may perceive these outcomes as reinforcing their acting-out behavior, further reinforcing the cycle. Additionally, cognitive processes such as self-efficacy beliefs, expectations, and attributions may also influence the child's interpretation of the situation and their subsequent behavior. For instance, if the child believes they are incapable of succeeding academically or if they attribute their behavior solely to external factors (e.g., "school is boring"), they may be more likely to continue acting out in similar situations.

## **Environment Factors**

The environmental component of behavior encompasses not only the physical surroundings in which the behavior takes place but also the social context and interpersonal dynamics that influence individuals' actions. This includes the people present or absent in the environment and the attitudes, beliefs, and ideas they hold, all of which can shape individuals' behavior and interactions. In the example provided, a child who grows up in a violent home is exposed to a social environment characterized by aggression, conflict, and potentially abusive behavior. The presence of violence within the family unit can have profound effects on the child's development and behavior.

Firstly, the child may learn through observational learning and modeling that aggression is an acceptable or even necessary way to resolve conflicts or assert control. Witnessing violence between caregivers or family members may normalize aggressive behavior and lead the child to believe that it is a typical response to interpersonal conflicts. Secondly, the child's social environment may lack positive role models or supportive relationships that promote prosocial behavior and healthy coping strategies. The absence of nurturing and supportive relationships may contribute to feelings of insecurity, low self-esteem, and a heightened sense of vulnerability, which may manifest in maladaptive behaviors such as aggression or withdrawal. Furthermore, the attitudes, beliefs, and ideas prevalent within the social environment can influence the child's perceptions of violence, its acceptability, and its potential consequences. For example, if the child is exposed to messages that justify or condone violence as a means of exerting power or control, they may internalize these beliefs and adopt similar behaviors in their own interactions.

When applied to the study of patients with chronic illness, SCT can explain factors contributing to their mental well-being and inform interventions to promote positive coping

strategies and adaptation. The following are how SCT helps to understand mental wellness among patients with chronic illness. First, self-efficacy. According to SCT, self-efficacy beliefs—the confidence in one's ability to manage challenges and achieve desired outcomes—are central to health behavior change and psychological well-being. Patients with chronic illness who have high self-efficacy beliefs may feel more empowered to cope with the demands of their condition, adhere to treatment regimens, and engage in self-care activities. Second, observational learning. SCT emphasizes the role of observational learning, whereby individuals learn by observing others' experiences, behaviors, and coping strategies. Patients with chronic illness may benefit from observing peers or role models who have successfully managed similar health challenges and adapted positively to their condition. Third, outcome expectations. SCT posits that individuals' expectations about the outcomes of their actions influence their behavior and motivation. Patients with chronic illness may experience a range of outcome expectations, including beliefs about the effectiveness of treatment, the likelihood of symptom control, and the impact of their illness on their quality of life. Positive outcome expectations, such as optimism about treatment outcomes and confidence in one's ability to cope with illness-related challenges, can promote adaptive coping strategies and psychological resilience, contributing to better mental well-being.

While social cognitive theory offers valuable insights into the cognitive, behavioral, and social factors that influence mental well-being among patients with chronic illness, it is not without limitations. A few of them include the following. First, individual differences. While SCT acknowledges the importance of individual factors such as self-efficacy and outcome expectations, it may not fully account for the diversity of experiences and coping strategies among patients with chronic illness. Factors such as personality traits, coping styles, and illness

perceptions vary widely among individuals and may influence mental well-being in complex ways that SCT does not fully capture. Secondly, limited emphasis on emotional processes. SCT focuses primarily on cognitive processes and behavioral outcomes, paying less attention to emotional factors such as stress, anxiety, and depression that are commonly experienced by patients with chronic illness. Emotions play a significant role in shaping mental well-being and may interact with cognitive and behavioral factors in ways that SCT does not explicitly address. Third, overemphasis on behaviorism. SCT has roots in behaviorism and may prioritize observable behaviors and reinforcement processes over internal cognitive processes and subjective experiences. While behavior change is important for improving mental well-being among patients with chronic illness, SCT may overlook the role of cognitive restructuring, emotion regulation, and meaning-making in coping with illness-related challenges. Fourth, lack of attention to structural factors. SCT tends to focus on individual-level factors and may overlook broader structural determinants of health and well-being, such as socioeconomic status, access to healthcare, and environmental barriers. These structural factors can significantly impact patients' ability to cope with chronic illness and access resources for mental health support, but they are not adequately addressed within the framework of SCT.

## **2.3 Review of Empirical Studies**

### **2.3.1 Illness Perceptions and Mental Well-being**

The association between illness perceptions, self-esteem, and psychological well-being in people with Multiple Sclerosis (MS), while controlling for socio-demographic variables, clinical variables, and sleep-related problems was assessed. The General Health Questionnaire-28 (GHQ-28), the Brief Illness Perception Questionnaire (B-IPQ), the Rosenberg Self-Esteem Scale

(RSES), the Expanded Disability Status Scale (EDSS), the Pittsburgh Sleep Quality Index (PSQI), and the Multidimensional Fatigue Inventory (MFI) were used. Multiple Linear Regressions and mediation analyses were utilised to analyse the data. The result indicates that positive illness perception is significantly associated with psychological well-being in MS<sup>19</sup>.

Breast cancer patients' illness perception, its relationship to their perceived sense of well-being, and the role of perceived social support was explored. Women with diagnosed breast cancer were recruited from the two university hospitals in South Korea between January and April 2018. The Questionnaires included the Revised Illness Perception Questionnaire (IPQ-R) and the Functional Assessment of Cancer Therapy-Breast (FACT-B). A total of 321 participants' data was analyzed using descriptive analyses, multiple regression, and structural equation modeling. Negative illness perception was greater in participants currently receiving chemotherapy ( $p=0.044$ ) or who had received chemotherapy in the past ( $p=0.006$ ). Positive illness perception was lower in older participants ( $p=0.001$ ) or those who had received chemotherapy ( $p=0.018$ ). Negative illness perception had a direct effect on a low sense of mental well-being ( $p<0.001$ )<sup>20</sup>.

The Common-Sense Model of Self-Regulation among persons with Multiple Sclerosis (MS), hypothesising direct relations between illness beliefs and psychological adjustment, and indirect relations through Coping Strategies and social support was tested.

Questionnaires were administered cross-sectionally to 680 participants ( $M_{age} =40.1$ ; 64.4% women) recruited in eight MS units to assess illness beliefs, Coping Strategies, social support, and adjustment indicators including life satisfaction, psychological well-being, mental health, and depression. Multiple mediational analyses were conducted to identify direct and

indirect paths connecting illness beliefs to psychological outcomes. Results showed significant direct and indirect relationships were observed: Beliefs on illness coherence, and personal and treatment control were associated with better adjustment; emotion representations and cyclic timeline with worse adjustment; illness identity, consequences, psychological and chance/bad luck causes with mixed positive and negative outcomes<sup>50</sup>.

Illness Perceptions among patients undergoing Hematopoietic Stem Cell Transplant (HSCT) was investigated. They examined the extent to which perceptions predicted health practices and mental health following transplant. Participants (N = 332) completed measures of illness perceptions (beliefs about cancer consequences and course, personal and treatment control over cancer, and understanding of one's cancer) prior to HSCT. Mixed-effects linear regression models revealed that HSCT recipients, who perceived the consequences of their cancer to be more serious, experienced more depression and anxiety, less well-being, and ate a healthier diet, but were less physically active during the year following transplant. Those with greater personal and treatment control ate a healthier diet and reported greater well-being. Patients with a better understanding of their cancer also ate a healthier diet and reported less depression, less anxiety, and greater well-being<sup>21</sup>.

Psychological well-being is a complex term to define, but it is typically associated with positive thoughts and emotions that individuals experience regarding their life satisfaction and overall sense of worth<sup>57</sup>. Therefore, it refers to optimal psychological functioning, which includes a combination of emotional aspects (e.g., happiness and experiencing positive emotions) as well as higher-level functions such as resilience, coping, and emotional regulation<sup>29,30</sup>. In contrast, psychological distress is composed of constructs such as anxiety, depression, anguish,

or hostility<sup>31</sup>. Recent research has shown the association and relevance of psychological well-being or distress among patients with Cardiovascular Diseases CVD<sup>26,32,33</sup>. Studies have found that increased levels of well-being were related to improved CVH<sup>26</sup> and lower odds of mortality due to a cardiac event<sup>22,34</sup>. Conversely, psychological distress, specifically depression and anxiety, has been bidirectionally linked to CVD<sup>25,35</sup>. Meta-analyses and longitudinal studies have provided evidence that depression and anxiety are risk factors for CVD, with an association between them and an increased risk of developing heart diseases such as ischemic heart disease or coronary heart disease<sup>36,37,38</sup>. In addition, the diagnosis of CVD may exacerbate anxiety and depressive symptoms in these patients. Some studies have reported a high prevalence of depression among patients with coronary artery disease, with 34% of them experiencing moderate to severe depression, which could negatively affect their prognosis<sup>39</sup>. A meta-analysis performed by Gathright et al. found that depression was a predictor of all-cause mortality in heart failure<sup>40</sup>. Furthermore, patients with coronary heart disease or heart failure and depressive symptoms are more likely to have a lower quality of life and a greater risk for recurrent cardiovascular events and mortality<sup>37</sup>. At the same time, studies addressing psychological distress and CVD have showed some sex differences. Women with CVD reported greater and more severe symptomatology of anxiety and depression than men with CVD, highlighting the need to consider these differences when designing and applying treatments for CVD patients<sup>41,42</sup>.

CVD can have a significant impact on patients' lives, not only causing psychological distress mentioned above but also physical symptoms such as reduced mobility, pain, and fatigue<sup>43</sup>. These symptoms may become chronic and can negatively affect their quality of life<sup>27</sup>. Previous studies have shown the association between a CVD diagnosis and a lower HRQoL<sup>44,45</sup>, which includes physical, mental, and social factors, as well as subjective perceptions of health

and well-being<sup>46</sup>. At the same time, lower HRQoL is associated with other CVD risk factors such as a reduced adherence to medication and an increased risk of recurrent cardiovascular events<sup>47,48,49</sup>. These findings have led to a wide body of research studying the role of HRQoL as an important variable in the context of chronic conditions, such as CVD, in order to better understand and intervene on its impact. The impact of psychological distress on the quality of life of individuals with cardiovascular disease emphasizes the need to intervene in their emotional and psychological care<sup>22,23,24,25,28</sup>. Further research is necessary to identify key variables that promote their psychological well-being and provide protective effects against the disease

### **2.3.2 Coping Strategies and Mental Well-being**

The effects of different Coping Strategies on mental health during the COVID-19 lockdown was evaluated<sup>51</sup>. A representative sample for Austria was recruited through Qualtrics® in a period of 4 weeks after the lockdown started. Measurements were coping inventory (SCI), psychological quality of life (WHO-QOL BREF, psychological domain), well-being (WHO-5), depression (PHQ-9), anxiety (GAD-7), stress (PSS-10), and insomnia (ISI). Regression analyses were performed with coping strategies as predictors and mental health measures as dependent variables. The representative sample included  $N=1,005$  respondents (52.7% women). Positive thinking, active stress coping, and social support were found to be positive predictors of psychological life quality, well-being, and negative predictors for perceived stress, depression, anxiety, and insomnia<sup>51</sup>.

Investigation was done on how people dealt with stressors during a lockdown period and examined the role of trait mindfulness and its subcomponents in coping and mental well-being<sup>52</sup>.

