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Perspective Chapter: Psychological Capacity – A Key Factor in Mental Health Disorders

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Abstract

Psychological capacity encompasses cognitive, emotional, behavioral, social, motivational, and coping abilities crucial for effective functioning and well-being. These capacities play a pivotal role in mental health, influencing resilience, self-efficacy, and overall psychological stability. Theoretical frameworks like cognitive processing, emotional intelligence, and resilience theory explain how individuals harness these capacities to manage stress and adapt to challenges. Psychological capacity is influenced by biological, environmental, and social factors, and its compression can lead to increased vulnerability to mental health disorders, such as depression and anxiety. Enhancing psychological capacity through targeted interventions—ranging from cognitive-behavioral therapy to lifestyle adjustments—can improve resilience and mental health outcomes. Recognizing early warning signs of psychological capacity compression and understanding its interaction with mental health disturbances are critical for timely intervention. Integrating pharmacological and non-pharmacological strategies, alongside regular medical consultations, can provide comprehensive management of psychological stress and enhance overall well-being. The Root and Branches Theory underscores the importance of addressing the root causes of psychological capacity compression to alleviate symptoms of mental distress, promoting a holistic approach to mental health care.

Keywords: psychological capacity, mental health, stress management, root and branches theory, well-being

1. Introduction

Psychological capacity, a multifaceted concept, encompasses an individual's cognitive, emotional, behavioral, social, motivational, and coping abilities. These capacities are fundamental to adaptive functioning and overall well-being, enabling individuals to perform cognitive tasks, regulate emotions, and manage interpersonal interactions effectively [1]. Cognitive functions, such as memory, attention, problem-solving, and decision-making, are crucial components of psychological capacity, influencing how individuals learn and reason [2]. Emotional intelligence, including

self-awareness, empathy, and emotional regulation, plays a significant role in managing social interactions and personal well-being [3].

The importance of psychological capacity extends to behavioral aspects like self-control, adaptability, and resilience, which help individuals navigate stress and adversity. Social capacities, including interpersonal and communication skills, are essential for building supportive relationships and resolving conflicts. Motivational capacities, such as goal setting, intrinsic motivation, and self-efficacy, drive personal and professional achievements. Coping capacities, involving stress management and problem-solving skills, are vital for maintaining mental health.

Understanding the theoretical frameworks that explain psychological capacity is crucial for developing effective interventions. These frameworks include cognitive theories, emotional intelligence theory, resilience theory, social cognitive theory, and self-determination theory, among others. Each provides insights into how individuals harness their capacities to manage stress and enhance well-being.

Psychological capacity is influenced by a range of factors, including biological, environmental, and social elements. These factors can either enhance or compress psychological capacity, affecting an individual's ability to cope with stress and maintain mental health. Chronic stress, adverse childhood experiences, lack of social support, and physical health problems are among the factors that can compress psychological capacity, leading to increased vulnerability to mental health disorders, such as depression and anxiety.

Enhancing psychological capacity through targeted interventions can improve resilience and mental health outcomes. These interventions include cognitive-behavioral therapy, mindfulness-based stress reduction, lifestyle adjustments, and building social support. Recognizing early warning signs of psychological capacity compression and understanding its interaction with mental health disturbances are critical for timely intervention [4–6].

The Root and Branches Theory offers a holistic approach to addressing psychological capacity compression, emphasizing the need to focus on root causes rather than merely managing symptoms. By enhancing overall psychological resilience and balance, individuals can achieve better mental health and well-being. This manuscript explores the components, influences, and interventions related to psychological capacity, providing a comprehensive understanding of its critical role in mental health.

2. Understanding psychological capacity

2.1 Introduction

Psychological capacity refers to an individual's mental abilities to perform cognitive tasks, regulate emotions, and manage social interactions. It includes cognitive functions like memory, attention, problem-solving, and decision-making, as well as emotional and social intelligence. This capacity is crucial for coping with stress, adaptive functioning, and personal well-being. It also supports intellectual functioning, including learning, reasoning, and problem-solving. Mental health, in contrast, is a state of well-being where individuals realize their potential, manage life stresses, work productively, and contribute to society [2].

2.2 Psychological capacity components

2.2.1 Psychological capacity has six components

Cognitive capacity: Cognitive capacity includes attention, memory, executive functioning, and perception. Attention enables focus on tasks, while memory involves storing and recalling information. Executive functioning refers to higher-level processes like planning and decision-making. Perception helps interpret sensory information [6, 7].

Emotional capacity: Emotional capacity includes emotional regulation, self-awareness, and empathy. Emotional regulation allows healthy management of emotions, self-awareness involves understanding one’s own feelings and traits, and empathy is the ability to understand and share others’ emotions [4–8].

Behavioral capacity: This text covers self-control, adaptability, and resilience. Self-control involves regulating behavior and impulses, adaptability is the ability to adjust to changes, and resilience is the capacity to recover from stress and setbacks [9].

Social capacity: Social capacity comprises interpersonal skills, communication skills, and conflict resolution. Interpersonal skills facilitate effective interaction with others, communication skills ensure clear expression of thoughts and needs, and conflict resolution involves managing disputes constructively [10].

Motivational capacity: Motivational capacity includes goal setting, intrinsic motivation, and self-efficacy. Goal setting involves pursuing personal and professional goals, intrinsic motivation refers to engaging in activities for personal satisfaction, and self-efficacy is the belief in one’s ability to succeed [11].

Coping components: Coping components include stress management, problem-solving skills, and support seeking. Stress management involves strategies to handle stress, problem-solving skills help resolve complex issues, and support seeking refers to reaching out for help when needed. These components are shown in **Table 1**.

2.3 Link between psychological capacity and well-being

Psychological capacity, which includes resilience, self-efficacy, coping mechanisms, and emotional regulation, is crucial for well-being. Resilience helps individuals recover from adversity, while self-efficacy boosts confidence and promotes better mental health. Effective coping strategies reduce stress, and emotional regulation ensures emotional stability, all of which enhance well-being. Additionally, psychological capacity significantly impacts resilience, enabling individuals to adapt to stress

Component	Description
Cognitive Capacity	Attention, memory, executive functioning, and perception
Emotional Capacity	Emotional regulation, self-awareness, and empathy
Behavioral Capacity	Self-control, adaptability, and resilience
Social Capacity	Interpersonal skills, communication skills, and conflict resolution
Motivational Capacity	Goal setting, intrinsic motivation, and self-efficacy
Coping Capacity	Stress management, problem-solving skills, and support seeking

Table 1.
Psychological capacity components.

and challenges. Strengthening psychological capacity through interventions that promote self-efficacy, optimism, and hope can improve resilience, highlighting the importance of psychological resources in maintaining well-being.

