



Resilience & Wellbeing App

The Resilience & Wellbeing App is available for Android and iOS (iPhone/iPad) phones and tablets. It provides a comprehensive assessment and a training system that helps to improve your physical and emotional health and wellbeing and to enhance performance and productivity, even under pressure. It is based on cutting-edge research into the physiology of stress and resilience.

What Can the Resilience & Wellbeing App Do for You?

Stress, Health and Performance

This app sets out to provide you with simple and easy-to-practice, two proven tools and techniques, which when practiced for only a few minutes a day, have brought about substantial changes in many people towards becoming healthier, happier and more productive.

The app introduces the **Engagement Training**, that combines **Resonant Frequency Training** (Heart Coherence Training) with **bilateral stimulation** (bilateral sound).

Engagement Training can transform the negative impact of pressure, stress and extreme emotions on health and performance, through an individualised paced breath training.

Engagement Training is based on scientific research in the fields of neurophysiology, chronobiology, neuropsychology, mindfulness, as well as positive psychology. The training has shown to be safe and effective.

The starting point of our technological approach is understanding the effects of *the psychological and physiological effect of emotions* on health, happiness and success—both, those emotions we know about and also those emotions we are not aware of yet, but which still, albeit sub-consciously, have a profound impact on our physical health, judgments, decision making, behaviour and performance.

Long term exposure to negative emotions, such as tension, anxiety, fear, grief, anger, frustration, disappointment and despair, can have a strong negative impact on health and performance. They can undermine health and reduce the capacity for good judgment, decision making and meaningful and effective action.

Engagement Training is an effective, easy-to-use, day-to-day tool that will help you reduce the impact of stress and negative emotions that undermine your health and performance.

The Resilience & Wellbeing App has been created to help you monitor and maintain good health, as well as good judgment, decision making capacity and performance under sustained high pressure.

The **Autonomic Health Assessment** assesses and monitors via heart rate variability measurement your health risk and health potential; levels of stress and strain; your capacity to relax, recover and regenerate; vitality (biological age); and your capacity for sustainable peak performance.



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The **Emotional Health Assessment** measures your levels of stress, anxiety and depression with the help of a standardised screening and monitoring questionnaire (DASS-21).

Both assessments allow to create a base line assessment of your physical and emotional health and allow to monitor your progress and the efficacy of any intervention(s).

Engagement Training is a physiological training for brain and autonomic nervous system that allows to maintain and increase physiological, emotional and mental health, flexibility, creativity and the capability to work effectively with others under unusually challenging circumstances and in a crisis.

Our Resilience & Wellbeing App can help you to:

- Remain well and make good judgments and decisions under pressure
- Improve and maintain emotional and physical health and prevent illness
- Acknowledge and let go of disturbing emotions
- Move to and sustain positive emotions and feelings
- Maintain adaptability and sustainable high performance
- Build and sustain healthy and caring personal relationships
- Build and sustain effective working relationships
- Develop the capacity to cope with stress, change and catastrophe
- Reduce stress/tension, performance-related anxiety and depression
- Regulate emotions by raising awareness
- Neutralise negative emotions such as anger and frustration, shifting them to positive feelings such as appreciation
- Bounce back to a homeodynamic and balanced state after a disruption
- Develop 'protective factors', resourcefulness and mental toughness
- Improving length and quality of sleep

The Resilience & Wellbeing App achieves this by training the rhythm and balance of brain and autonomic nervous system away from a fixed, sympathetic 'fight or flight' response



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How About Lifestyle Improvements?

The Resilience & Wellbeing App complements and supports the health enhancing effects of:

- A healthy and balanced diet
- Rhythmic physical exercises
- A rhythmic lifestyle
- Sufficient sleep
- Alternating times of strain and recovery (taking breaks)
- Reducing the use of drugs, such as alcohol and nicotine

Developing Transferable Skills

By training the physiological patterns of engagement and letting go, these physiological ‘skills’ will then be available at any moment throughout the day, allowing to effectively regulate your emotional responses and thereby yourselves and your social environment.

Developing or maintaining high levels of resilience in all areas of life will have the following benefits:

- Good outcomes regardless of high-risk status
- Constant competence under stress
- Fast and complete recovery from trauma
- Self-regeneration after injury

The Resilience & Wellbeing App’s Tools & Techniques

In this app you will find practical tools and techniques that have been created to help you develop resilience, improve wellbeing and health, and deal effectively with pressure, using a *simple* training.

The Assessments

A. Emotional Health Assessment

This assessment is based on a 21-question, self-report questionnaire called the Depression Anxiety Stress Scales. This test measures your levels of stress, anxiety and depression.

The DASS is not a diagnostic tool, i.e. does not diagnose conditions, but assesses the severity of symptoms of the three related emotional states of depression, anxiety and tension/stress as compared with the average population. So “mild”, for example, means that your score is above the population mean but still well below the typical severity for people seeking help (i.e. it does not mean a mild level of depression, for example).