A sample of 93 participants were recruited to study coping reactions using a multi-wave study over a period of two months with 13 measurement points. Multilevel analysis revealed that engagement-related coping such as problem-solving was positively related to well-being; the opposite was true for disengagement coping such as blaming. The mindfulness facet orientation towards experience (being open and accepting experiences without judgment) was negatively related to disengagement coping, while the facet of self-regulated attention (awareness of the present moment) was positively related to engagement coping. Self-regulated attention but not orientation towards experience was associated with savouring positive aspects of COVID-related changes over time. Engagement-related coping mediated the effects of trait mindfulness on well-being<sup>52</sup>.

The relationship between coping strategies and the psychological well-being of Enugu prison inmates was investigated<sup>53</sup>. The sample for the study constitutes 300 prison inmates, 73.33% (220) were male prisoners, while the remaining 26.67% (80) were female prisoners. The ages of the prisoners ranged between 18-58 years; their mean age is 43.50 years. Two instruments were used for data collection, they include the Coping Assessment Scale (CAS) and the Psychological Well-Being Scale (PWB-S). The result of the (linear) multiple regression indicated that appraisal-focused coping ( $\beta = .35$ ,  $p < .05$ ) significantly predicted psychological well-being among prison inmates of Enugu state command<sup>53</sup>.

The discovery of how elderly people coped with the psychological burdens of pandemic and the social isolation in Hungary was tested<sup>54</sup>. This study included 589 (441 females) Hungarian individuals, aged 60–83 ( $M = 68.1$ ,  $SD = 4.46$ ). Online survey data were collected to reach a wide population of the elderly. Results of Hierarchical Linear Modeling (HLM) and

Structural Equation Modeling (SEM) analyses established how the current life-changing circumstances, the intolerance of uncertainty, loneliness, and social support influence the mental health (e.g. depression, anxiety, well-being) of the elderly. Findings showed that perceived change in mood, social connectedness, and quality of life was negatively affected by catastrophising and loneliness; whereas positive refocusing and contamination fear had a positive effect. Further, maladaptive emotion regulation strategies mediated the connection between intolerance of uncertainty, contamination fear, loneliness, and mental well-being<sup>54</sup>.

### **2.3.3 Locus of Control and Mental Well-being**

Investigation was done on whether different coping strategies would mediate the relationship between Health Locus of Control (HLC) and mental health in MS patients<sup>72</sup>. In this cross-sectional study, a total of 382 patients with Multiple Sclerosis (MS) were included. The patients completed the General Health Questionnaire-12, Coping Inventory for Stressful Situations, and Multidimensional Health Locus of Control Scale. The demographic and clinical characteristics of the patients were collected using a self-report survey and neurological assessment. A mediation analysis was used to test the study hypothesis. Problem-oriented coping was found to be a significant mediator in the relationship between internal HLC and mental health. Emotion-focused Coping was found to be a significant mediator in the relationship between the power of other HLC and mental health.

Emotion-focused coping was also found to be a significant mediator in the relationship between chance HLC and mental health. Patients with internal HLC were found to have positive mental health due to their problem-focused coping strategies, while patients with external HLC had worse mental health as they used more emotion-focused strategies<sup>72</sup>.

The role of Locus of Control (LOC), an important personality trait, in helping victims to develop resilience against crime was explored<sup>55</sup>. Specifically, it seeks to examine the impact of local area crime rates on the mental health of residents and whether a person's LOC can help build resilience against the negative mental health effects of local area crime. Using 19 waves of longitudinal data from the Household, Income, and Labour Dynamics in Australia (HILDA) Survey, covering 15,245 adults between the ages of 21 and 59 years, an empirical strategy was employed to address the issue of sorting and endogenous crime-related moving behaviour. They found that local area crime, lowers mental health for residents and that those who are more internal on LOC are more resilient to the adverse effects of local crime on mental health<sup>55</sup>.

The effects of two positive psychological resources on the mental health of Indian citizens during the early days of the lockdown was examined<sup>56</sup>. The effects of Psychological Capital (PsyCap) and internal locus of control on psychological distress of people via affect balance were tested. Data were collected through an online survey from 667 participants. Psychological distress was assessed using the GHQ-12, and affect balance was assessed as the preponderance of positive over negative affect. Results reveal that Psychological Capital and internal locus of control were negatively associated with psychological distress. In addition, affect balance mediated the relationship between psychological capital and psychological distress and the relationship between internal locus of control and psychological distress. Thus, both the psychological resources through affect balance acted as buffers protecting people from mental health deterioration during the COVID-19 lockdown<sup>56</sup>.

The relationship between health locus of control, Generalised Self-Efficacy (GSE), and mental health, whilst controlling for potential confounding factors was re-examined<sup>57</sup>. It was

anticipated that health LOC and GSE would predict mental health. A sample of 224 adults completed an online survey comprised of validated psychometric tools scales. Regression analyses were conducted to determine whether health LOC and GSE predicted mental health, after controlling for self-esteem, social support, and coping. Results indicated that GSE was a significant unique positive predictor of mental health. Health locus of control was not a significant predictor of mental health<sup>57</sup>.

#### **2.3.4 Gender and Mental Wellbeing**

The prevalence by age and gender of common chronic pain conditions (headache, back or neck pain, arthritis or joint pain, and other chronic pain) in 10 developed and 7 developing countries and their association with the spectrum of both depressive and anxiety disorders was explored<sup>63</sup>. It draws on data from 18 general adult population surveys using a common survey questionnaire (N = 42,249). Their result indicates that there was a higher prevalence of chronic pain conditions among females and older persons, and chronic pain was similarly associated with depression-anxiety spectrum disorders in developed and developing countries. Hence, they concluded that the prevalence of pain is greater among females, impacting their mental well-being<sup>63</sup>.

A study to review the literature on gendered norms about men and women with pain and gender bias in the treatment of pain was conducted. The results analysed were guided by the theoretical concepts of hegemonic masculinity and andronormativity. Also, a literature search of databases was conducted<sup>64</sup>. A total of 77 articles met the inclusion criteria. The included articles were analyzed qualitatively, with an integrative approach. The included studies demonstrated a variety of gendered norms about men's and women's experience and expression of pain, their

identity, lifestyle, and coping style. Gender bias in pain treatment was identified, as part of the patient-provider encounter and the professional's treatment decisions. It was discussed how gendered norms are consolidated by hegemonic masculinity and andronormativity. Awareness about gendered norms is important, both in research and clinical practice, to counteract gender bias in healthcare and to support healthcare professionals in providing more equitable care that is more capable of meeting the needs of all patients, men, and women<sup>64</sup>.

The role of contextual factors in chronic pain type and patient gender in cognitive, affective, and behavioral stigmatizing manifestations coming from the general population toward individuals with chronic pain through an experimental vignette study was examined<sup>65</sup>. The research is divided into 2 separate samples: individuals with CP (N = 729) and individuals without CP (N = 283). Factorial ANOVA models were estimated with CP type, patient gender, and participant gender included as factors, and age as a control variable. The findings support, partly, the general hypothesis of higher (perceived) public stigma towards individuals with primary (vs secondary) CP. No main effects of patient gender were observed. Gender bias in stigmatizing manifestations only emerged in certain contextual circumstances (i.e. pain type and participant gender). Different interaction effects (with a combination of gender, patient gender, or CP type) were significant for the distinctive outcome variables. Taken together, the findings of the current study attest to the importance of public stigma as perceived by individuals both with and without CP. They also highlight the moderating roles of pain type and patient gender in the perception of specific manifestations of public stigmatization of CP<sup>65</sup>.

Pain coping, pain acceptance, and analgesic use as predictors of QoL among women with primary dysmenorrhea was examined<sup>66</sup>. 145 women with primary dysmenorrhea completed an online survey including the Menstrual Symptoms Questionnaire (MSQ), the Coping Strategies

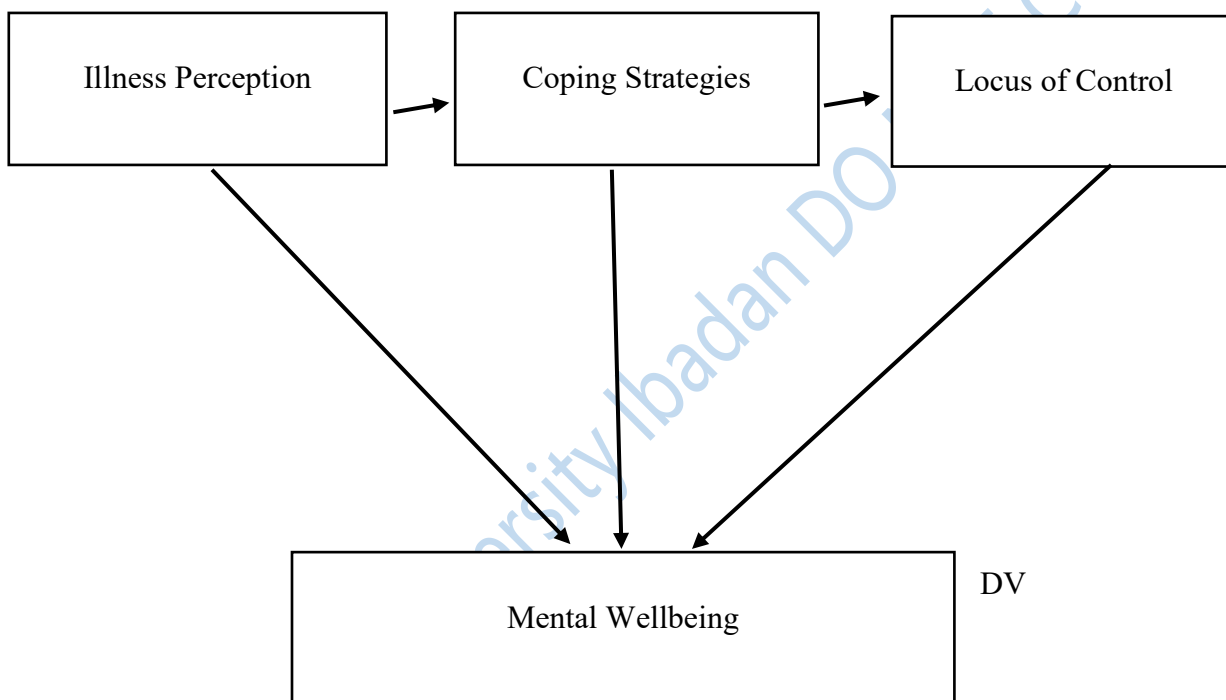
Questionnaire (CSQ), the Chronic Pain Acceptance Questionnaire (CPAQ-8), questions about analgesic use, and the Short Form-12 (SF-12), a measure of physical and mental health-related QoL. In multiple regression, pain acceptance predicted better physical and mental QoL, whereas pain coping did not predict mental or physical quality of life. Being married or cohabiting and having menstrual pain that was less severe and shorter in duration predicted better physical QoL and those effects were mediated by pain acceptance. Being older at the onset of painful periods predicted better mental QoL and that effect was also mediated by pain acceptance. More severe menstrual pain and congestive rather than spasmodic dysmenorrhea predicted worse mental QoL but those effects were not mediated by other factors. Analgesic use did not predict physical or mental QoL<sup>66</sup>.