3. Psychological capacity compression

3.1 Causes of psychological capacity compression

Psychological capacity compression refers to the diminishing ability of individuals to manage psychological stressors and maintain mental well-being. Various factors contribute to this phenomenon, often intersecting and compounding the effects, as shown in Table 2.

3.2 Psychological capacity compression impacts

Psychological capacity compression can negatively impact various competencies. Here’s how each of the competencies might be affected:

3.2.1 Cognitive functioning

- *Memory*: Compressed psychological capacity can lead to difficulties in retaining and recalling information, which can affect both short-term and long-term memory.
- *Attention*: Sustained attention and the ability to focus on tasks may be impaired, leading to distractibility and reduced productivity.
- *Problem-solving*: The ability to think clearly and solve problems logically can be hindered, resulting in slower processing speed and ineffective decision-making.

Cause	Description
Chronic Stress	Prolonged exposure to stressors, leading to diminished psychological resilience and coping capacity [12].
Socioeconomic Factors	Lower socioeconomic status associated with increased stressors, such as financial instability, lack of access to health care, and educational disadvantages, which can compress psychological capacity [13].
Environmental Factors	Exposure to adverse environmental conditions, such as noise pollution, overcrowding, and poor living conditions, can contribute to stress and cognitive disruption affect psychological capacity negatively [14].
Trauma and Adverse Childhood Experiences	Early exposure to trauma resulting in long-term mental health issues and reduced resilience [15].
Lack of Social Support	Social support is a critical buffer against stress. The absence of a supportive social network can lead to exacerbating stress and reducing mental resilience, feelings of isolation and helplessness [16].
Physical Health Problems	Chronic physical health issues increasing psychological stress and decreasing coping ability [17].

Table 2.
Causes of psychological capacity compression.

- *Decision-making:* Under stress, decision-making may become more impulsive or indecisive, with a tendency to avoid complex choices or rely on less optimal solutions.

3.2.2 Emotional regulation

The ability to manage and respond to emotional experiences may be compromised, leading to increased vulnerability to emotional outbursts, mood swings, or emotional numbness. This can result in heightened sensitivity to stress, anxiety, or depression.

3.2.3 Behavioral control

Compressed psychological capacity can impair self-control, making it difficult to manage impulses and resist harmful behaviors. This may lead to increased risk-taking, trouble maintaining routines, and reliance on unhealthy coping strategies like substance use.

3.2.4 Social skills

The ability to interact and communicate effectively with others may decline, leading to social withdrawal, misunderstandings, or conflicts in relationships. It contributes to isolation or loneliness, further exacerbating psychological stress.

3.3 Protective vs. risk factors for psychological capacity stress (compression)

Psychological capacity, comprising cognitive, emotional, and social resources, is essential for handling challenges. It can be strengthened by protective factors like social support and positive coping, or compressed by risk factors like stress and trauma. Recognizing these influences is key to developing interventions that boost capacity and improve mental well-being [18], as shown in **Table 3**.

Factor type	Protective factors	Risk factors
Biological Factors	Genetic resilience, brain plasticity	Family history of mental health disorders, neurotransmitter imbalances
Psychological Factors	Emotional regulation, cognitive flexibility	Difficulty in managing emotions, negative thinking patterns
Behavioral Factors	Healthy coping mechanisms, regular exercise	Maladaptive behaviors, substance abuse
Social Factors	Strong social support, effective communication	Social isolation, poor communication skills
Environmental Factors	Stable environment, access to resources	Exposure to violence, lack of access to resources

Table 3.
Protective vs. risk factors for psychological capacity.

4. Early warning signs and symptoms of psychological capacity compression

Recognizing early signs of psychological capacity compression is key to identifying stress and mental health struggles. Early intervention can prevent worsening and improve outcomes, as shown in **Table 4**.

Recognizing these signs early is vital for intervention and support. If someone is exhibiting these symptoms, it is important to seek help from a mental health professional to address these issues promptly and effectively.

5. Psychological capacity compression is the root of depression and anxiety types “the root and branches theory”

5.1 Psychological capacity stress (compression)

When psychological capacity is compressed, it can lead to dysregulation in the body’s hormonal balance, particularly involving adrenaline, cortisol, and happiness hormones like serotonin, dopamine, and endorphins [19]. This is illustrated in **Figure 1**.

5.2 Link psychological capacity compression and hormonal changes

1. *Hypothalamic-pituitary-adrenal (HPA) axis*: Chronic stress activates the hypothalamic-pituitary-adrenal axis, causing prolonged cortisol release, which disrupts the balance of adrenaline and happiness hormones [20].
2. *Neuroplasticity*: Stress impairs brain plasticity, affecting mood-regulating areas like the prefrontal cortex, which hampers the production of happiness hormones [21].
3. *Inflammation*: Chronic stress induces inflammation, reducing serotonin and dopamine levels, contributing to mood disorders [22].
4. *Behavioral changes*: Psychological capacity compression often leads to unhealthy behaviors (poor diet, lack of exercise, and substance abuse), further disrupting hormonal balance and worsening stress effects [23].

5.3 “Root and branches theory” (new theory by AlKhathami Abdullah, 2024)

5.3.1 Empirical evidence

The “Root and Branches Theory” suggests that psychological stress is a core underlying cause of various mental health disorders. By addressing this stress, symptoms can be alleviated, and recurrence can be prevented. Empirical research supports this theory, demonstrating that managing chronic stress through therapeutic interventions significantly reduces symptoms of anxiety, depression, and other related disorders.

