



## ARTICLEBY GABRIELLE COVINO

Nearly half of all Australian adults will face mental health challenges during their lives - 1 in 5 will experience this each year. Sadly, these statistics have become all too familiar, and many of us have grown desensitised to the magnitude of the ongoing mental wellbeing crisis.

In a world where exhaustion, a culture of busyness, and pushing through have become the norm, addressing these challenges remain as crucial as ever.

Both government and peak mental health bodies acknowledge an imperative to shift how we engage with mental health, and that Australians urgently require a system that acts early to help people before mental health conditions worsen.<sup>2</sup>

As practitioners, what is our role, and how can we best support our patients?

This article introduces the Mental Wellbeing Spiral (MWS) alongside the foundational principles of the General Adaptation Syndrome (GAS). We will explore their practical applications in holistic medicine and their critical role in promoting resilience and sustainable healthcare practices. By integrating these concepts into clinical approaches, practitioners can navigate the complexities of stress with both precision and empathy, ultimately enhancing patient outcomes and practitioner wellbeing.



### **KEY HIGHLIGHTS**

- The Mental Wellbeing spiral (MWS) model illustrates a spectrum ranging from peak mental performance to severe mental health issues.
- The MWS is divided into three stages: debilitated, distracted, and dynamic.
- The article integrates MWS with Hans Selye's GAS, detailing the three stages of stress response: alarm, resistance, and exhaustion, and highlighting the physiological mechanisms behind these stages.
- Perception of stress influences its impact, viewing stress as a manageable challenge can mitigate negative effects and enhance resilience.
- The adoption of a holistic approach by integrating MWS and GAS models to better understand and treat mental wellbeing, combining psychological insights with physiological responses may lead to improved patient outcomes.



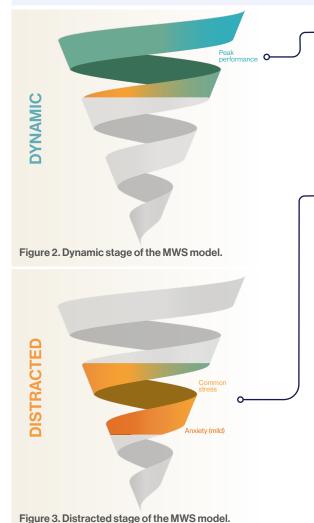


#### UNDERSTANDING THE MENTAL WELLBEING SPIRAL

Driven by the ongoing need to support practitioners to navigate mental health challenges - exacerbated by the impact of the COVID-19 pandemic and widespread burnout - Dr Lesley Braun developed the MWS model.

The MWS concept illustrates a spectrum where peak mental performance and severe mental health issues occupy opposite ends. (Figure 1.) The middle area is where most individuals reside, experiencing varying stress levels without reaching clinical depression or peak mental wellness. Movement along the MWS is influenced by diet, lifestyle, mindset, behaviour patterns, environment, and genetics. Therefore, an holistic approach, incorporating diet, lifestyle, environment, mindset, and personal meaning is crucial in promoting upward movement on the spiral. This integrative approach also includes the targeted use of nutritional and herbal medicines to support and accelerate this positive movement safely.

The MWS can be divided into three stages: debilitated, distracted, and dynamic.



Dynamic stage

At the top of the spiral is the aspirational state of peak performance. Individuals in this stage have abundant energy, which replenishes quickly. They can focus, concentrate, and achieve a state of 'flow' more easily, with extra capacity to handle challenges and changes. This stage involves not just coping but improving productivity, feeling stronger, and enjoying mastery and joy. Herbs and supplements, including nootropics and adaptogens have been found beneficial for enhancing physical and mental performance in this stage.

#### Distracted stage

This middle segment is where most people fluctuate throughout their lives. They do not face severe mental health issues but are also not at their peak performance. Individuals generally manage daily challenges but may struggle with high stress and rapid change. Symptoms can include feeling scattered, irritable, overwhelmed, and disengaged. Mood, focus, memory, sleep, immune function, and digestion may be impacted, particularly at the lower end of this stage. Complementary and integrative medicine, including rest, stress management techniques, nutritional support, and herbal medicines, can help boost energy, improve focus, restore mood, reduce stress effects, enhance adaptability, build resilience, and improve sleep quality.

- The majority of everyday people move up and down this middle space during their lifetime
- Capacity to meet everyday challenges is okay, but experience lowered resilience to sudden change
- · May feel scattered, irritable, and overwhelmed at times
- Mood, focus, memory, sleep, immune function, and digestion can be affected at high stress times

### Debilitated stage

At the bottom end of the spiral, individuals suffer from serious mental health issues. This stage is characterised by low energy, mood, and motivation, affecting daily decisions and quality of life (QoL). Psychological and physical tension is common, along with low resilience and an inability to handle rapid or unexpected changes. Medical supervision from experienced professionals is often essential.