Anxiety and psychological resilience together associated with persistent and experimental pain was explored<sup>67</sup>. In a cross-sectional design, they studied 160 patients who had previously been treated for breast cancer and who now reported at least moderate pain (NRS  $\geq 4$ ) in any area of the body. Psychological resilience was measured on the Resilience Scale-14, anxiety on the Hospital Anxiety and Depression Scale, and intensity and interference of persistent pain using the Brief Pain Inventory. The cold pressor test was conducted to assess sensitivity to experimental cold pain. The results showed that resilience was associated with pain interference in persistent pain and that anxiety moderated this effect. Higher psychological resilience was associated with lower pain interference and this association was stronger in patients with low anxiety than among patients with high anxiety. These effects were visible in persistent pain but not in experimental cold pain. These results indicate that chronic pain and experimental pain as well as pain severity and pain interference are psychologically different phenomena. Psychological resilience protects against pain interference but effectively only in patients with

low anxiety. It is necessary also to consider protective factors in addition to vulnerability factors in cases of persistent pain<sup>67</sup>.

## 2.4 Conceptual Framework

IVS



Source: Researcher's Fieldwork, 2024

**Figure 2.1 Conceptual Framework of Theories**

Figure 2.1 above shows the conceptual framework for this study. There are three (3) independent variables; illness perceptions, coping strategies, and locus of control. And mental well-being is the dependent variable.

The Diagram shows the independent and joint influence of the independent variables on the dependent variable.

## **2.5 Summary of Gap in Literature Reviewed**

The theoretical frameworks reviewed, which are Self-Determination Theory, Conservation of Resources Theory, and Social Cognitive Theory, provide valuable insights into the factors influencing mental well-being, particularly in the context of chronic medical conditions. Studies have consistently shown that patients' perceptions of their illness play a significant role in shaping their mental health and quality of life. Those with positive perceptions tend to exhibit better mental well-being, while those with negative perceptions experience poorer mental health outcomes. Additionally, coping strategies have been found to be closely linked to mental health, with adaptive coping strategies often associated with better mental well-being.

Although some studies have reported an association between locus of control and mental well-being, findings have been mixed, with some studies failing to find a significant correlation. Nonetheless, exploring the role of locus of control alongside illness perceptions and coping strategies can provide a more comprehensive understanding of the factors influencing mental well-being among individuals with chronic medical conditions.

The current study aims to fill gaps in the literature by investigating the influence of illness perceptions, coping strategies, and locus of control on mental well-being specifically among private hospital patients with chronic pains in Ibadan, Nigeria. This research is significant as it addresses a population that has received limited attention in previous studies on mental well-being. By examining these variables in the context of chronic pain, the study seeks to shed light on the unique challenges and experiences faced by individuals living with this condition.

The overarching goal of the study is to promote mental well-being among private hospital patients with chronic pains in Ibadan, Nigeria, by identifying factors that contribute to positive mental health outcomes. By bridging gaps in the literature and expanding knowledge on the interplay between illness perceptions, coping strategies, locus of control, and mental well-being, the study aims to inform interventions and support services tailored to the needs of this population. Ultimately, the research endeavors to contribute to the development of effective strategies for enhancing mental well-being and quality of life among individuals with chronic pain in the local community.

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## **Chapter Three**

### **Methodology**

#### **3.1 Research Design**

The cross-sectional survey research design is used in this study. The survey design is appropriate because data were collected from different participants at a particular point in time. This design is suitable to enable the researcher to examine the relationship between illness perceptions, coping Strategies, and locus of control on mental well-being among private hospital patients with chronic pains in Ibadan, Oyo State, Nigeria. Illness perceptions, coping strategies, and locus of control are independent variables, while mental well-being is the dependent variable.

#### **3.2 Study Setting**

This Study was carried out at Saint Gregory's Specialist & Ultrasound Diagnostic Clinic, Yemetu, Ibadan, Oyo State. The clinic is privately owned and one of the most popular diagnostic clinics in Ibadan Metropolis. The clinic diagnoses patients with different forms of ailments ranging from Cancer (CA) of different types, Ulcer, Appendicitis, Fibroids, Cyst, Renal Stones, Lumps, Hepatomegaly, Goitre, Poly Cyst Ovarian Disease (PCOD), Cataracts, Glaucoma and so on. Over thirty (30) patients with chronic pains visit the clinic on daily basis. The research scope is limited to private hospital outpatients with chronic pains in Ibadan, Oyo State, Nigeria.

#### **3.3 Population of the Study**

The study population comprised all patients experiencing chronic pain that are coming for ultrasound scan at St. Gregory's Specialist Clinic & Ultrasound Diagnostic Centre, Yemetu, Ibadan, Oyo State, Nigeria.

### **3.4 Sample Size and Sampling Technique**

Participants are sample of private hospital outpatients with chronic pain from 18 years old and above. Using a sample size calculator with confidence level of 95%, Error margin of  $\pm 5$  and population proportion of 50%, a total of 235 participants participated in this study.

This study made use of purposive sampling technique. This was adapted due to the relevance of the participants to the issue being investigated, their availability, willingness, and readiness of participants to participate in the research as regards the inclusion and exclusion criteria. Therefore, participants were selected based on the inclusion criteria.

Inclusion criteria include adults who are above the age of 18 years, who have been diagnosed with any kind of ailments that caused pains for at least a period of 3 months, who have the mental ability to read and respond to the questionnaire, and who will be willing to participate in the research.

### **3.5 Description of the Research Instrument**

A structured self-administered questionnaire which comprises of five sections was used in collection of data from the selected participants. The questionnaire measures illness perceptions, coping strategy, locus of control, mental well-being, and some items on demographic characteristics, clinical assessment and seriousness of pain.

#### **Section A: Demographic Variable, Clinical Assessment and Seriousness of Pain**

This section of the questionnaire contains items measuring the demographic information of the participants which include; Age, Gender, Religion, Marital Status and Educational Background. Clinical Assessment questions are: How long have you been experiencing the pain?

What was your diagnosis? And what is/are the treatment(s) given so far? And the seriousness of the pain is been listed from No pain (1) to Profound pain (10)

### **Section B: The Reversed Illness Perception Questionnaire (IPQ-R)**

The Reversed Illness Perception Questionnaire IPQ-R is an 84-item self-completed instrument developed to provide a quantitative measurement of the components of illness representations, as described by Leventhal's Common-Sense Model (CSM) of Self-Regulation<sup>1</sup>. It is divided into three sections: Identity Subscale (14 symptoms), Causal Subscale (18 causes), and a third section, which contains 7 subscales, including consequences, timeline, acute/chronic and cyclical, personal and treatment control/cure, illness coherence, and emotional representations. Sample items include, "My illness will last a short time", "My symptoms come and go in cycles", "My illness strongly affects the way others see me", "I have the power to influence my illness" etc. The scale items are rated on a 4-point scale, ranging from 1 (strongly disagree) to 4 (strongly agree). High scores on the identity, consequences, timeline, acute/chronic, and cyclical subscales represent strongly held beliefs about the number of symptoms attributed, the negative consequences, and the chronicity and cyclical nature of the illness. High scores on the personal and treatment control and coherence subscales represent positive beliefs about controllability and a personal understanding of the illness. The developers found good internal consistency reliability (Cronbach alpha's ranging from 0.79 for timeline cyclical to 0.89 for timeline acute/ chronic)<sup>2</sup>.

### **Section C: Coping Strategies Scale**

The coping strategies scale is a 13-item scale that assesses cognitive, emotional, and behavioural methods of dealing with problems and stressful situations<sup>3</sup>. Sample items include:

“When dealing with a problem, I spend time trying to understand what happened”, “When dealing with a problem, I try to see the positive side of the situation”, “When dealing with a problem, I consider several alternatives for handling the problem”. “When dealing with a problem, I often try to remember that the problem is not as serious as it seems”, etc. Each answer category was assigned a value from 4 (mostly true about me) to 1 (Not true about me). The developers reported internal consistencies coefficient alphas 0.91.

#### **Section D: Locus of Control Scale**

The locus of control questionnaire is a 13-item scale that measures generalised expectancies of external control of reinforcement<sup>3</sup>. Sample items include: “When dealing with a problem, I try to step back from the problem and think about it from a different point of view”, “When dealing with a problem, I consider several alternatives for handling the problem”, “When dealing with a problem, I often wait it out and see if it doesn’t take care of itself”, etc. The scale is a forced-choice instrument. A high score indicates an external Locus of Control on the internal-external dimension of the scale. In scoring, only external alternatives are endorsed. The developers reported internal consistencies coefficient alphas 0.83.

#### **Section E: Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)**

The Warwick-Edinburgh mental well-being scale (WEMWBS) is a 14-item measuring both hedonic and eudemonic aspects of mental health including positive affect (feelings of optimism, cheerfulness, relaxation), satisfying interpersonal relationships and positive functioning (energy, clear thinking, self-acceptance, personal development, competence, and autonomy)<sup>4</sup>. Sample items include: “I have been feeling optimistic about the future”, “I have been feeling useful”, “I have been feeling interested in other people”, etc. Individuals completing

the scale are required to tick the box that best describes their experience of each statement over the past two weeks using a 5-point Likert scale (none of the time, rarely, some of the time, often, all of the time). The Likert scale represents a score for each item from 1 to 5 respectively, giving a minimum score of 14 and a maximum score of 70. All items are scored positively. The overall score for the WEMWBS is calculated by totalling the scores for each item, with equal weights. A higher WEMWBS score, therefore, indicates a higher level of Mental Well-being. The developers reported a Cronbach's alpha score of 0.89.

### **3.6 Validity of the Research Instruments**

The research instruments were adopted in a related study assessing cyclical timeline perceptions, illness coherence and emotional representations. To check to what extent items are in accordance with each other, the item-total correlation was computed for each combination of items. This is the correlation between an item and the rest of all items combined. Each item on the measurement instrument correlates with the remaining items.

### **3.7 Reliability of the Research Instruments**

A pilot study was conducted to 20 randomly selected private hospital outpatients with Chronic Abdominal Pain to ascertain the reliability and consistency of the instruments in this study. Illness perception yielded Cronbach's alpha score of 0.929, coping strategies yielded Cronbach's alpha score of 0.894, locus of control yielded Cronbach's alpha score of 0.918 and mental wellbeing yielded Cronbach's alpha score of 0.884. (See Appendix V).

### **3.8 Research Procedure**

A letter of introduction is obtained from the department. Ethical approval is gotten from the Oyo State Ministry of Health. Participants is provided with the informed consent form which includes a brief summary of what the research entails and their rights as participants. Interested candidates were given their consent by appending their signatures on the consent form given to them. Those who shown their willingness to participate and given their consent was administered the survey questionnaire. The respondents were assured of confidentiality and anonymity of the data provided. A total number of two hundred and thirty-five (235) questionnaires were administered. Data obtained is subjected to analysis.

### **3.9 Method of Data Collection**

Data were collected on the clinic days (Monday to Friday) when patients with chronic pain came for ultrasound scan. Four trained research assistants were engaged to collect data from the respondents. The research assistants were introduced to the nurses at the clinic. As patients were given tally numbers while waiting for their turn to see the doctor, the research assistants approached the patients and explained the nature of the study to the patients and seek their willingness to participate in the study.

### **3.10 Data Analysis**

Data were collected and analyzed using Statistical Package for the Social Sciences (SPSS) 24 Software. The stated hypotheses i, ii, iii and v were tested using a T-Test of independent samples while hypothesis iv was tested using a 2x2 Analysis Of Variance (ANOVA). These statistical tools are suitable for testing the stated hypotheses because the researcher wants to

predict the value of a dependent variable (Mental Well-being) based on the value of the three other independent variables (illness perceptions, coping strategies and locus of control).