Category	Symptoms
Emotional Symptoms	<i>Increased Irritability and Anger:</i> Frequent or intense episodes of irritability and anger, often disproportionate to the situation.
	<i>Persistent Sadness or Anxiety:</i> Continuous feelings of sadness, anxiety without a clear cause.
	<i>Mood Swings:</i> Rapid and unexplained shifts in mood, from high energy to feeling down.
Cognitive Symptoms	<i>Difficulty Concentrating:</i> Trouble focusing on tasks, making decisions, or remembering information.
	<i>Negative Thought Patterns:</i> Increased prevalence of pessimistic thoughts, self-doubt, or feelings of hopelessness.
	<i>Indecisiveness:</i> Difficulty in making even simple decisions.
Behavioral Symptoms	<i>Withdrawal from Social Activities:</i> Avoidance of social interactions, hobbies, or activities that were previously enjoyable.
	<i>Changes in Eating or Sleeping Patterns:</i> Significant changes in appetite or sleep, such as eating too much or too little, or experiencing insomnia or oversleeping.
	<i>Decreased Performance:</i> Noticeable drop in performance at work or school, often accompanied by a lack of motivation.
Physical Symptoms	<i>Chronic Fatigue:</i> Persistent feelings of exhaustion not alleviated by rest.
	<i>Unexplained Aches and Pains:</i> Physical symptoms, such as headaches, muscle tension, or stomach problems, without a clear medical cause.
	<i>Frequent Illness:</i> Weakened immune system, leading to more frequent colds or other illnesses.
Social Symptoms	<i>Isolation:</i> Increased tendency to isolate oneself from friends, family, and colleagues.
	<i>Conflict in Relationships:</i> More frequent conflicts or tension in personal and professional relationships.
	<i>Dependence on Substances:</i> Increased use of alcohol, drugs, or other substances as a coping mechanism.
Psychological Symptoms	<i>Feeling Overwhelmed:</i> Persistent feelings of being overwhelmed by everyday tasks and responsibilities.
	<i>Loss of Interest:</i> Reduced interest in activities and hobbies that were once enjoyed.
	<i>Emotional Numbness:</i> Feeling emotionally detached or numb, struggling to experience a full range of emotions.
Warning Signs of Severe Distress	<i>Suicidal Thoughts or Behavior:</i> Expressions of wanting to harm oneself or others, or actual attempts to do so, are critical warning signs that require immediate attention.
	<i>Panic Attacks:</i> Sudden episodes of intense fear or discomfort, often accompanied by physical symptoms like heart palpitations, shortness of breath, or dizziness.

Table 4.
Early warning signs and symptoms of psychological capacity stress.

- *Psychological stress and depression:* Chronic stress is a key predictor of depression, overwhelming an individual’s psychological capacity and leading to mood dysregulation [22].

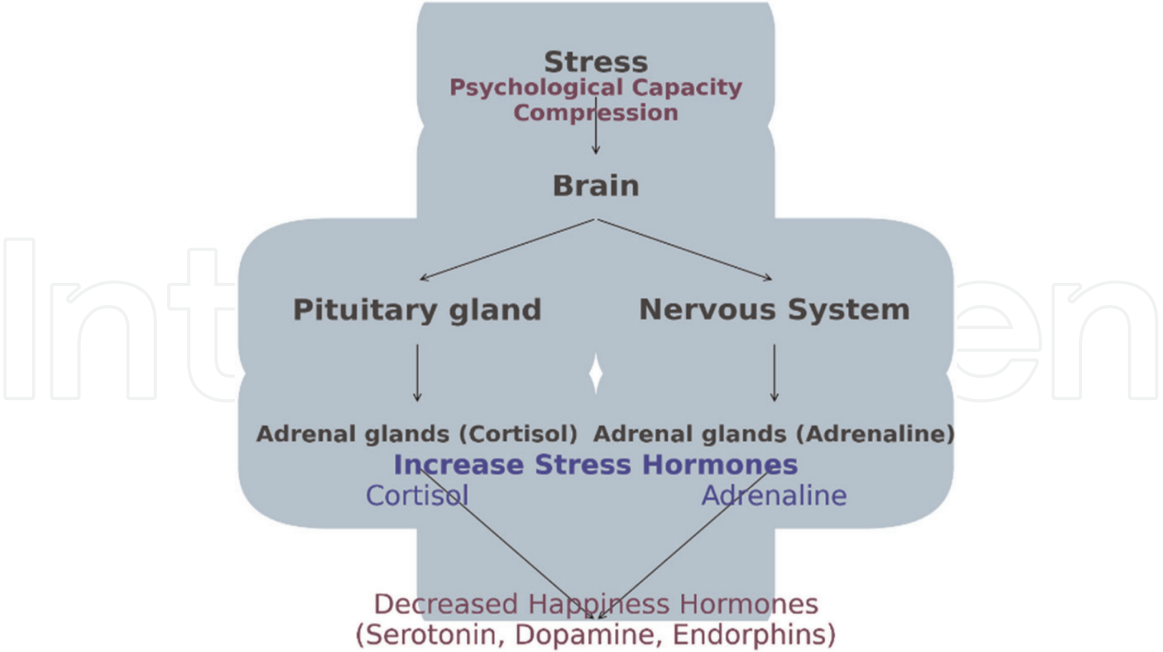


Figure 1.
Psychological capacity compression impacts.

- *Stress and anxiety disorders:* Chronic stress is closely linked to anxiety disorders like generalized anxiety disorder (GAD), panic disorder, and phobias. Stress alters neurochemical pathways, particularly in the HPA axis, contributing to anxiety [20].
- *Obsessive-compulsive disorder (OCD) and stress:* Stress exacerbates OCD symptoms by intensifying anxiety and compulsions. Effective stress management techniques, such as exposure and response prevention, are crucial [24].
- *Panic attacks and phobias:* Chronic stress often triggers or worsens panic attacks and phobias by causing hyperarousal of the autonomic nervous system [25].
- *Hormonal imbalance due to stress:* Chronic stress disrupts the HPA axis, leading to elevated cortisol and adrenaline levels, which negatively impact mood regulation [20].
- *Neuroplasticity and chronic stress:* Chronic stress can lead to hippocampal atrophy, impairing cognitive function and increasing vulnerability to mood disorders [20].

Overall, addressing stress as a root cause is essential for alleviating symptoms and preventing the recurrence of these disorders.