- · Severe mental health issues.
- Low energy, mood, and and motivation.
- · Significantly impacts QoL and ability to lead life to the fullest.
- Resilience and adaptation are low.
- Supervision required from a mental health professional.

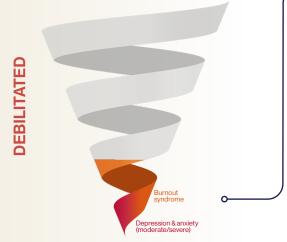


Figure 4. Debilitated stage of the MWS model.



#### REVISITING THE GENERAL ADAPTATION SYNDROME

Recognising its profound impact on health outcomes, Hans Selye's GAS stands as a timeless framework offering valuable insights into stress management. Originally conceptualised in the mid-20th century, GAS delineates stress response patterns into three distinct stages: alarm, resistance, and exhaustion.<sup>2</sup> (See Figure 5.) This model not only details the physiological underpinnings of stress but also provides a structured approach for practitioners to orientate effective intervention.

#### The stress response - General Adaptation Syndrome

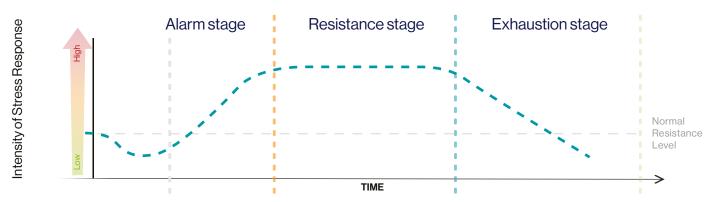


Figure 4. Selye's 3-stage stress response model.

The dotted blue line depicts the body's response to chronic stress over time, and how it deviates from normal or 'hormesis' (grey dotted line). (Hans Selye, 1956)

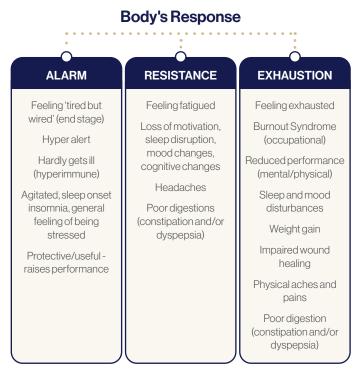


Figure 5. The General Adaptation Syndrome model<sup>2</sup>

# HYPOTHALAMIC-PITUITARY-ADRENAL AXIS AND GAS

The role of the hypothalamic-pituitary-adrenal (HPA) axis in mediating the stress response is central to understanding the physiological mechanisms of GAS. Notably, the first two phases - alarm and resistance - occur during exposure to acute stress and are part of everyday life. In contrast, the assault of chronic, ongoing stress can push an individual into the third stage - challenging coping mechanisms both physically and emotionally, leading to exhaustion.<sup>2</sup>

#### PHYSIOLOGICAL MECHANISMS OF GAS

The physiological changes during GAS are intricate and involve multiple systems within the body. Understanding these changes is essential for practitioners to develop effective treatment strategies for stress-related conditions.<sup>2</sup>

#### Alarm stage

During the alarm stage, the body experiences an immediate response to a stressor. This involves the activation of the HPA axis and the sympathetic nervous system. The hypothalamus releases corticotropin-releasing hormone (CRH), which stimulates the pituitary gland to secrete adrenocorticotropic hormone (ACTH). ACTH then prompts the adrenal glands to produce cortisol, a key stress hormone that helps mobilise energy reserves and modulate immune responses.<sup>3,4</sup>

#### Resistance stage

In the resistance stage, the body attempts to adapt to the ongoing stress. Cortisol levels may remain elevated, and the body continues to utilise energy reserves to cope with the stressor. The HPA axis remains active, and other hormones, such as aldosterone, are released to help maintain fluid balance and blood pressure. This stage is characterised by a heightened state of alertness and metabolic activity as the body strives to maintain homeostasis.