### **3.11 Ethical Consideration**

The researcher seeks ethical approval from the Oyo State Ministry of Health. Also, informed consent was obtained from the participants both verbally and in a written format, in the informed consent form attached to the questionnaires. Included in the questionnaire is an introductory statement, which was used to introduce the research and the researcher. It provided information on the purpose, intent, the use of information provided, and the assurance of confidentiality of respondents. Participants gave their consent to participate by signing the consent form.

Participation in the study was voluntarily and participants were freed to pull out at any time while filling out the questionnaire. Demographics that could trace a participant to his/her response like name, phone number, address, etc., were avoided and intentionally left out. Only the principal investigator had access to the filled questionnaire during the analysis and no response can be traced to any person.

## Endnotes

1. H. Leventhal, Y. Benyamini, S. Brownlee, M. Dielenbach, E. Leventhal, L. Patrick-Miller, & C. Robitaille, "Illness Representations: Theoretical Foundations". In Perceptions of Health and Illness: Current Research and Applications, Edited 1. Rona Moss-Morris, John Weinman, Keith Petrie, Robert Horne, Linda Cameron & Deanna Buick *The Revised Illness Perception Questionnaire (IPQ-R)*, **Psychology & Health** 17:1, 2002 116, DOI: [10.1080/08870440290001494](https://doi.org/10.1080/08870440290001494)
2. R. Moss-Morris, J. Weinman, K. Petrie, R. Horne, L. Cameron & D. Buick, *The Revised Illness Perception Questionnaire (IPQR)*, **Psychology & Health** 17:1, 2002: 116, DOI [10.1080/08870440290001494](https://doi.org/10.1080/08870440290001494)
3. J. B. Rotter, *Generalized Expectancies for Internal versus External Control of Reinforcement*. **Psychological Monographs: General and Applied** 80, No 1 (Whole No. 609). 1966.
4. R. Tennant, L. Hiller, R. Fishwick, S. Platt, S. Joseph, S. Weich, & S. Stewart-Brown, *The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS): Development and UK Validation*. **Health and Quality of life Outcomes** 5 no.1, 2007: 1-13.

## Chapter Four

### Results and Discussion of Findings

#### 4.1 Demographic Data Analysis

The total number of participants in this study were 232, 178 females (76.1%) and 36 males (15.4%). Their age range was 18 to 77 years ( $M= 35.77$ ,  $SD = 9.28$ ). Their experience of pain range was 1 to 288 months ( $M= 58.76$ ,  $SD = 53.83$ ). Marital status shows that 46 (19.7%) were single, 172 (73.5%) were married, 4 (1.7%) were divorced, and 2(0.9%) were widow, while 10 (4.3%) did not indicate their marital status. In terms of educational qualifications 1 (0.4%) had no formal education, 1 (0.4%) had primary education, 20 (8.5%) had secondary education and 206 (88%) were graduate while 6 (2.6%) did not indicate their educational qualification. 154 (65.8%) of the respondents were Christians, 64 (27.4%) were Muslims and 16 (6.8%) did not indicate their religion. The frequency analysis of diagnosis shows that 6 (2.6%) of the participants has cancer, 108 (46.2%) has fibroid, 23 (9.8%) has ulcer, 18 (7.7%) has appendicitis, 5 (2.1%) kidney/renal stones, and 30 (12.8%) were diagnosed with other ailments, while 44 (18.8%) did not indicate their diagnosis. Analysis of treatment for diagnosis shows that 19 (8.1%) received operation, 127 (54.3%) received medication, and 24 (10.3%) received both, 64 (27.4%) did not indicate the treatment received for the diagnosis. Analysis of seriousness of the pain shows that 42 (17.9%) did not feel any pain, 35 (15%) feel small pain, 31 (13.2%) feel little pain, 33 (14.1%) feel moderate pain, 21 (9%) feel mild pain, 16 (6.8%) feel little mild pain, 7 (3%) feel moderate severe pain, 6 (2.6%) feel mild severe pain, 15 (6.4%) feel very severe pain, and 5 (2.1%) feel profound pain, while 23 (9.8%) did not response to the level of seriousness of their pain.

**Table 4.1 Demographic Profile of Respondents by Age, Pain Experience, Gender, Marital Status, Educational Background, and Religion**

Demographic Profile(N=232)	M	(SD)	Range	No	%
Age	35.77	9.28	16 – 77		
Pain Experience (in months)	58.76	53.83	1 – 288		
<b>Gender</b>					
Male				36	15.4
Female				178	76.1
No Response				20	8.5
<b>Marital Status</b>					
Single				46	19.7
Married				172	73.5
Divorced				4	1.7
Widow				2	0.9
No Response				10	4.3
<b>Educational Background</b>					
No Formal Education				1	0.4
Primary Education				1	0.4
Secondary Education				20	8.5
Graduate				206	88.0
No Response				6	2.6
<b>Religion</b>					
Christianity				154	65.8
Islam				64	27.4
No Response				16	6.8

**Source: Fieldwork, 2024**

**Table 4.2 Demographic Profile of Respondents by Diagnosis, Treatment, and Seriousness of the Pain**

<b>Demographic Profile (N=232)</b>	<b>No</b>	<b>%</b>
<b>Diagnosis</b>		
Cancer	6	2.6
Fibroid	108	46.2
Ulcer	23	9.8
Appendicitis	18	7.7
Kidney/Renal Stones	5	2.1
Others	30	12.8
No Response	44	18.8
<b>Treatment</b>		
Operation	19	8.1
Medication	127	54.3
Operation & Medication	24	10.3
No Response	64	27.4
<b>Seriousness of the Pain</b>		
No Pain	42	17.9
Small Pain	35	15.0
Little Pain	31	13.2
Moderate pain	33	14.1
Mild Pain	21	9.0
Little Mild Pain	16	6.8
Moderate Severe Pain	7	3.0
Mild Severe Pain	6	2.6
Very Severe Pain	15	6.4
Profound Pain	5	2.1
No Response	23	9.8

**Source: Fieldwork, 2024**

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## 4.2 Test of Hypotheses

### Hypothesis One:

Participants with high illness perception will score significantly higher on mental well-being than participants with low illness perception among patients with chronic pain in Ibadan was analysed with a t-test of the independent sample. The result is presented in Table 4.3.

**Table 4.3: Summary of T-Test for Independent Sample Showing the Difference Between Low and High Illness Perception on Mental Well-being**

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Illness perception	N	$\bar{x}$	SD	Df	T	P
Low	107	21.44	8.89	232	-3.558	< .01
High	127	26.13	10.94			

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**Source: Fieldwork, 2024**

The results in Table 4.3 show that there is a significant difference between low illness perception ( $\bar{x} = 21.44$ ) and high illness perception ( $\bar{x} = 26.13$ ) on mental well-being ( $t(232) = -3.558, p < 0.01$ ). The result shows that participants with high illness perception reported higher levels of mental well-being compared to those participants with low illness perception. This indicates that participants have higher mental well-being when they have high illness perception and vice versa.

### Hypothesis Two:

Participants who are high in coping strategies will score significantly higher on mental well-being than participants who are low in coping strategies among patients with chronic pain in Ibadan was analysed with t-test of independent sample. The result is presented in Table 4.4.

**Table 4.4: Summary of T-Test for Independent Sample Showing the Difference Between Low and High Coping Strategies on Mental Well-being**

Coping strategies	N	X-	SD	Df	T	P
Low	109	18.77	7.67	232	-8.194	< .01
High	125	28.54	10.17			

**Source: Fieldwork, 2024**

The results in Table 4.4 show that there is a significant difference between low coping strategies ( $x^- = 18.77$ ) and high coping strategies ( $x^- = 28.54$ ) on mental well-being ( $t(232) = -8.194, p < 0.01$ ). The result shows that participants with high coping strategies reported higher level of mental well-being compare to those participants with low coping strategies. This indicates that participants who cope better have higher mental well-being than participant who cannot cope.

### **Hypothesis Three:**

Participants with an internal locus of control will score significantly higher on mental well-being than their counterparts with an external locus of control among patients with chronic pain in Ibadan was analysed with a t-test of an independent sample. The result is presented in Table 4.5.

**Table 4.5: Summary of T-Test for Independent Sample Showing the Difference Between Internal and External Locus of Control on Mental Well-being**

Locus of control	N	X-	SD	Df	T	P
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External	122	21.45	8.59	232	-4.058	< .01
Internal	112	26.75	11.30			

**Source: Fieldwork, 2024**

The results in Table 4.5 show that there is a significant difference between the external locus of control ( $\bar{x} = 21.45$ ) and internal locus of control ( $\bar{x} = 26.75$ ) on mental well-being ( $t(232) = -4.058, p < 0.01$ ). The result shows that participants with internal locus of control reported higher levels of mental well-being compared to those participants with external locus of control. This indicates that participants who employed an internal locus of control have higher mental well-being than participants with an external locus of control.

**Hypothesis Four:**

There will be a significant interaction effect between coping strategies and locus of control on mental well-being among patients with chronic pain in Ibadan was analyzed using 2X2 analysis of variance as shown in Table 4.6:

**Table 4.6: 2X2 ANOVA of Main and Interaction Effects of Coping Strategies and Locus of Control on Mental Well-being Among Patients with Chronic Pain**

Source	SS	Df	MS	F	Sig.
Intercept	119759.293	1	119759.293	1468.563	.000
Coping Strategies	4327.473	1	4327.473	53.066	.000
Locus	412.335	1	412.335	5.056	.025
Coping Strategies * Locus	4.241	1	4.241	.052	.820
Error	18756.182	230	81.549		

Total 159379.000 234

a. R Squared = .242 (Adjusted R Squared = .232)

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**Source: Fieldwork, 2024**

From Table 4.6, the result of the 2X2 analysis of variance indicates that coping strategies have a significant main effect on mental well-being,  $F(1, 230) = 53.066, p < .01$ , also locus of control has a significant main effect on mental well-being,  $F(1, 230) = 5.056, p < .05$ . The result shows that there is no significant interaction effect between coping strategies and locus of control on mental well-being,  $F(1, 230) = .052, P > .05$ .

**Hypothesis Five:**

Female participants with chronic pain will score significantly high on mental well-being than male participants among patients with chronic pain in Ibadan was analysed with a t-test other f independent sample. The result is presented in Table 4.7.

**Table 4.7: Summary of T-Test for Independent Sample Showing the Difference Between Female and Male Patients on mental well-being**

Gender	N	x-	SD	df	T	P
Male	36	25.64	9.49	212	.866	> .05
Female	178	23.98	10.65			

The results in Table 4.7 shows that there is no significant difference between male ( $x- = 25.64, SD = 9.49$ ) and female ( $x- = 23.98, SD = 10.65$ ) on mental well-being ( $t(212) = .866, p > 0.05$ ).

This indicates that both male and female participants experienced similar mental well-being.

Hence, the hypothesis is not supported.