5.4 Visual representation of the root and branches theory

Psychological capacity compression, caused by reduced happiness hormones and increased stress hormones like adrenaline and cortisol, is visualized as the root of a tree. The symptoms—such as depression, anxiety disorders, OCD, phobias, and panic attacks—are depicted as branches, as illustrated in **Figure 2**. These symptoms vary among individuals, with some experiencing one or multiple issues. The “root and



Figure 2.
Visual representation of the “Root and Branches Theory” represents psychological capacity compression.

branches” theory highlights the importance of holistic mental health treatment that focuses on addressing the root cause—hormonal balance—rather than just treating individual symptoms, as supported by the common use of antidepressants.

5.5 Cultural considerations in psychological capacity compression

The expression of psychological distress varies across cultures. For instance, in collectivist cultures, stress may be managed through community and family support, which can buffer against psychological capacity compression [26]. Conversely, in cultures emphasizing individualism, people may feel pressured to manage stress alone, potentially increasing psychological burden. Additionally, some cultures may express psychological distress through physical symptoms, a phenomenon known as somatization [27].

Therefore, Clinicians must be culturally competent, understanding how cultural beliefs affect mental health and treatment preferences. This may involve collaborating with cultural mediators or integrating traditional practices into treatment plans to ensure they are culturally appropriate and effective.

5.6 Assessing psychological capacity compression in clinical settings

Psychological capacity compression has traditionally been assessed in clinical settings using a range of methods. These include clinical interviews, self-report questionnaires, such as the Perceived Stress Scale (PSS) [28] and the Connor-Davidson Resilience Scale (CD-RISC) [29], as well as psychological assessments like the Beck Depression Inventory (BDI) [30] and measures of Heart Rate Variability (HRV) [31]. Additionally, observational methods have been utilized.

Recently, the assessment of psychological capacity compression has become more practical and effective with the implementation of the “Stress Assessment Screening Step” within the AlKhathami Approach (Step 2). This method has shown high validity and reliability, surpassing the performance of expert psychiatrists and well-

established tools like the PHQ-9 (Patient Health Questionnaire-9) and GAD-7 (Generalized Anxiety Disorder-7) questionnaires [32].

5.7 Influences on psychological capacity compression and mental health outcomes

Psychological capacity compression refers to the diminished ability of individuals to manage stress, emotions, and cognitive demands due to internal or external pressures. This phenomenon has significant implications for mental health outcomes, as it impacts resilience, coping mechanisms, and overall psychological well-being.

Psychological capacity compression and mental health outcomes are influenced by genetics, personality traits, and life experiences:

- *Genetics and psychological capacity compression:* Genetic factors, such as variations in serotonin transporter genes, can increase susceptibility to stress, heightening the risk of psychological capacity compression [33].
- *Personality traits and stress resilience:* Personality traits like neuroticism increase vulnerability to anxiety and depression, while traits like resilience and optimism protect psychological capacity [34].
- *Life experiences impact on stress and mental health:* Adverse childhood experiences can lead to long-term changes in the brain's stress response, increasing vulnerability to psychological capacity compression [15]. Positive life experiences can enhance psychological resilience [35].

5.8 Indicators and signs of psychological compression

Psychological compression refers to the state where an individual's mental capacity to manage stress, emotions, and cognitive demands is overwhelmed. Recognizing its indicators and signs is crucial for early intervention and effective support.

When stress hormones like adrenaline and cortisol rise, and the levels of happiness hormones decrease due to psychological capacity compression, there are three key signs and three indicators of these changes in the body:

5.8.1 Indicators of psychological stress

Consider psychological stress as a contributing factor in a patient's condition, if they exhibit any of the following:

- Persistent physical symptoms or an uncontrolled chronic illness, such as diabetes, hypertension, irritable bowel syndrome, headache, low back pain ... etc.
- Frequent visits to healthcare providers
- Difficulty with sleep

If any of these indicators is present, psychological stress may play a significant role in the patient's overall health.

5.8.2 Signs of psychological stress

- i. Sleep disturbances: Difficulty in falling asleep, staying asleep, or experiencing restless sleep, interrupted sleep [36].
- ii. Decline in performance and concentration: Reduced ability to focus, decreased productivity, and impaired cognitive functions [5].
- iii. Impact on social relationships: Increased irritability, easy anger, and a tendency to withdraw and prefer isolation [37].

These indicators reflect the body’s response to heightened stress and the subsequent imbalance in hormone levels, affecting overall well-being and daily functioning.

Practical point: Assessing psychological capacity

When you meet a patient or a person, assess their psychological capacity by asking the following questions:

1. Sleep:

- *Are you experiencing any difficulties with sleep?*

2. Performance and Concentration:

- *Have you noticed any decline in your performance or concentration?*

3. Relationship:

- *Is there easy anger or do you prefer isolation?*

If the answer to any of these questions is “yes,” it indicates that the person might be suffering from psychological stress.

6. Integrated mental healthcare management

6.1 Combining therapy approach

A comprehensive approach to mental health care involves combining interventions that target various domains, including biological, psychological, behavioral, social, and environmental factors. These interventions are categorized into four key domains: pharmacological, non-pharmacological, nutritional, and routine visits. When used together, these strategies offer a holistic and effective way to manage a wide range of health conditions, often resulting in superior health outcomes compared to a single-treatment approach [38].

Pharmacological treatments provide immediate relief from symptoms, while non-pharmacological and nutritional strategies contribute to long-term benefits and help

prevent recurrence [39]. This combined approach is particularly beneficial for patients with multiple health conditions, as it can enhance overall health and well-being [40]. Additionally, it serves as a preventive measure, reducing the likelihood of developing chronic diseases and potentially leading to a reduction or cessation of medication [41].

To optimize mental health outcomes, it is essential to balance pharmacological and non-pharmacological treatments while addressing individual patient needs and potential barriers. Integrated treatment strategies frequently result in improved health outcomes and a higher quality of life [42]. Lifestyle interventions, such as regular physical activity and a balanced diet, play a crucial role in mitigating the negative effects of stress on hormonal balance, thereby enhancing mental health outcomes [43], look at **Figure 3**, and are demonstrated in **Table 5**.