#### Exhaustion stage

Prolonged stress without adequate recovery leads to the exhaustion stage, where the body's adaptive mechanisms become depleted. Chronic exposure to high cortisol levels can impair immune function, increase the risk of chronic diseases, and lead to symptoms such as fatigue, depression, and metabolic disturbances. The body's inability to sustain the resistance phase results in a breakdown of physiological processes, making it more susceptible to illness and dysfunction. 9,10



#### The Importance of Perception of Stress

Stress perception significantly influences the degree to which an individual suffers from stress. Recent studies have shown that viewing stress as harmful amplifies its negative effects, whereas perceiving stress as a manageable challenge can mitigate its impact on health.11

For healthcare practitioners, understanding this dynamic is central in stress management strategies. While it's important to acknowledge the real and tangible impacts of stress on the individual, educating patients to reframe their stress perception can enhance resilience and reduce stress-related health issues.

#### The Perceived Stress Scale (PSS)

This scale is one of the most popular self-rated stress scales. it includes a 10-item validated questionnaire that can help guide practioners and patients to see where they sit on the MWS.

By promoting a mindset that views stress as an opportunity for growth - while supporting with adaptogenic herbs and supplements - practitioners can use these strategies to help patients harness stress for improved mental and physical wellbeing.12

The synergy between the MWS and GAS equips healthcare practitioners with a powerful toolkit to navigate the dynamic, multifaceted terrain of mental wellbeing, stress, and burnout. By integrating these frameworks, practitioners can forge more resilient pathways for their patients, bringing together psychological insights with physiological responses to stress.

#### SUMMARY

Supporting patients to understand that some degree of stress, distress, anxiety, and sadness are a normal part of the human existence helps patients to see where they sit on the spectrum of stress and for the practitioner what holistic management strategies can be put in place to stop progressing down the spiral.

This holistic approach not only enhances diagnostic precision and treatment effectiveness but also empowers individuals to achieve sustainable mental wellness. As we continue to advance towards a future of a more settled mental health landscape, leveraging these models promises to support standards of care and pave the way for genuinely positive patient outcomes.

- $Commonwealth\ of\ Australia, Department\ of\ Health,\ National\ Mental\ Health\ and\ Suicide\ Prevention\ Plan.\ Available\ from:$ https://www.health.gov.au/resources/publications/the-australian-governments-national-mental-health-and-suicide prevention-plan
- Mental Wellbeing The essential guide to herbs and nutritional supplements Braun L. 2021 Blackmores Institute a division
- erman, M. N., & Stemberg, E. M. (2012). Glucocorticoid regulation of inflammation and its functional correlates: From A axis to glucocorticoid receptor dysfunction. Annals of the New York Academy of Sciences, 1261(1), 55-63. doi:10.1111 HPA axis to glucocorticoid receptor dysfunction. Annals of the New York Academy of Sciences. 120 (1), 00-00.0 //j1749-6632.2012.06633

  Herman, J. P., McKiveen, J. M., Solomon, M. B., Carvalho-Netto, E., & Myers, B. (2012). Neural regulation of the stre
- Glucocorticoid feedback mechanisms. Brazilian Journal of Medical and Biological Research 45(4):292-8. doi:10.1590/ S0100-879X2012007500041
- Selve H. The Stress of Life. New York: Mcgraw-Hill: 1956.
- Joëls, M., & Baram, T. Z. (2009). The neuro-symphony of stress. Nature Reviews Neuroscience, 10(6), 459-466. doi:10.1038/
- obels with details in Lipesconner (1998). The many details are considered and the control of the Endocrinology, 7, 137. doi:10.3389/fendo.2016.00137

  8. Peters A, McEwen BS, Friston K. (2017). Uncertainty and stress: Why it causes diseases and how it is mastered by the brain.
- Progress in Neurobiology. Aduable from: https://www.sciencedirect.com/science/article/pii/S030100827300569

  Johnson, S. B., Riley, A. W., Granger, D. A., & Riis, J. (2013). The science of early life toxic stress for pediatric practice and advocacy. Pediatrics, 131(2), 319-327. doi:10.1542/peds.2012-0469

  20. Sapolsky, R. M. (2015). Stress and the brain: Individual variability and the inverted-U. Nature Neuroscience, 18(10), 1344-1350.
- doi:10.1038/nn.4129
  11. Crum, A. J., Akinola, M., Martin, A., & Fath, S. (2017). The role of stress mindset in shaping cognitive, emotional, and
- physiological responses to challenging and threatening stress, Anxiety, Stress, & Coping, 33(3), 302-320, https://doi.org/10.1 080/10615806.2016.1275585
- Jamieson, J.P., Crum, A. J., Goyer, J.P., Marotta, M. E., & Akinola, M. (2018). Optimizing stress responses with reappraisal a mindset interventions: An integrated model. Stress and Health, 37(3), 452-464. https://doi.org/10.1080/10615806.2018.14