### 4.3 Discussion of Findings

The first hypothesis stated that participants with high illness perception would score significantly higher on mental well-being than participants with low illness perception among patients with chronic pain in Ibadan was confirmed. The finding that individuals with higher illness perception report higher levels of mental well-being contradicts some previous literature suggesting that perceiving illness as more severe is associated with poorer mental health outcomes. However, recent studies have emphasized the importance of subjective illness perceptions in shaping psychological adjustment and coping processes. The study of Leventhal and colleagues highlights the role of illness representations in influencing emotional responses and coping strategies among individuals with chronic illnesses<sup>1</sup>. The result provides valuable insights into the relationship between illness perception and psychological well-being among patients with chronic pain. In a broader sense, it suggests the following. Firstly, the finding suggests that individuals' perceptions of their illness play a crucial role in shaping their mental well-being. Patients who perceive their illness more intensely, as indicated by higher illness perception scores, tend to report higher levels of mental well-being compared to those with lower illness perception scores<sup>9</sup>. This underscores the importance of acknowledging and addressing patients' beliefs and interpretations about their condition in the context of chronic pain management. Healthcare providers may need to consider patients' illness perceptions when designing interventions aimed at promoting mental well-being, as perceptions of illness severity, controllability, and impact on daily life can significantly influence patients' emotional and psychological adjustment to chronic pain. Furthermore, the result highlights the complexity of the relationship between illness perception and mental well-being. While it may seem counterintuitive that higher illness perception is associated with better mental well-being, this

finding suggests that individuals who perceive their illness more intensely may be more actively engaged in managing their condition and seeking support, which could contribute to better psychological outcomes. Additionally, individuals with higher illness perception may have a greater sense of awareness and acceptance of their condition, allowing them to cope more effectively with the challenges posed by chronic pain.

Several reasons can account for this result. A few of them include the following. First is the perception of control. Individuals with higher illness perception may feel a greater sense of control over their condition, leading to better mental well-being. They may believe that they have more agency in managing their symptoms and seeking appropriate treatment, which can contribute to feelings of empowerment and reduced distress. Hence, individual differences in perception of control might have contributed. Secondly, coping strategies. Patients with higher illness perception may be more likely to employ adaptive coping strategies, such as problem-solving and seeking social support, which are associated with better mental health outcomes. These individuals may actively engage in strategies to manage their symptoms and cope with the challenges of chronic pain, leading to enhanced psychological well-being. Third, illness acceptance. Higher illness perception may be indicative of greater acceptance and acknowledgment of one's condition. Individuals with chronic pain who have a more realistic understanding of the severity and impact of their illness may be better equipped to cope with its challenges and adjust their expectations accordingly, leading to improved mental well-being. Fourth, treatment adherence. Patients with higher illness perception may be more motivated to adhere to treatment recommendations and engage in self-care practices, which can positively influence mental well-being. Their awareness of the importance of managing their condition may lead to greater adherence to medication regimens, lifestyle modifications, and therapeutic

interventions, resulting in better psychological outcomes. Finally, social support. Individuals with higher illness perception may be more likely to seek and receive social support from friends, family, and healthcare providers, which can buffer against the negative effects of chronic pain on mental well-being. Having a strong support network and access to resources for managing their illness may contribute to higher levels of psychological resilience and well-being.

The second hypothesis stated that participants who are high in coping strategies will score significantly higher on mental well-being than participants who are low in coping strategies among patients with chronic pain in Ibadan, was confirmed. The result is in support of the previous research results<sup>2,3,4,5,17</sup>. The association between effective coping strategies and higher mental well-being is consistent with numerous studies emphasizing the protective role of adaptive coping mechanisms in promoting psychological resilience. A recent study has highlighted the importance of interventions aimed at enhancing coping skills, such as cognitive-behavioral therapy and mindfulness-based interventions, in improving mental health outcomes<sup>11</sup>. Having the capacity to effectively manage chronic pain can serve as a protective factor against adverse effects on the mental well-being of patients. This capability can contribute to improved physical and psychological well-being, thereby enhancing overall quality of life. Studies indicate that individuals who employ an active coping style, characterized by a proactive and direct approach to problem-solving, experience lower levels of emotional distress<sup>13</sup>. Also, the observed result indicating a significant difference between low and high coping strategy groups on mental well-being among patients with chronic pain provides important insights into the relationship between coping strategies and psychological well-being. Firstly, the finding underscores the critical role of coping strategies in shaping mental well-being outcomes among individuals dealing with chronic pain. Patients who employ higher levels of coping

strategies, as evidenced by higher coping strategy scores, tend to report better mental health outcomes compared to those with lower coping strategy scores. This suggests that the ability to effectively manage and cope with the challenges associated with chronic pain is associated with enhanced psychological well-being. Secondly, the result highlights the importance of adaptive coping mechanisms in promoting mental well-being in the context of chronic pain. Individuals who utilize constructive coping strategies such as problem-solving, seeking social support, and acceptance of their condition are more likely to experience higher levels of psychological resilience and overall well-being. These coping strategies may help individuals to effectively navigate the stressors and limitations imposed by chronic pain, leading to a greater sense of control and mastery over their circumstances. Furthermore, the significant difference between low and high coping strategy groups on mental well-being suggests that the quality and effectiveness of coping efforts play a crucial role in determining psychological outcomes. Patients who employ a diverse range of coping strategies and adaptively adjust their approach to managing chronic pain may experience greater psychological adjustment and subjective well-being. However, it is essential to interpret these findings within the broader context of chronic pain management. While high coping strategies are associated with better mental well-being, it does not imply that individuals with chronic pain should solely rely on coping strategies to manage their psychological symptoms. Comprehensive treatment approaches that address both the physical and psychological aspects of chronic pain, including pharmacological interventions, psychotherapy, and lifestyle modifications, are often necessary to optimize patient outcomes.

The significant difference observed between low and high coping strategy groups on mental well-being among patients with chronic pain can be attributed to several possible reasons: First, adaptive coping skills. Individuals with higher coping strategy scores may possess more

adaptive coping skills, such as problem-solving, seeking social support, and cognitive reappraisal. These individuals may be better equipped to effectively manage the stressors and challenges associated with chronic pain, leading to better psychological adjustment and overall well-being. Second, enhanced stress management. Patients with higher coping strategy scores may be more adept at managing stress and reducing its negative impact on their mental health. They may employ a variety of coping techniques to regulate their emotional responses to pain and maintain a sense of control over their circumstances, which can contribute to greater psychological resilience. Third, active problem-solving. Individuals with high coping strategy scores may be more proactive in identifying and addressing the sources of stress and discomfort associated with chronic pain. They may engage in problem-solving strategies to tackle practical issues related to pain management, such as adhering to treatment regimens, modifying daily activities, and seeking appropriate healthcare resources. Fourth, social support network. Patients with high coping strategy scores may have stronger social support networks, which can serve as a buffer against the negative impact of chronic pain on mental well-being. These individuals may receive encouragement, validation, and practical assistance from family, friends, and healthcare providers, fostering a sense of belonging and emotional support. Finally, adaptive coping appraisals. Individuals with high coping strategy scores may perceive their coping efforts as effective and beneficial, leading to positive appraisals of their ability to manage chronic pain and its associated challenges. These adaptive coping appraisals can enhance self-efficacy beliefs and confidence in one's ability to cope with adversity, contributing to better mental health outcomes.

The third hypothesis stated that participants with an internal locus of control will score significantly higher on mental well-being than their counterparts with external locus of control among patients with chronic pain in Ibadan was confirmed. These results are consistent with

findings from various other studies<sup>6,7</sup>. The finding that individuals with an internal locus of control report higher levels of mental well-being is supported by extensive literature linking internal locus of control beliefs to greater psychological well-being and adaptive coping behaviors. Recent studies have underscored the relevance of locus of control in various domains, including health behavior change, stress management, and resilience-building interventions<sup>12</sup>.

Although mental well-being is influenced by a multitude of genetic, neurobiological, and psychosocial factors, the findings underscore the importance of locus of control as a cognitive factor significantly impacting mental well-being. The results imply that individuals who perceive themselves as having control over life events are less prone to experiencing depressive symptoms. It can be inferred that such beliefs motivate individuals to actively confront stressful situations, thereby reducing the likelihood of engaging in negative self-perceptions, pessimistic views of the world, and feelings of helplessness, passivity, and indecision<sup>8</sup>.

The significant difference observed between external locus of control and internal locus of control groups on mental well-being among participants provides valuable insights into the relationship between locus of control beliefs and psychological well-being. Firstly, the finding highlights the impact of locus of control beliefs on individuals' mental health outcomes. Participants who endorsed an internal locus of control orientation, characterized by beliefs that outcomes are determined by their own actions and efforts, reported higher levels of mental well-being compared to those with an external locus of control orientation. This suggests that perceptions of personal agency and control over one's life circumstances are associated with better psychological adjustment and overall well-being. Secondly, the result underscores the importance of individuals' sense of control in shaping their mental health outcomes. Participants with an internal locus of control may feel empowered and confident in their ability to influence

their own destinies, leading to feelings of mastery, autonomy, and self-efficacy. These beliefs may enhance individuals' resilience to stress, promote adaptive coping strategies, and foster a positive outlook on life, all of which contribute to better mental well-being. Furthermore, the significant difference in mental well-being between external and internal locus of control groups suggests that locus of control beliefs may serve as a protective or risk factor for mental health. Individuals with an external locus of control orientation, who attribute outcomes to external forces such as luck, fate, or other people, may experience feelings of helplessness, hopelessness, and vulnerability, which can negatively impact their psychological well-being. However, it is essential to consider potential confounding variables or alternative explanations for these findings. Other factors, such as personality traits, coping strategies, social support, and environmental stressors, may also influence the relationship between locus of control beliefs and mental well-being. Additionally, longitudinal studies are needed to determine the directionality and causality of this relationship, as higher levels of mental well-being may lead to more internal locus of control beliefs over time. The significant difference observed between external and internal locus of control groups on mental well-being highlights the importance of addressing individuals' beliefs about control in psychological interventions aimed at promoting mental health. Helping individuals develop a sense of internal control and self-efficacy may be beneficial in enhancing their resilience, coping abilities, and overall psychological well-being.

The significant difference between external and internal locus of control groups on mental well-being among participants with chronic pain may be influenced by several factors:

First, is perceived control. Individuals with an internal locus of control tend to believe that they have control over their own lives and outcomes, which can foster a sense of empowerment and agency. This perceived control may lead to better mental well-being by

enhancing individuals' confidence in their ability to cope with challenges and navigate difficult situations effectively. Second, coping strategies. Internal locus of control beliefs is often associated with more adaptive coping strategies, such as problem-solving and seeking social support. Individuals who believe they have control over their circumstances may be more likely to engage in active coping efforts, which can buffer against stress and promote psychological resilience. Third, attributional style. Internal locus of control is linked to a tendency to attribute outcomes to one's own actions and efforts. This positive attributional style may contribute to a more optimistic outlook on life and greater psychological well-being, as individuals are more likely to interpret setbacks as temporary and controllable. Fourth sense of mastery. Believing in one's ability to influence outcomes and shape one's own destiny is associated with a sense of mastery and self-efficacy. Individuals with an internal locus of control may approach challenges with a greater sense of confidence and competence, leading to higher levels of mental well-being. Finally, sense of responsibility. Internal locus of control beliefs may also be associated with a greater sense of personal responsibility for one's well-being. This sense of responsibility may motivate individuals to take proactive steps to maintain their mental health, such as engaging in self-care practices and seeking professional help when needed.

The fourth hypothesis stated that there will be a significant interaction effect between coping strategies and locus of control on mental well-being among patients with chronic pain in Ibadan was not confirmed. The results of the 2x2 analysis of variance (ANOVA) provide valuable insights into the individual and combined effects of coping strategies and locus of control on mental well-being among participants with chronic pain.

Firstly, the significant main effect of coping strategies on mental well-being ( $F(1, 230) = 53.066, p < .01$ ) indicates that coping strategies independently influence mental well-being

outcomes. This suggests that participants who employ more adaptive coping strategies tend to report higher levels of mental well-being compared to those who utilize less adaptive coping strategies. This finding underscores the importance of effective coping mechanisms in promoting psychological resilience and well-being, particularly in the context of managing chronic pain.