6.2 Psychological capacity compression: “A container analogy”

The process of psychological capacity compression can be represented by a container filled with water that is being externally compressed, with stones inside it taking up

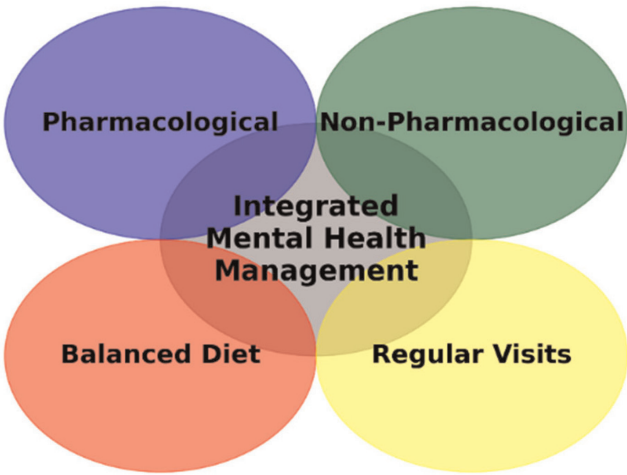


Figure 3.
A balanced integrated management approach.

Intervention	Description
Medication Management	Antidepressant usage.
Enhancing Happiness Hormone Production	Lifestyle adjustments, such as promoting regular physical activity like daily walking.
Preventing Breakdown of Happiness Hormones	Avoiding harmful arguments, and self-blame by focusing on positive ownership of things.
Balanced Nutrition	A healthy diet that includes magnesium and vitamins B1, B6, B12, and D.
Regular Doctor Visits	Administer for 2 to 3 weeks until remission is achieved, then continue to complete a total of 9 months since remission. After that, gradually reduce the dosage until discontinuation.

Table 5.
Enhancing psychological capacity: Interventions and strategies.

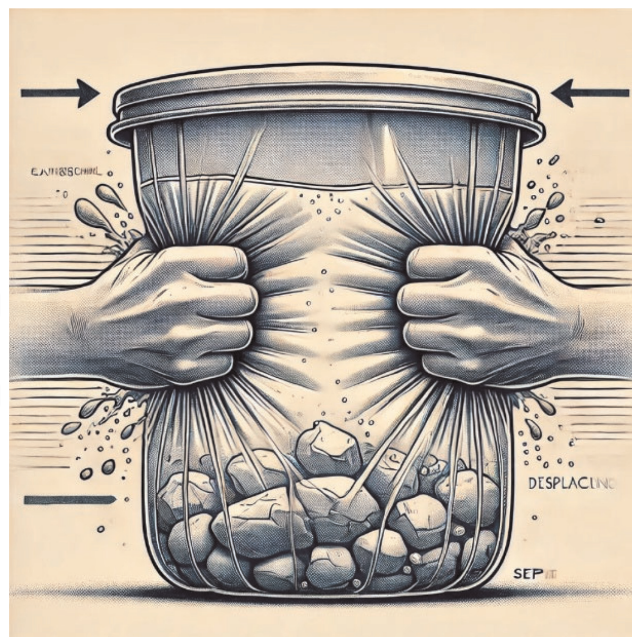


Figure 4.
 Psychological capacity compression: “A Container Analogy.”

space within the container. This analogy illustrates that the effective capacity of the container decreases due to the principle of buoyancy (Archimedes’ law). As the external pressure on the container increases (representing life stressors), and the volume of the submerged stones inside it grows (symbolizing the decrease in happiness hormones and the increase in stress hormones), more water is displaced from the container. This displaced water represents the symptoms that the person experiences, as illustrated in Figure 4.

6.3 Restoring psychological capacity: “A factory approach to mental well-being”

The process of addressing psychological capacity compression can be represented by restoring the compressed container to its natural capacity. This can be illustrated as the operation of a factory:

1. Producing happiness hormones: Achieved through regular walking.
2. Maintaining happiness hormones: By avoiding provocative discussions and not self-blaming; instead, focusing on existing blessings, such as the ability to hear, see, and care for oneself without relying on others.
3. Reducing stress hormones: Through relaxation techniques like deep breathing.
4. Providing raw materials for happiness hormone production: By ensuring a healthy diet and essential minerals, such as magnesium and vitamins B1, B6, B12, and D.
5. Preventing the breakdown of happiness hormones: Using antidepressants, when necessary, in moderate to severe cases.

6. Supporting and monitoring the body's needs: With regular follow-ups with a therapist.

This approach emphasizes the holistic management of mental well-being, likening it to the continuous and systematic operations within a factory.

6.4 Pharmacological management

Goal: To prevent the breakdown of happiness hormones.

Antidepressants, such as SSRIs (selective serotonin reuptake inhibitors) and SNRIs (serotonin and norepinephrine reuptake inhibitors), are first-line treatments for depression and anxiety, and commonly prescribed. They are used to manage emotional dysregulation, improve mood, motivation, and treat trauma-related disorders [44]. However, pharmacological treatments like SSRIs are effective but may cause side effects such as sexual dysfunction and weight gain should be considered. Atypical antidepressants like bupropion are alternatives for patients who do not tolerate SSRIs or SNRIs.

6.5 Non-pharmacological management

Goal: To increase happiness hormones and lower stress hormones.

- *Enhancing happiness hormone production:* Promoting the production of happiness hormones can be achieved through regular activities like walking and encouraging hobbies and interests, which help improve mood. However, patient compliance is essential, as severe depression or anxiety may impede adherence to these lifestyle interventions [45].
- *Preventing breakdown of happiness hormones:* To maintain happiness hormones, it's important to avoid harmful arguments and self-blame. Instead, focus on taking positive and constructive ownership of situations [46].
- *Lowering stress hormones:* Reducing stress hormones can be achieved by incorporating relaxation techniques, such as deep breathing exercises [47].
- *Improving conflict resolution and problem-solving abilities:* Techniques such as narrative therapy can be effective in resolving interpersonal conflicts, which in turn helps reduce the likelihood of stress development [48].

6.6 Healthy diet for supporting happiness hormones

Goal: To promote the production of happiness hormones and overall mental well-being.