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This assessment highlights areas of risks or concerns and also allows you to monitor the progress you will make in time. It allows you to ***screen for possible emotional health problems, assess the intensity of these symptoms and compare them at different times.***

We recommend doing the test initially prior to any training to create a baseline, and then repeat the test after six weeks of practicing the Engagement Training, Attentiveness Training and/or the Relaxation Training. Then three months later, repeat the test to monitor your improvements and the impact of the trainings.

The DASS is scientifically validated and used worldwide. It has been developed by the Lovibond, S.H. & Lovibond, P.F., Psychology Foundation of Australia.

Should you suffer with mental or emotional health problems, or should the test pick up any abnormal scores, please export the test results as a PDF file and show them to your health professional, therapist and/or coach.

B. Autonomic Health Assessment

This test measures the rhythmic activity of your autonomic nervous system. It can give you an understanding of your ***health risk and health potential***; how strained you are; how well you recover; and how flexible, adaptable and youthful your organism is (heart rate variability is reduced with age, prior to developing and during severe physical and/or mental illnesses).

It may also inform you about your physiological resources for sustainable peak performance (flow, engagement) at this moment in time.

Moderately or highly abnormal values could in some cases be the result of health problems. Please always medical advice, should you suspect suffering from a physical or mental health problem.

We recommend doing the ***Autonomic Health Assessment before starting the Engagement Training to get a baseline, and then to repeat the Autonomic Health Assessment every 1 to 2 weeks, to monitor the progress and long-term effect of your training programme on your health.***

It may be helpful to do more than one autonomic health assessment initially to get a proper baseline, for example in the morning after rising on 2 or 3 consecutive days.

The results are stored and accessible for review and comparison (online or exported as a PDF or CVS file).



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C. Expert Assessment

Expert Assessment measures the impact of certain activities, such as conversation, reading, watching TV etc., and also therapeutic interventions on the autonomic nervous system in real time and produces a summary report after the event.

It can **assess levels of strain and recovery as well as engagement** during these activities.

The results are stored and accessible for review and comparison (online or exported as a PDF or CVS file).

The Engagement Training

(Resonant Frequency Training & Bilateral Stimulation)

Engagement Training (ET) is an **audio guided and biofeedback-based form of resonant frequency training combined with bilateral (brain) stimulation**.

ET trains to a **physiological state that underlies sustainable peak performance, flow state and engagement, even under pressure, but also enhances the capacity to let go and recover from strain**.

This can lead to *better management of stress and extreme emotions, improved and sustained emotional and physical health and improved performance*.

ET promotes and protects emotional and physical health.

Everybody has an **individual breathing rhythm (pace) at which training of emotional and physical health, wellbeing and peak performance (engagement) happens at an optimal level**; this individual rhythm can change over time and with ongoing training. This individual pace of breath (between 4.5 and 6.5 breathing cycles per minute) will be assessed by measuring the impact that pacing your breath at different paces has on your physiology (**Resonant Frequency Test**).

Once your optimal pace (Resonant Frequency) has been identified, the **audio and visual breath pacer** will automatically default to this identified rhythm during your Engagement Training.

After every 10 training sessions, you will automatically repeat the **Resonant Frequency Test** to optimize the effect of the next 10 training sessions.

In scientific studies, when performed for 10 - 20 minutes once or twice a day for six weeks, Engagement Training (Resonant Frequency Training) has been shown to significantly reduce negative stress, depression and anxiety and to improve health and performance.

The Resonant Frequency Training is complemented by a **bilateral sound for bilateral stimulation**, a technique used in stress management and trauma therapy (EMDR). The rhythmically oscillating sound aligns the activity between left and right brain and stimulates brainwave activity in the range of Delta 1.5Hz and SMR 12Hz.

Delta brain wave activity is associated with deep sleep (sleep phase 3), production of human growth hormone, trauma processing and physiological regeneration and repair.

SMR 12Hz is associated with stabilization and balance of mood, and relaxed focus and attention.



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Practicing the Exercises

Allowing yourself to practice 10-20 minutes once or twice daily, over a six-week period of focused training, you will be surprised at the positive impact this will have on your emotional and physical wellbeing, health and performance.

Individualising your programme and your exercises after a period of getting to know them is strongly encouraged. You can complement your guided breathing exercise (Engagement Training) with affirmations or visualisation if you wish to do so. It may make practising your exercises increasingly enjoyable and purposeful, even beyond the immediate benefit you will experience.

Practising the training regularly, will allow you to acquire transferable skills in form of a physiology of engagement, that will be available for you whenever you require them (for example under pressure and in crisis).