Similarly, the significant main effect of locus of control on mental well-being ( $F(1, 230) = 5.056, p < .05$ ) indicates that individuals' beliefs about control over their lives also independently influence their mental well-being. Participants with an internal locus of control orientation, who believe they have control over their circumstances, tend to report higher levels of mental well-being compared to those with an external locus of control orientation. This highlights the psychological significance of perceived control and agency in shaping individuals' subjective well-being.

However, the non-significant interaction effect between coping strategies and locus of control on mental well-being ( $F(1, 230) = .052, p > .05$ ) suggests that the combined influence of coping strategies and locus of control on mental well-being does not differ significantly from what would be expected based on their individual effects alone. In other words, while both coping strategies and locus of control independently contribute to mental well-being outcomes, their combined effect does not yield a synergistic or interactive effect on mental well-being in this context.

Overall, these findings suggest that both coping strategies and locus of control beliefs play important roles in shaping mental well-being among individuals with chronic pain. Interventions aimed at improving mental well-being in this population may benefit from targeting both coping skills and beliefs about control, with a focus on fostering adaptive coping strategies and promoting a sense of internal control and empowerment. While the absence of a

significant interaction effect suggests that the combined influence of coping strategies and locus of control on mental well-being may not be greater than the sum of their individual effects, addressing both factors remains important for comprehensive mental health interventions in the context of chronic pain management.

The fifth hypothesis stated that Female participants with chronic pain will score significantly high on mental well-being than male participants among patients with chronic pain in Ibadan was not confirmed. The absence of significant gender differences in mental well-being contradicts some previous research indicating gender disparities in psychological health outcomes. While gender-related factors such as social roles, gender norms, and societal expectations have been implicated in mental health disparities, recent studies have also highlighted the importance of considering individual differences and contextual factors in understanding gender-related patterns of mental well-being<sup>14</sup>. While certain aspects of gender disparities have been consistently identified across various studies, it is pertinent to investigate whether the heightened severity of negative symptoms, commonly observed among male patients, extends uniformly across all facets or only specific domains within this intricate and diverse psychopathological construct. This inquiry is particularly relevant given recent findings suggesting that distinct facets of negative symptoms – specifically, "avolition" and "poor emotion expression" – might exert varying influences on treatment outcomes<sup>15,16</sup>.

The analysis comparing mental well-being scores between male and female participants yielded non-significant results ( $t(212) = .866, p > 0.05$ ), indicating that there is no statistically significant difference in mental well-being between the two gender groups. Specifically, the mean mental well-being score for male participants was 25.64 (SD = 9.49), while the mean score for female participants was 23.98 (SD = 10.65).

This finding suggests that, on average, both male and female participants in the study reported similar levels of mental well-being. Consequently, the hypothesis proposing a difference in mental well-being between genders is not supported by the data.

Several factors may contribute to the absence of a significant difference in mental well-being between male and female participants: First, sample characteristics. The participants in the study, regardless of gender, may share similar demographic, clinical, or psychosocial characteristics that influence their mental well-being. For example, they may have similar levels of pain severity, coping strategies, social support, or access to healthcare resources. First, measurement tools. The instrument used to assess mental well-being may not be sensitive enough to detect subtle differences between male and female participants. Alternatively, the measure may capture aspects of mental well-being that are equally relevant to both genders, leading to comparable scores. Second, gender differences. While gender differences in mental health have been documented in some contexts, the absence of a difference in this study may suggest that other factors, such as individual differences in coping styles, personality traits, or life circumstances, play a more significant role in shaping mental well-being than gender alone. Third, cultural and social context. Cultural norms and social expectations surrounding gender roles and expressions of distress may influence how individuals perceive and report their mental well-being. In some cultures, men and women may experience similar levels of stigma or barriers to seeking help for mental health issues, leading to comparable outcomes. While the hypothesis suggesting a gender difference in mental well-being was not supported by the data, this finding contributes to our understanding of mental health disparities and underscores the need for further research to explore the complex interplay of factors that influence mental well-being across different demographic groups.

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## Chapter Five

### Conclusion

#### 5.1 Summary of Findings

The study investigated the role of illness perception, coping strategies, and locus of control as predictors of mental well-being among patients dealing with chronic pain. The results highlighted the significant influence of these factors on mental well-being, emphasizing their relevance in understanding and addressing the psychological aspects of chronic pain management. Illness perception, including individuals' beliefs and interpretations about their condition, emerged as a key predictor of mental well-being. Patients' perceptions of their illness, such as its severity, controllability, and impact on their lives, were found to significantly influence their emotional and psychological adjustment to chronic pain.

Similarly, coping strategies employed by patients played a crucial role in shaping their mental well-being. The effectiveness of coping strategies, whether problem-focused or emotion-focused, was associated with better mental health outcomes among individuals with chronic pain. Adaptive coping strategies, such as seeking social support, problem-solving, and acceptance, were linked to higher levels of psychological well-being. Furthermore, locus of control, or individuals' beliefs about the extent to which they can control events in their lives, emerged as a significant predictor of mental well-being in the context of chronic pain. Patients with a stronger internal locus of control, who believed they had control over their pain and its management, reported better mental health outcomes compared to those with a more external locus of control orientation.

These findings underscore the complex interplay between illness perception, coping strategies, locus of control, and mental well-being among patients with chronic pain. They highlight the importance of addressing patients' beliefs about their illness, teaching adaptive coping skills, and fostering a sense of control over pain management to promote better mental health outcomes. The implications of these findings are significant for interventions aimed at improving the mental health of patients with chronic pain. Interventions targeting illness perception, coping strategies, and locus of control can help individuals develop more adaptive ways of managing their pain and coping with its psychological impact, ultimately enhancing their overall well-being and quality of life. By addressing these factors comprehensively, healthcare providers can provide more effective and holistic care for patients living with chronic pain.

The study revealed that higher illness perception predicted better mental well-being, indicating that individuals who perceive their illness more intensely tend to experience higher levels of mental well-being. Also, effective coping strategies were better predictors mental well-being, highlighting the importance of coping mechanisms in promoting mental well-being of patients with chronic pain. The result suggested that individuals with an internal locus of control, who believe they have control over their circumstances, reported higher levels of mental well-being compared to those with an external locus of control among patients with chronic pain.

The study findings underscored the individual importance of coping strategies and locus of control in determining the mental well-being of patients with chronic pain. Both factors demonstrated significant main effects, indicating their independent contributions to mental well-being outcomes in this population. Coping strategies, encompassing the various ways individuals

manage and adapt to stressors associated with chronic pain, emerged as a significant predictor of mental well-being. Patients who employed effective coping mechanisms tended to experience better mental health outcomes, highlighting the critical role of coping strategies in mitigating the psychological impact of chronic pain. Similarly, locus of control, reflecting individuals' beliefs about their ability to influence outcomes in their lives, also exerted a significant influence on mental well-being among patients with chronic pain. Those with an internal locus of control, who perceived themselves as having control over their circumstances, reported higher levels of mental well-being compared to those with an external locus of control orientation. However, the study did not find a significant interaction effect between coping strategies and locus of control on mental well-being. This suggests that while both coping strategies and locus of control independently contribute to mental well-being, their combined influence may not have a synergistic effect in predicting mental well-being outcomes in the context of chronic pain. These findings provide valuable insights into the factors that influence mental well-being among patients with chronic pain. While coping strategies and locus of control play important roles individually, healthcare providers may need to consider additional factors or interventions to address the complex interplay between these factors and promote optimal mental health outcomes in this population. Further research may explore other potential moderators or mediators that could influence the relationship between coping strategies, locus of control, and mental well-being in patients with chronic pain, thereby informing more targeted and effective interventions.

The role of gender in determining mental well-being among patients with chronic pain was also investigated in this study. Contrary to expectations, the analysis revealed that gender did not play a significant role in predicting mental well-being in the studied population. Both

male and female patients with chronic pain reported similar levels of mental well-being, suggesting that gender differences may not be a significant factor in determining mental health outcomes in this context. These findings challenge traditional assumptions about gender differences in mental health and underscore the need to consider individual differences and unique experiences when addressing mental well-being in patients with chronic pain. While gender-based approaches to healthcare are common, this study suggests that mental health interventions for chronic pain patients may benefit from a more inclusive and gender-neutral approach. By recognizing that mental well-being is influenced by a multitude of factors beyond gender, healthcare providers can develop more comprehensive and tailored interventions to support the psychological needs of all patients with chronic pain, regardless of gender. This may involve addressing factors such as illness perception, coping strategies, locus of control, and social support networks, which have been identified as significant predictors of mental well-being in this population. The study findings highlight the importance of adopting a holistic and individualized approach to mental health care for patients with chronic pain, one that considers a wide range of factors that may influence mental well-being beyond traditional demographic variables like gender. By addressing the unique needs and experiences of each patient, healthcare providers can enhance the effectiveness of mental health interventions and promote better outcomes for individuals living with chronic pain.

## **5.2 Conclusion**

This study aimed at exploring the illness perception, coping strategies, and locus of control as determinants of mental well-being among patients with chronic pain in Ibadan. The results draw attention to illness perception, coping strategies, and locus of control as part of the

cognitive variables that play a significant role in mental well-being. The results suggest that high illness perception improves mental well-being than low illness perception among patients with chronic pain. Then patients who display better coping strategies are more likely to have good mental well-being, whereas patients who display poor coping strategies are less likely to have with good mental well-being. Also, patients who display internal locus of control are more likely to have good mental well-being, whereas patients who display external locus of control are less likely to present with good mental well-being. Mental well-being has negative implications for patients' treatment success, future employment, future relationships and their happiness in life. It is worthwhile to consider illness perception, Coping strategies, and locus of control as significant variables when addressing mental well-being as a mental health problem among patients with chronic pain.

### **5.3 Recommendations**

Based on the results of the study, several recommendations were made to promote the mental well-being of patients with chronic pain and address factors such as illness perception, coping strategies, and locus of control.

1. Development and implementation of psychoeducation programs that aim to enhance individuals' understanding of illness perception. These programs can provide information about the nature of illnesses, their impact on mental well-being, and strategies for coping effectively.
2. Proposing coping skills training workshops or interventions to teach patients with chronic pain adaptive coping strategies. Techniques such as problem-solving, emotion regulation,

and social support seeking can be taught to help individuals better manage the stress and adversity of the illness.

3. Organizing empowerment workshops focusing on fostering an internal locus of control. These workshops can help patients with chronic pain recognize their ability to influence and control their circumstances, leading to increased feelings of empowerment and improved mental well-being.
4. Designing integrated interventions that combine elements of illness perception education, coping skills training, and empowerment strategies could better improve mental well-being. This comprehensive approach can address multiple factors influencing mental well-being simultaneously.
5. Encourage continued research to further understand the complex interplay between illness perception, coping strategies, locus of control, and mental well-being. Longitudinal studies and qualitative research can provide deeper insights into these relationships over time and across diverse populations.

#### **5.4 Contributions to Knowledge**

The study made several significant contributions to knowledge in the area of mental health.

1. The study enhances our understanding of the relationship between illness perception and mental well-being. By demonstrating that individuals with higher illness perception tend to report better mental well-being, it challenges any assumptions that perceiving illness as more severe would lead to poorer mental health outcomes.
2. It validates the importance of coping strategies in promoting mental well-being of patients. The findings highlight the positive association between effective coping

mechanisms and better mental well-being, emphasizing the need for interventions that enhance coping skills.