6.6.1 Natural diet recommendations for optimal health

- *Use of natural oils:* It is recommended to incorporate natural oils, such as olive oil and natural animal fats, while avoiding hydrogenated oils. Research indicates that olive oil, a key component of the Mediterranean diet, is associated with a reduced risk of cardiovascular disease and improved mental health. Conversely,

hydrogenated oils, which contain trans fats, are linked to an increased risk of heart disease and have a negative impact on mental health [49, 50].

- **Full-fat products vs. low-fat products:** It is preferable to avoid low-fat products and instead opt for full-fat natural products. Studies suggest that full-fat dairy consumption may be associated with a lower risk of obesity and metabolic disease, along with benefits for mental health [51].
- **Natural sweeteners:** Reducing the intake of sweets and processed sugars is advised, replacing them with natural sweeteners like dates and natural honey, which can also support mental health [52].
- **Avoiding soft drinks:** It is advisable to avoid soft drinks, as their consumption has been associated with negative cardiometabolic outcomes and adverse effects on mental health [53]. Relying more on natural food sources is generally healthier and more beneficial.

6.6.2 Supporting brain health

- **Fruits, vegetables, and essential nutrients:** Consuming a diet rich in fruits, vegetables, healthy fats, vitamins B1, B6, B12, and vitamin D (1,000–2000 IU (international units) daily, especially for those with low sunlight exposure), folic acid, and magnesium (200–400 mg/day) supports brain health and reduces anxiety [54].
- **Omega-3 fatty acids:** Taking 1000–2000 mg of omega-3 fatty acids daily can reduce inflammation and improve mood [55].

6.7 Regular doctor visits contribute to

- *Consistent case monitoring:* Ensuring conditions are monitored and managed effectively to reduce the risk of complications.
- *Medication management:* Adjusting medications based on the patient's current health status and response to treatment for optimal therapeutic outcomes.
- *Lifestyle recommendations:* Providing tailored advice on diet, exercise, and other lifestyle factors that contribute to overall well-being, helping patients make informed decisions about their health.
- *Mental health support:* Offering opportunities for patients to discuss mental health concerns, receive support, and get referrals to mental health specialists, if needed.
- *Building a doctor-patient relationship:* Regular visits help build a trusting relationship between the patient and the doctor, facilitating open communication and a better understanding of the patient's health needs.

6.8 Collaboration with mental health specialists

Mental health professionals may collaborate to provide holistic care, particularly in cases where mental health and social factors intersect.

6.8.1 Psychiatrist

If a patient were suspected to have a psychotic event, suicidal thoughts, drug abuse, postpartum depression, child psychotic disorder, or show resistant behavior, then it should involve a psychiatrist in the diagnosis and management plan (AlKhathami Approach, Step 3) [32].

6.8.2 Psychologist

Psychologist primarily focuses on assessing, diagnosing, and treating mental health issues through therapeutic interventions, such as psychotherapy, cognitive-behavioral therapy, and counseling. They often work with individuals to understand their thoughts, emotions, and behaviors, providing strategies to manage mental health challenges and improve overall well-being. Thus, the Family doctor should collaborate with the psychologist to provide specific psychological therapy as needed for the patient.

6.8.3 Social worker

A social worker focuses on helping individuals, families, and communities improve their well-being by addressing social, economic, and environmental factors that impact their lives. They provide support, advocacy, and resources to help the person navigate challenges, such as poverty, addiction, domestic violence, and mental health issues. Social workers often connect the person with community resources and work to improve social systems and policies.

6.9 Regular follow-up visits' schedule

- *First visit:* Apply Step 5 of the AlKhathami Approach [32]. Initiate management, which may include pharmacological interventions, non-pharmacological treatments, and nutritional supplements, such as magnesium, vitamins B1, B6, B12, and vitamin D (as needed).
- *Second visit (after 2 weeks):* Assess the improvement in the patient's usual symptoms. Conduct a reassessment and provide supportive therapy. Introduce narrative therapy to enhance problem-solving skills. Continue with the established management plan.
- *Third visit (after 3 weeks):* Significant improvement or remission is typically observed, although conditions like panic disorder or social phobia may require more time and higher doses. Adjust the dosage, if there is no remission.
- *Follow-up visits:* Schedule follow-up appointments every 3–4 weeks, until remission is achieved. Once remission is stable, extend the interval between visits to every 2 months, continuing this schedule for 9 months. After maintaining remission, gradually taper the medication dosage over time, until it can be safely discontinued.

6.10 Management prognosis

Typically, based on experience, when a patient fully adheres to the treatment plan—taking prescribed medication, engaging in non-pharmacological therapies, following the recommended diet and supplements, and attending regular follow-up visits—improvements are often observed within 1 to 2 weeks. By 6 to 8 weeks, symptoms of generalized anxiety, depression, and related physical issues usually subside. However, conditions like panic disorder, phobias, and obsessive-compulsive disorder often require additional follow-up, an increase in medication dosage, or even the introduction of new medications to manage the condition effectively.

During follow-ups, it's important for the healthcare provider to monitor which symptoms are improving, which are not, and any side effects from the medication. Decisions about dosage and medication choice should be based on this information. Since each patient responds differently to treatment, understanding the patient's unique needs and adjusting the plan accordingly are essential.

6.11 Comorbidities management

Managing patients with coexisting mental health issues, such as depression or anxiety, alongside chronic physical illnesses like diabetes or cardiovascular disease, requires a customized, integrated approach that addresses the complexities of both mental and physical health. Pharmacological treatments must be carefully chosen to manage both the mental health disorder and the chronic physical condition, with attention to avoiding adverse interactions.

In patients with chronic physical diseases, effective stress management that reduces stress hormones often leads to significant improvements in controlling the physical condition. Therefore, it is essential to regularly review and adjust the treatment plan for the physical disease, including medication dosages, as needed. Collaborative care models, which involve a multidisciplinary team including primary care providers and specialists, are particularly effective in managing these dual conditions.

Personalized lifestyle changes are crucial for managing both mental health and chronic physical illnesses. For example, a tailored exercise program for a patient with depression and cardiovascular disease can improve both mood and cardiovascular health [56]. Nutritional counseling, such as adopting a Mediterranean diet, can support both mental health and chronic illness management [57].