When experiencing very challenging situations, you can activate the physiological engagement response by focusing a few seconds on your heart and performing a few 'rescue breaths'.

Make practising your exercises an enjoyable quality time with yourself; this will not only benefit you, but also your work and home environment.

THE BENEFITS OF DAILY TRAINING WITH THE ADAPTIVE RESILIENCE APP

The Adaptive Resilience App may become an important tool to change your life, reducing the negative impact of short- and long-term stress and helping you to enhance health, happiness, sustainable peak performance, as well as full recovery from strain.

Ten to twenty minutes once or twice daily training with the Adaptive Resilience App can benefit you in the following ways:

Health & Wellbeing

- Improve and maintain your health and wellbeing¹
- Increase your physiological adaptability and flexibility, when responding to inner or outer demands
- Improve your sleep
- Boost recovery from strain
- Boost recovery from ill health

Emotion Regulation

- Deal more effectively with pressure, trauma, change and crisis
- Improve your regulation of emotions
- Reduce stress, anxiety, anger, fear and low moods
- Recover more quickly from trauma, change and crisis



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Adaptive
Resilience

Performance & Productivity

- Access sustainable high-performance states (flow states) more easily, even under pressure
- Improve your judgment and decision-making capacity in challenging circumstances
- Improve performance and productivity under pressure
- Boost your confidence to handle problems
- Access your resourcefulness for problem solving
- Improve your concentration, focus, memory and cognitive processing under pressure
- Improve your social skills

Furthermore, clinical trials have shown that Resonant Frequency Training techniques (Engagement Training) can help control or improve problems like:

Post-traumatic stress disorder (PTSD)², stress³, anxiety⁴, anger, depression, panic attacks, attention deficit disorder, asthma, high blood pressure, irritable bowel syndrome and chronic fatigue syndrome

This technology can also be used alongside other medical or therapeutic interventions.

Should you suffer with mental, emotional or physical health problems, please always consult your health professional and/or therapist.

CAUTION

Do not do any of the assessments and/or the training whilst driving or operating machines, or whilst doing any activity that requires your full alertness and attention.

Do not do any of the assessments and/or trainings without permission and/or guidance from your health professional or therapist if you suffer from mental health problems, have experienced major traumas or suffer from post-traumatic stress disorder.

DISCLAIMER

Although in many cases complementary, the assessments and trainings of the app do not replace the diagnostic, advice or intervention from your health care professional, therapist and/or health and performance coach.

Should you suspect that you suffer from a physical, emotional or mental health problem, or should any of the data collected be outside the recommended range, please see your health care professional or therapist for advice.

PRIVACY POLICY

By using the Adaptive Resilience App you are giving permission for Adaptive Resilience Ltd and Happy Electronics to take a copy of your session data and use selected elements of it for examination, research and analysis. All data used by Adaptive Resilience Ltd and Happy Electronics will be anonymised and may be passed to a third party for analysis and research. In the event that data is passed onto a third party, no identifying information will be sent with the data. Data will not be used by Adaptive Resilience Ltd and Happy Electronics for commercial and marketing purposes.



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The Team behind the app:

Dr Peter Gruenewald, MD

Peter is an internationally recognised authority in the field of resilience training, stress management and performance as well as in clinical chronobiology. He is managing director of Adaptive Resilience Ltd. Peter works as Clinical Specialist in Sleep Medicine at University College Hospital and as a part time private GP in London and was previously a GP in the NHS for 24 years. He is an Associate Fellow at Saïd Business School. He contributes to leadership development programmes at a number of institutions, including Saïd Business School, as well as for the Major Project Leadership Academy (MPLA) of the Cabinet Office; the Institute of Public Administration (Ireland); Her Majesties Prison and Probation Service (HMPPS); Aspirant Directors of Public Health and Leaders in Children Services.

The Engagement Training (Resonant Frequency Training) of this app is currently, besides other techniques, scientifically trialled by the evidence team of the Ministry of Justice for prison staff. His workshops focus on developing resilience, stress management and performance, as well as leading under pressure.

Peter is the author of *The Quiet Heart. Putting Stress in its Place.* (Floris Books, 2007), which describes a highly effective approach to stress management and personal development, using techniques based on neuroscience, clinical chronobiology, mindfulness, and positive and motivational psychology to enhance well-being, leadership and performance under pressure and in crisis.

Peter completed his medical training at the Medizinische Universität Wien and at the Medizinische Universität Graz.

Petr Kolman

Founder and Managing Director of Happy Electronics, a company, that creates products for stress and performance management. Happy Electronics, a company based the Czech Republic, develops biofeedback and AVS applications for Android devices, manufacturing mind machines.

Petr is electrical engineer, programmer and software developer.

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For any other enquiries, please contact us on info@adaptive-resilience.co.uk

For more information about the science behind this app, please refer to Section: 'The Science behind the App'



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