3. The study provides insight into the role of locus of control in mental well-being. By showing that patients with an internal locus of control tend to experience higher levels of mental well-being, it underscores the importance of personal beliefs and perceptions in shaping psychological outcomes of patients with chronic pain.
4. The study has practical implications for mental health interventions and programs. It highlights the potential effectiveness of psychoeducation, coping skills training, and empowerment strategies in promoting mental well-being, offering valuable insights for the development of targeted interventions.
5. The finding that gender does not significantly influence mental well-being challenges traditional gender stereotypes in mental health research. It suggests that both men and women may experience similar levels of mental well-being, emphasizing the importance of gender-neutral approaches in mental health promotion.

### **5.5 Suggested Areas for Further Research**

1. Conduct longitudinal studies to examine the long-term effects of illness perception, coping strategies, and locus of control on mental well-being is important. Tracking participants over time would provide insights into how these factors evolve and interact dynamically, offering a deeper understanding of their impact on mental health.
2. Explore cross-cultural differences in illness perception, coping strategies, locus of control, and mental well-being will further our understanding in the area of mental health.

Comparative studies across diverse cultural contexts would elucidate cultural variations in psychosocial factors and their implications for mental health outcomes.

3. Mediating and Moderating Factors: Investigate potential mediating and or moderating factors that influence the relationships between illness perception, coping strategies, locus of control, and mental well-being. Factors such as social support, personality traits, and resilience may play important roles and warrant further exploration in mental health study.

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## Appendix I

### Questionnaire:

Department of Psychology, Faculty of Management and Social Sciences,  
Lead City University, Ibadan, Oyo State.

This questionnaire is meant for research purpose only and that any information given will be treated with utmost confidentiality.

#### Section A

Instruction: Please tick or mark '√' where appropriate and complete the gap where necessary.

Age:.....

Gender: Male ( ) Female ( )

Religion: Christianity ( ) Islam ( ) Traditionalist ( ) others  
specify.....

Marital Status: Single ( ) Married ( ) Divorce ( ) Widow ( )

Others specify.....

Educational background: No formal education ( ) Primary School Cert ( )

Secondary School Cert ( ) Graduate: NCE, OND, HND, BSc, Masters, PhD ( )

#### Clinical Assessment:

How long have you been experiencing the pain? (indicate in months).....

What was your diagnosis? Cancer( ) Fibroid( ) Ulcer( ) Appendicitis( )

Kidney/renal stones( ) Others specify.....

What is/are the treatment(s) Operation( ) Medication( ) Operation & Medication ( )

**Rate the seriousness of the pain you are experiencing**

1	2	3	4	5	6	7	8	9	10
No pain	Small pain	Little pain	Moderate pain	Mild pain	Little mild pain	Moderate severe pain	Mild severe pain	Very severe pain	Profound pain

**Section B**

Please write a number next to each statement to indicate the extent to which you agree or disagree with each statement. Kindly indicate your response using Strongly Agree = 1, Agree = 2, Disagree = 3, Strongly Disagree = 4

S/No	Items	1	2	3	4
1	I have been feeling optimistic about the future				
2	I have been feeling useful				
3	I have been feeling relaxed				
4	I have been feeling interested in other people				
5	I have had energy to spare				
6	I have been thinking clearly				
7	I have been feeling good about myself				
8	I have been close to other people				
9	I have been feeling confident				
10	I have been able to make up my own mind about things				
11	I have been feeling loved				
12	I have been interested in new things				

13	I have been feeling cheerful					
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### Section C

Please write a number next to each statement to indicate the extent to which you agree or disagree with each statement. Kindly indicate your response using Strongly Agree = 1, Agree = 2, Disagree = 3, Strongly Disagree = 4

S/No	Items	1	2	3	4
1	My illness will last a short time				
2	My illness is likely to be permanent rather than temporary				
3	My illness will last for a long time				
4	This illness will pass quickly				
5	I expect to have this illness for the rest of my life				
6	My illness will improve in time				
7	The symptoms of my illness change a great deal from day to day				
8	My symptoms come and go in cycles				
9	My illness is very unpredictable				
10	I go through cycles in which my illness gets better and worse				
11	My illness is a serious condition				
12	My illness has major consequences on my life				
13	My illness does not have much effect on my life				
14	My illness strongly affects the way others see me				
15	My illness has serious financial consequences				
16	My illness causes difficulties for those who are close to me				

17	There is a lot which I can do to control my symptoms				
18	What I do can determine whether my illness gets better or worse				
19	The course of my illness depends on me				
20	Nothing I do will affect my illness				
21	I have the power to influence my illness				
22	My actions will have no effect on the outcome of my illness				
23	There is very little that can be done to improve my illness				
24	My treatment will be effective in curing my illness				
25	The negative effects of my illness can be prevented (avoided) by my treatment				
26	My treatment can control my illness				
27	There is nothing which can help my condition				
28	The symptoms of my condition are puzzling to me				
29	I don't understand my illness				
30	My illness doesn't make any sense to me				
31	I have a clear picture or understanding of my condition				
32	I get depressed when I think about my illness				
33	When I think about my illness, I get upset				
34	My illness makes me feel angry				
35	My illness does not worry me				
36	Having this illness make me feel anxious				
37	My illness makes me feel afraid				

## Section D

Please write a number next to each statement to indicate the extent to which you agree or disagree with each statement. Kindly indicate your response using Strongly Agree = 1, Agree = 2, Disagree = 3, Strongly Disagree = 4

S/No	Items	1	2	3	4
1	When dealing with a problem, I spend time trying to understand what happened.				
2	When dealing with a problem, I try to see the positive side of the situation				
3	When dealing with a problem, I try to step back from the problem and think about it from a different point of view.				
4	When dealing with a problem, I consider several alternatives for handling the problem.				
5	When dealing with a problem, I try to see the humor in it				
6	When dealing with a problem, I think about what it might say about bigger lifestyle changes I need to make				
7	When dealing with a problem, I often wait it out and see if it doesn't take care of itself.				
8	When dealing with a problem, I often try to remember that the problem is not as serious as it seems.				
9	When dealing with a problem, I often use exercise, hobbies, or meditation to help me get through a tough time.				
10	When dealing with a problem, I make jokes about it or try to make light of it.				

11	When dealing with a problem, I make compromises.				
12	When dealing with a problem, I take steps to take better care of myself and my family for the future.				
13	When dealing with a problem, I work on making things better for the future by changing my habits, such as diet, exercise, budgeting, or staying in closer touch with people I care about				

### Section E

Each item below is a belief statement about your medical condition with which you may agree or disagree. Besides each statement is a scale which ranges from Strongly Disagree = 1, Moderately Disagree = 2, Slightly Disagree = 3, Slightly Agree = 4, Moderately Agree = 5, to Strongly Agree = 6. For each item we would like you to circle the number that represents the extent to which you agree or disagree with that statement. There is no right or wrong answers.

S/No	Items	1	2	3	4	5	6
1	If my condition worsens, it is my own behaviour which determines how soon I will feel better again						
2	As to my condition, what will be will be						
3	If I see my doctor regularly, I am less likely to have problems with my condition						
4	Most things that affect my condition happen to me by chance						
5	Whenever my condition worsens, I should consult a medically trained professional						
6	I am directly responsible for my condition getting better or worse						

7	Other people play a big role in whether my condition improves, stays the same or get worse							
8	Whatever goes wrong with my condition is my own fault							
9	Luck plays a big part in determining how my condition improves							
10	In order for my condition to improve, it is up to other people to see that the right thing happen							
11	Whatever improvement occurs with my condition is largely a matter of good fortune							
12	The main thing which affects my condition is what I myself do							
13	I deserve the credit when my condition improves and the blame when it gets worse							
14	Following doctor's orders to the letter is the best way to keep my condition from getting any worse.							
15	If my condition worsens, it is a matter of fate							
16	If I am lucky, my condition will get better							
17	If my condition takes a turn for the worse, it is because I have not been taking proper care of myself							
18	The type of help I receive from other people determines how soon my condition improves							

## Appendix II

### Consent Form

Dear Respondent,

This questionnaire is strictly for academic research purpose only and that any information given will be treated with utmost confidentiality.

I agree to be a participant in this study. I acknowledge that I am aware of what this study involves, that I am above 18years old, and that I have received a copy of this informed consent form.

Participant signature and Date: \_\_\_\_\_

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**Appendix III**  
**Pilot Study Output**

## Reliability

### Scale: Well-being

#### Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded <sup>a</sup>	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.884	13

#### Item Statistics

	Mean	Std. Deviation	N
B1	1.6000	.94032	20
B2	1.5500	.82558	20
B3	1.8000	.89443	20
B4	1.7000	.97872	20
B5	1.8500	1.03999	20
B6	1.6000	.88258	20
B7	1.6000	.75394	20
B8	1.5000	.82717	20
B9	1.2000	.52315	20
B10	1.5000	.68825	20

B11	1.5500	1.23438	20
B12	1.6000	1.09545	20
B13	1.3500	.81273	20

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
B1	18.8000	52.063	.321	.888
B2	18.8500	48.661	.691	.869
B3	18.6000	48.463	.646	.871
B4	18.7000	46.326	.752	.865
B5	18.5500	49.103	.489	.880
B6	18.8000	47.116	.777	.864
B7	18.8000	49.642	.668	.871
B8	18.9000	48.726	.684	.870
B9	19.2000	52.800	.557	.878
B10	18.9000	50.200	.680	.872
B11	18.8500	51.713	.229	.900
B12	18.8000	45.221	.739	.865
B13	19.0500	50.892	.496	.879

### Scale Statistics

Mean	Variance	Std.	N of Items
------	----------	------	------------

		Deviation	
20.4000	57.305	7.57002	13

## Reliability

### Scale: Illness perception

#### Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded <sup>a</sup>	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.929	37

#### Item Statistics

	Mean	Std. Deviation	N
C1	1.2500	.55012	20
C2	2.8500	1.66307	20
C3	2.9500	1.50350	20
C4	2.0500	1.19097	20
C5	3.4000	1.66702	20

C6	4.5500	.60481	20
C7	2.2500	.91047	20
C8	2.3500	1.18210	20
C9	2.6500	1.26803	20
C10	2.2500	1.37171	20
C11	2.5000	1.35724	20
C12	2.2000	1.28145	20
C13	2.6500	1.49649	20
C14	3.2000	1.54238	20
C15	2.6000	1.35336	20
C16	2.8000	1.57614	20
C17	3.8500	1.13671	20
C18	3.5500	1.05006	20
C19	3.7000	1.12858	20
C20	2.9500	1.53811	20
C21	4.0500	1.19097	20
C22	3.2000	1.39925	20
C23	3.0500	1.73129	20
C24	4.0000	1.12390	20
C25	3.9000	1.16529	20
C26	4.0500	1.19097	20
C27	3.3500	1.53125	20
C28	2.7500	1.48235	20
C29	2.6500	1.53125	20
C30	2.3500	1.26803	20

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C31	3.8000	1.19649	20
C32	2.4500	1.19097	20
C33	2.6500	1.26803	20
C34	2.9000	1.33377	20
C35	3.4500	1.39454	20
C36	2.4500	1.31689	20
C37	2.3000	1.30182	20