Regular follow-up is essential to monitor progress and adjust treatment plans. This includes assessing mental health outcomes and physical health metrics, ensuring that any emerging issues are addressed promptly. Educating patients about the interconnectedness of mental and physical health empowers them to manage their conditions actively.

7. Modern narrative therapy: An approach to problem externalization and solution finding

7.1 Rational

Modern Narrative Therapy helps individuals separate their emotions from their problems to find more effective solutions. When people address their own issues, emotions can cloud their judgment and lead to overthinking. By projecting the

problem onto a “friend,” individuals can analyze it more objectively, using their own knowledge and reasoning without emotional interference. This approach empowers them to develop practical, effective solutions, leading to better problem-solving and personal growth.

7.2 Objective

The goal of Modern Narrative Therapy is to help individuals address their problems, make appropriate decisions independently, and interact with others in a manner that best suits their abilities.

7.3 Modern narrative therapy steps

1. *Externalization*: This technique involves separating the person from the problem. By externalizing and defining the issue, it becomes easier to manage and address.
2. *Identifying a “friend”*: The individual is encouraged to project the problem onto a “friend,” whether imaginary or real. This projection allows the patient to step out of the problem and view it as a therapist would, rather than as someone directly affected by it.
3. *Ensuring separation from the problem*: The therapist ensures that the patient successfully detaches himself or herself from the problem and perceives it as an issue affecting the friend only. The patient then takes on the role of an advisor, providing guidance and support to solve the friend’s problem.
4. *Offering solutions and advice*: The patient offers appropriate advice and solutions to help the friend resolve their issue. The therapist ensures that these solutions do not involve escaping from the problem. If such a solution is proposed, the therapist asks the patient to consider the potential consequences if the friend were to act on advice based on avoidance. The aim is for the patient to realize that this solution is not suitable and to rethink a more appropriate solution.
5. *Application request*: Once the therapist is confident that the patient has successfully distanced himself or herself from the problem and proposed suitable solutions from their perspective, the therapist asks the patient to apply the advice they offered to the friend to their own situation, thus addressing their problem.

7.4 Example of modern narrative therapy in practice

Let us imagine a scenario where a person, Sarah, is struggling with feelings of anxiety related to her performance at work. She often feels overwhelmed and fears that she might not meet her employer’s expectations.

1. *Externalization*: The therapist begins by helping Sarah to externalize her anxiety. Instead of saying, “I am anxious,” Sarah is encouraged to view the anxiety as something separate from herself. The therapist might say, “Let us imagine that this anxiety is not part of you but rather something outside of you, like a cloud that sometimes follows you around.”

2. *Identifying a “friend”*: The therapist then asks Sarah to imagine that a close friend, Emma, is dealing with the same anxiety about work. The problem is now externalized onto Emma, making it easier for Sarah to think about the issue objectively.
3. *Ensuring separation from the problem*: The therapist checks in with Sarah to ensure she has fully separated herself from the anxiety, seeing it as Emma’s problem and not her own. Sarah now takes on the role of a supportive friend who wants to help Emma navigate this issue.
4. *Offering solutions and advice*: Sarah is then asked what advice she would give to Emma. Sarah might suggest that Emma could break down her work tasks into smaller, more manageable steps, or that Emma could speak to her supervisor to clarify expectations. The therapist ensures that these solutions are proactive and not about avoiding the problem. For example, if Sarah suggests that Emma should just ignore her anxiety, the therapist would ask, “What might happen if Emma ignores this anxiety? Could it grow worse?”
5. *Application request*: After Sarah has provided thoughtful advice for Emma, the therapist asks her to consider applying this advice to herself. Sarah is encouraged to use the strategies she recommended, such as breaking tasks into smaller steps or discussing her concerns with her supervisor, to manage her own anxiety.

Outcome: By externalizing the problem and viewing it as something that her “friend” is dealing with, Sarah can see her situation from a new perspective. This allows her to identify practical solutions without being overwhelmed by the emotional burden of anxiety. By the end of the session, Sarah feels more empowered and equipped to handle her work-related anxiety using the strategies she developed for Emma.

This example illustrates how Modern Narrative Therapy helps individuals to detach from their problems, think critically about them, and apply effective solutions in their own lives.

7.5 Scenario-1: Managing work-related stress through modern narrative therapy

Background: Mosa is a 35-year-old marketing manager who has been feeling extremely stressed at work. He worries constantly about meeting deadlines, managing his team, and delivering successful campaigns. His stress is affecting his sleep, relationships, and overall well-being.

Therapy session:

1. *Externalization*: The therapist starts by helping Mosa separate himself from his stress. Instead of saying, “I am stressed,” the therapist asks Mosa to think of the stress as something outside of him. The therapist might say, “Let us think of your stress as a heavy backpack that you are carrying around. It’s not a part of you, but something that you are carrying.”
2. *Identifying a “friend”*: Next, the therapist introduces the idea of a friend. “Imagine you have a close friend, Ali, who is also a marketing manager and is dealing with the same stress you are. He’s carrying this heavy backpack of stress just like you.”

3. *Ensuring separation from the problem:* The therapist checks to make sure Mosa is able to fully visualize the stress as Ali's problem and not his own. "Now that you are thinking about Ali, how do you feel about the stress he's experiencing? What would you say to him?"

Mosa begins to feel a bit of distance from his own stress and starts to think more clearly. "I would tell Ali that he's doing the best he can and that he should try to delegate some of his tasks to his team."

4. *Offering solutions and advice:* The therapist encourages Mosa to offer more advice to Ali. "What else could Ali do to manage this stress better?"

Mosa suggests, "Maybe Ali could set more realistic deadlines for himself and communicate more openly with his boss about what's feasible. He could also take short breaks during the day to clear his mind."

The therapist listens and then probes further. "Those are great suggestions. What if Mosa just tried to ignore the stress? What could happen?"

Mosa thinks and responds, "If Ali ignores the stress, it might build up even more and affect his performance at work and his health."

5. *Application request:* The therapist then asks Mosa to apply these solutions to his own life. "What if you tried some of these strategies that you suggested for Ali? How could you start delegating tasks, setting realistic deadlines, and communicating with your boss?"