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
C1	108.6500	660.029	.364	.928
C2	107.0500	600.366	.828	.923
C3	106.9500	614.155	.727	.924
C4	107.8500	668.029	.019	.931
C5	106.5000	610.789	.692	.925
C6	105.3500	668.029	.071	.930
C7	107.6500	649.818	.430	.928
C8	107.5500	636.576	.547	.926
C9	107.2500	638.092	.483	.927
C10	107.6500	639.187	.426	.928
C11	107.4000	641.937	.390	.928
C12	107.7000	629.484	.614	.926
C13	107.2500	657.039	.148	.931
C14	106.7000	616.958	.669	.925

C15	107.3000	648.326	.297	.929
C16	107.1000	610.937	.734	.924
C17	106.0500	650.997	.316	.929
C18	106.3500	645.187	.456	.927
C19	106.2000	651.642	.307	.929
C20	106.9500	612.471	.733	.924
C21	105.8500	644.871	.402	.928
C22	106.7000	613.695	.793	.924
C23	106.8500	622.134	.527	.927
C24	105.9000	644.095	.443	.927
C25	106.0000	661.789	.125	.930
C26	105.8500	652.029	.282	.929
C27	106.5500	613.945	.716	.924
C28	107.1500	621.818	.630	.925
C29	107.2500	611.461	.750	.924
C30	107.5500	621.208	.756	.924
C31	106.1000	649.147	.329	.929
C32	107.4500	639.945	.486	.927
C33	107.2500	635.039	.532	.927
C34	107.0000	639.474	.435	.928
C35	106.4500	660.997	.107	.931
C36	107.4500	629.103	.602	.926
C37	107.6000	625.516	.667	.925

**Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
109.9000	670.621	25.89635	37

## Reliability

### Scale: Coping

#### Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded <sup>a</sup>	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.894	13

#### Item Statistics

	Mean	Std. Deviation	N
D1	1.9500	1.27630	20
D2	1.6500	.98809	20
D3	1.6500	.98809	20
D4	1.5000	.82717	20

D5	1.6500	.74516	20
D6	1.6000	.94032	20
D7	1.9500	1.27630	20
D8	1.4000	.59824	20
D9	1.5000	.68825	20
D10	1.6500	.74516	20
D11	1.8500	.98809	20
D12	1.4500	.75915	20
D13	1.7500	1.06992	20

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**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
D1	19.6000	50.779	.715	.881
D2	19.9000	53.463	.760	.878
D3	19.9000	53.884	.728	.880
D4	20.0500	55.103	.784	.878
D5	19.9000	55.358	.857	.877
D6	19.9500	53.734	.783	.877
D7	19.6000	56.253	.394	.901
D8	20.1500	62.871	.231	.899
D9	20.0500	60.471	.418	.893
D10	19.9000	58.832	.528	.889
D11	19.7000	54.642	.671	.882
D12	20.1000	57.358	.651	.885

D13	19.8000	58.274	.367	.899
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### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
21.5500	65.418	8.08817	13

### Reliability

#### Scale: Locus of Control

#### Case Processing Summary

		N	%
Cases	Valid	20	100.0
	Excluded <sup>a</sup>	0	.0
	Total	20	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.918	18

### Item Statistics

	Mean	Std. Deviation	N
E1	3.3000	1.89459	20
E2	4.7500	1.37171	20
E3	3.3500	1.66307	20
E4	4.7000	1.26074	20
E5	3.7000	1.83819	20
E6	4.0500	2.01246	20
E7	3.5500	1.82021	20
E8	3.2500	1.83174	20
E9	4.5500	1.84890	20
E10	3.4500	1.95946	20
E11	5.0000	1.33771	20
E12	2.9000	1.77408	20
E13	3.6500	1.69442	20
E14	4.0500	2.01246	20
E15	4.0500	2.11449	20
E16	3.9500	1.87715	20
E17	3.9000	1.99737	20
E18	4.1000	1.99737	20

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
E1	66.9500	391.629	.636	.912
E2	65.5000	409.947	.560	.914
E3	66.9000	386.937	.814	.908
E4	65.5500	429.313	.230	.920
E5	66.5500	386.471	.734	.910
E6	66.2000	380.905	.738	.909
E7	66.7000	381.905	.811	.908
E8	67.0000	393.053	.641	.912
E9	65.7000	418.011	.284	.921
E10	66.8000	380.063	.773	.908
E11	65.2500	422.513	.339	.919
E12	67.3500	385.187	.784	.908
E13	66.6000	400.779	.579	.914
E14	66.2000	389.011	.628	.912
E15	66.2000	400.063	.454	.918
E16	66.3000	419.905	.254	.922
E17	66.3500	383.713	.706	.910
E18	66.1500	386.555	.667	.911

**Scale Statistics**

Mean	Variance	Std. Deviation	N of Items
70.2500	442.934	21.04600	18

## Frequencies

### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	3	15.0	15.0	15.0
	Female	17	85.0	85.0	100.0
	Total	20	100.0	100.0	

### Marital

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	6	30.0	30.0	30.0
	Married	13	65.0	65.0	95.0
	Divorced	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

### Religion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Christianity	13	65.0	65.0	65.0
	Islam	7	35.0	35.0	100.0
	Total	20	100.0	100.0	

### Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary school cert	4	20.0	20.0	20.0
	Graduate	16	80.0	80.0	100.0
	Total	20	100.0	100.0	

### Diagnosis

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fibroid	11	55.0	55.0	55.0
	Appendicitis	4	20.0	20.0	75.0
	Others	5	25.0	25.0	100.0
	Total	20	100.0	100.0	

### Treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medication	17	85.0	85.0	85.0
	Operation & Medication	3	15.0	15.0	100.0
	Total	20	100.0	100.0	

### Pain rate

	Frequency	Percent	Valid	Cumulative
--	-----------	---------	-------	------------

				Percent	Percent
Valid	No pain	1	5.0	5.0	5.0
	Small pain	2	10.0	10.0	15.0
	Little pain	6	30.0	30.0	45.0
	Moderate pain	5	25.0	25.0	70.0
	Mild pain	2	10.0	10.0	80.0
	Little mild pain	3	15.0	15.0	95.0
	Profound pain	1	5.0	5.0	100.0
	Total	20	100.0	100.0	

## Descriptives

### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age	20	22.00	47.00	34.3500	6.68285
Pain_experience	20	4.00	144.00	26.6000	34.29347
Valid N (listwise)	20				

## Appendix IV

### Bio-data

#### A. Personal Data

Surname: PHILLIPS  
First Name: Henshaw  
Other Names: Daniel Ekpo  
Date of Birth: 28<sup>th</sup> December 1979  
Place of Birth: Ibadan  
Nationality: Nigerian  
Marital Status: Married  
Phone Numbers: 08023469920, 08032119620  
Email Address: henryd28@yahoo.com  
Name & Address of Next of kin: Mrs. Justina Henshaw, No 19, Anilelarin Estate,  
Ajobo/Idiomo, Arunlogun Road, Ojoo Ibadan, Oyo State

#### B. Educational Background with Dates:

- i. Lead City University, Ibadan, Oyo State – Masters of Science (MSc) in Clinical Psychology (in view)
- ii. University of Ibadan, Oyo State – Bachelor of Science (BSc) in Psychology (2007–2014)
- iii. Idea Konsult Ltd Computer Engineers, Ibadan, Oyo State – Diploma in Computer Hardware Maintenance A+ (2007)
- iv. University of Ibadan, Oyo State – Diploma in Adult Education and Community Development (2002 – 2005)
- v. Baptist Secondary School, Oke Ado Ibadan, Oyo State – Secondary School Certificate SSCE (1991 – 1997)
- vi. Bishop Akinyele Independence School, Oke Ado Ibadan, Oyo State, Nigeria – Primary School Leaving Certificate (1986 – 1991)

#### C. Work Experiences with Date:

- i. Programme Officer, Educare Trust, Ibadan (1997 - 2014)
- ii. Assistant Programme Officer, Educare Trust, Ibadan (Volunteer 2014 till date)

- iii. Clinic Secretary/Administrator, St. Gregory's Specialist Clinic & Ultrasound Diagnostic Service, Yemetu, Ibadan (May 2014 till Date)

**D. Awards and Fellowships**

- i. Special Volunteer Award by Educare Trust Nigeria (2000)
- ii. Merit Award by Project Swift Count (2011)

**E. Membership of Academic/Professional Bodies:**

- i. Association of Nigerian Authors – (ANA), Oyo State Chapter
- ii Nigerian Universities Education Students Association – (NUESA), Oyo State Chapter
- iii Centre For Poets – (CFP), Oyo State Chapter
- iv Nigeria Association of Psychology Students, (NAPS), University of Ibadan Chapter
- v Nigeria Association of Clinical Psychologists (NACP) – Graduating Member

**F. Publications:**

	<b>Title of Paper</b>	<b>Publisher</b>	<b>Year</b>
i.	Don't get the 'SAD Syndrome' (Article)	Monitor Newspaper	2000
ii.	Educare Trust Handbook for Education in the New Millennium (Asst Editor)	Bookcraft Ltd	2007
iii.	Educare Trust HISHER Book (Asst Editor)	Fred Concept Ltd	2007
iv.	Educare Trust Guide to starting Youth Inspiration Centres & Permanent Exhibition Centres (Asst Editor)	Rare Comm. Ltd	2009

**G. Major Conferences Attended with Dates**

- i. Delegate: Students and Youth Festival (SYFEST). Organized by the University of Accra, Ghana (2002)
- ii. Group Leader: Literacy Education among Rural Dwellers. Organized by the Department of Adult Education & Community Development, University of Ibadan (2005)
- iii Delegate: Developing a Positive Approach to People living with HIV/AIDS; Prevention, Management and Control. Organized by State Action Committee on AIDS (SACA) (2006)

- iv Delegate: Monitoring & Evaluation of Millennium Development Goals Projects.  
Organized by Nigeria Network for Non-Governmental Organization (NNNGO) (2007)
- v Delegate: Lagos State 2<sup>nd</sup> Education Summit on Funding Qualitative Education in  
Lagos State. Organized by the Lagos State Government. (2009)
- vi Participant: Direct Capacity Building Training for Non-State Actors. Organized by  
European Union INSIDE (2011)
- vii Participant: Nigerian Association of Clinical Psychologist, NACP National Conference  
organized by NACP Ado-Ekiti (2023)

**H. Referees:**

1. Dr. Tony Marinho  
Chief Medical Director  
St. Gregory's Specialist Clinic & Ultrasound Diagnostic Service I  
N0 124, Old Adeoyo Road, Yemetu, Ibadan, Oyo State, Nigeria.  
Telephone: 07057744889. Email: [to\\_marinho@yahoo.com](mailto:to_marinho@yahoo.com)
2. Hon. (Dr.) Wale Okediran  
Former Member, Federal House of Representatives, Abuja  
Director, Primero Consultancy Limited.  
Medical, Legislatives and Literary Consultants  
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3. Mr. Folorunsho Moshood Abolore  
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Concorde Lane, Old Ibadan Airport, Samonda GRA  
PMB 5317, Ibadan, Oyo State, Nigeria.  
Tel: +234 8023865772 Email: [fm\\_moshood@yahoo.com](mailto:fm_moshood@yahoo.com)

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Signature

---

Date

### **The University Compliance Certification**

This is to certify that this thesis by Henshaw Ekpo PHILLIPS with matriculation number LCU/PG/002903 in the Department of Psychology, Faculty of Management and Social Sciences, Lead City University, Ibadan, Oyo State is in full compliance with the university format and style.

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Signature

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Date

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## Chapter One

### Introduction

#### 1.1 Background to the Study

Mental Well-being is characterised as 'positive human functioning, extending beyond a physiological or biomedical notion of health to encompass the emotional, social, and spiritual



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