Mosa starts to see how the advice he gave Ali could also benefit him. He commits to talking to his boss about his workload, delegating more tasks to his team, and taking regular breaks during the day.

Outcome: By the end of the session, Mosa feels more in control of his stress. He's able to view his situation from a new perspective, making it easier to implement practical solutions. The act of separating himself from the stress and advising "Ali" helped Mosa gain clarity and develop a plan to manage his own stress effectively.

This scenario demonstrates how Modern Narrative Therapy can help individuals like Mosa step back from their problems, see them from a different angle, and find constructive ways to address them.

7.6 Scenario-2

Patient: (Basim).

Therapist: (Dr. Ibrahim).

Dr. Ibrahim: Hi Basim, it's great to see you again. Last time, you mentioned feeling overwhelmed with work, especially with managing your deadlines and team. How have things been since our last session?

Basim: It's been tough, honestly. The stress just keeps piling up. I feel like I'm carrying this huge weight all the time, and I'm not sure how much longer I can handle it.

Dr. Ibrahim: It sounds like that stress is really weighing you down. I'd like to try something different today to help you think about this stress in a new way. Are you open to that?

Basim: Sure, I'm willing to try anything at this point.

Dr. Ibrahim: Great. Let us start by imagining that this stress you are feeling is not a part of you, but something you are carrying, like a heavy backpack. How does that image feel to you?

Basim: Yeah, that makes sense. It's definitely like a heavy backpack, one that I cannot take off.

Dr. Ibrahim: Now, let us take it a step further. I want you to imagine that your friend, Mosa, is the one carrying this heavy backpack of stress. He's in a similar position as you—a marketing manager dealing with a lot of pressure. Can you picture that?

Basim: Yeah, I can see that. Mosa's a hard worker too, so I can imagine him feeling the same way.

Dr. Ibrahim: So, if Mosa came to you and told you about how he's struggling with this stress, what advice would you give him? What could he do to manage this heavy load?

Mosa: Hmm ... I'd probably tell him that he does not have to do everything on his own. He has a team, so he should delegate more tasks. Maybe he could also set more realistic deadlines instead of trying to be a superhero.

Dr. Ibrahim: That's great advice. How do you think Mosa would feel if he started delegating more and setting those realistic deadlines?

Basim: I think he'd feel a bit of relief, like the weight is not all on his shoulders anymore. He'd probably feel more in control.

Dr. Ibrahim: What if Mike just tried to ignore the stress? What do you think would happen then?

Basim: Ignoring it would just make things worse. The stress would keep building up until he could not handle it anymore, and that could lead to burnout.

Dr. Ibrahim: Exactly. Now, let us bring this back to you. You've offered some really insightful advice to Mosa. How might you apply this same advice to your own situation?

Basim: I guess I could start delegating more to my team. I've been trying to do everything myself because I want it done right, but I see now that it's too much. I could also talk to my boss about what's realistic with the deadlines we have.

Dr. Ibrahim: That sounds like a solid plan. What small steps could you take this week to start making those changes?

Basim: I could start by having a meeting with my team tomorrow to go over the tasks we have and see what I can delegate. And I'll set up a meeting with my boss to discuss the project timelines.

Dr. Ibrahim: That's a great approach, Basim. You've identified some very practical steps that can help lighten that heavy backpack of stress. How do you feel about trying this out?

Basim: I feel more hopeful. I think if I follow through, I can start managing the stress better.

Dr. Ibrahim: I'm confident you can. Let us check in next week to see how things are going and if there are any adjustments we need to make. Does that sound good?

Basim: Yeah, that sounds good. Thanks, Dr. Ibrahim.

Dr. Ibrahim: You're welcome, Basim. You're doing great work, and I'm here to support you every step of the way.

This method helps individuals gain perspective, reduce emotional interference, and apply practical solutions to their problems.

8. Conclusion

8.1 Root and branches theory

The Root and Branches Theory suggests that psychological capacity compression, driven by a reduction in happiness hormones and an increase in stress hormones, plays a central role in the development of mental health disorders, such as depression, anxiety, OCD, and panic attacks. The metaphor of a tree is used to explain this concept: psychological stress acts as the “roots,” which feed into the system and cause various symptoms that emerge as “branches.” These symptoms manifest as emotional, behavioral, and cognitive disruptions, indicating a strained psychological state. Rather than focusing solely on alleviating these symptoms, the theory advocates for addressing the root cause—psychological stress itself. This is achieved through increasing happiness hormones like serotonin and reducing stress hormones like cortisol through interventions, such as mindfulness, exercise, and positive social interactions.

In addition to focusing on stress management, the Root and Branches Theory also acknowledges the complex role of genetics, personality, and life experiences in shaping an individual’s mental health. These factors determine how susceptible a person is to psychological capacity compression and how they respond to various stressors. Furthermore, the theory emphasizes the importance of culturally sensitive approaches to mental health care, recognizing that cultural factors significantly influence how people experience and express psychological distress. The AlKhathami Approach, validated for early detection and intervention in primary care settings, aligns with this theory, offering a structured, holistic method for addressing mental health issues at their core.

8.2 Modern narrative therapy

Modern Narrative Therapy is a therapeutic approach that encourages individuals to externalize their problems, separating themselves from their issues. By treating the problem as an external entity, people can analyze it from a more objective and detached perspective. This separation allows individuals to view their challenges with greater clarity, reducing the emotional burden associated with internalizing issues. By personifying the problem—sometimes treating it metaphorically as a “friend”—they can apply their own experiences and knowledge to tackle the issue, promoting a sense of empowerment and control over their circumstances.

This approach builds emotional resilience by fostering confidence and helping individuals see that they are not defined by their problems. Modern Narrative Therapy also encourages the development of practical, actionable solutions, as people can engage with their challenges from a place of emotional detachment. It is particularly effective in diverse cultural contexts, where externalizing issues may resonate with cultural narratives or symbolic forms of expression. This culturally adaptable approach allows individuals to work through their mental health struggles in a way that respects personal and cultural values, promoting mental well-being and long-term recovery.

Acknowledgements

The authors acknowledge the use of ChatGPT for language polishing and the figure creation in the manuscript.

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