

Control Your Stress & Manage Your Time!

Georgios P. Piperopoulos



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GEORGIOS P. PIPEROPOULOS

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To my daughter Anastasia (Natasha)
& my grandson Charalampos (Harry)

ABOUT THE AUTHOR

Georgios P. Piperopoulos studied sociology and psychology at American, German and Austrian Universities receiving his Bachelor's, Master's and Ph.D. degrees; taught at several American, European and Greek Universities at both undergraduate and postgraduate levels before retiring from his professorial chair at the Department of Business Administration, The University of Macedonia, Thessaloniki, Greece.

He has been visiting professor at Newcastle University Business School, U.K. since 2013 and at the MBA program, City College of Thessaloniki, International Faculty of Sheffield University since 2010.

He has held a variety of managerial posts in private enterprises and public social services organizations in the USA and Europe.

He has developed and taught Leadership, Communication, Stress Management and Psychological Operations courses at the Supreme Joint War College of the Hellenic Armed Forces (Army, Navy, Air force), the Army staff training school, the Hellenic Police Continuing Education Centre and at the Greek branch of the United Nations Peace Serving Operations Training Centre.

Professor Piperopoulos has published several textbooks and many popular books in Greek and English and authored hundreds of articles and editorials in leading Greek Newspapers and magazines. He has been a frequent guest on Greek TV and radio programs as a commentator and, for several years, presented his own show titled 'I Communicate Therefore I am' in Greek National and Regional TV channels and Radio stations. He has delivered hundreds of public lectures to groups in Greece, Europe and the USA.

His book Fundamentals of Communication, PR and Leadership has been published by BookBoon - <http://bookboon.com/en/fundamentals-of-communication-p-r-and-leadership-ebook>

His daughter Dr Natasha (Anastasia) Piperopoulou lives with her son in Athens and is employed as psychologist in a Piraeus public school for training and educating adolescents with special needs. His son Dr Panagiotis (Panos) Piperopoulos is a lecturer at Leeds University Business School, UK.

PROLEGOMENA

So you had a great time last night, pressed the 10 minute snooze button on the alarm clock that woke you up this morning and now you are running around frantically trying to dress while chewing a piece of toast pretending you are having breakfast; now running down your street hoping to catch the bus as the next one will take 15 minutes to come, you are breathing faster while your heart beats rise...

Welcome to the so-called stress mode.

You are at the university library, some unexpected chores last night hindered you from tidying up the power slide show for your presentation to your graduate seminar and as you rush to get the job done you feel your blood pressure and heart beats are on the rise and your available time has gone into the debit column...

You have entered the so-called stress mode.

It has been another of those we routinely call 'normal' days at your place of work, some customers complaining, some smiling with gratitude; you have had the usual sandwich for lunch and the proverbial chit-chat with a couple of colleagues at coffee break. As you prepare for your return home, your stomach begins to turn into a knot, your attitude drops to pessimism on the thought of spending yet another evening with a partner who once was the source of affection and inspiration but lately of negativism and rejection mercilessly stealing away the better of you...

You are now dwelling in a chronic so-called stress mode.

Don't ask students, working men and women or managerial personnel if they are familiar with stress and anxiety or if they have found the secret of effectively managing their time. If you happen to be a middle school, college or university student, a working person or a manager you already know, from your personal experiences and the shared experiences of colleagues, what will be the answer to these questions.

Our everyday life, in modern, clock regulated societies, sometimes feels like a serial of unceasing, of continuously increasing pressures and demands on our bodies and souls, on our physical and emotional being. When we add to modern life styles strains created by our ambitions and by self-induced or imposed desires for success and promotions we end up exacerbating our physical, mental, emotional and social abilities and strengths and start to flirt with stress, anxiety and lack of time.

Indeed, daily schedules and program demands mercilessly steal our time and our failure to make ends meet usually is experienced as fatigue, emotional drain, tendency to absenteeism and ultimately for some of us a strong desire to run away from it all.

It seems to be widely accepted among physicians, psychologists and other health professionals as well as among the public at large that stress may contribute to serious psychosomatic disorders including high blood pressure, anxiety or depression. Such problems, if left untreated, could sometimes lead to even more serious health conditions ranging from some types of cancer to cardiovascular disorders, or simply said heart problems.

The number of men and women seeking psychological, psychiatric or medical advice and treatment diagnosed with a sub-layer of uncontrolled stress and anxiety is impressive and even more impressive is the number of books, pamphlets and seminars aiming to help you deal with the realities of anxiety, stress and ineffective time management.

In view of such an almost astronomical plethora of “helpful” publications as well as of “enlightening” learn-how-to seminars you, as a reader, could legitimately raise the simple question relating to the practical need for the publication of yet another such book namely the one you are looking at.

Having amassed half a century of experiences as an academic and a practitioner, as a public speaker and as the leader in learn-how-to seminars aiming to control stress, deal with anxiety and effectively manage time I have composed this short book as a guide to the interested reader who is seeking a different approach to these two topics included in its title.

The positive reception of my presentations on stress, anxiety and time management to lay public audiences, to professional groups and, for several years, to high ranking military personnel attending the UNPSOTC (United Nations Peace Serving Operations Training Centre) in Greece lead me to the decision to put my verbal presentations and commentary as well as my power point slideshows into the form of the short book now at your disposal.

I am certainly pleased that Bookboon, the publisher of my previous book “Fundamentals of Communication, P.R. and Leadership” decided to publish this book.

In the process of reading the book you might be surprised to find out that I belong to that group of professionals and practitioners who see stress not as a malaise but as a natural blessing, a natural useful mechanism, when used and applied appropriately; I also consider anxiety as a motivator in exceeding self-perceived limitations of our actual, real skills and capabilities and time as an ephemeral but not incapacitating variable.

Combining the issues of stress control and time management in one book I aim to provide a useful 'breath of fresh air' to individuals who, day-after-day, feel sinking into deeper levels of agony, depression and loss of hope with depleted emotional and physical reserves and apparent lack of time they so desperately feel they need to complete given tasks, to realize their goals.

This book aims to offer help and advice that can be easily absorbed and as easily put in practice by anxious students and overstressed, with work overloads and time limitations, professionals.

Looking at what is available in dealing with the concepts of stress and time as practical, do it yourself guides structured with bullet-points and 1-2-3 simple (and useful) instructions, I decided to write this book that offers a more wholesome, a 'holistic' approach which will provide the readers with a more thorough familiarization with the two concepts and, hopefully, facilitate successful handling of them.

I do express my gratification to Bookboon publishing house for accepting this book and adding it to an impressive collection of books dealing with similar subjects they already have published.

I am hopeful that the time you will invest reading this book, if placed in a symbolic "cost-benefit" analysis continuum, or in a personal time balance sheet, as an investment, will show up on the positive side, on the credit column.

An indirect benefit to the readers of my book is that if you so wish you can abstract useful material and structure power point presentations.

PART ONE – CONTROL YOUR STRESS

1 WHAT IS STRESS?

Ask each person in a group of youngsters or adults, friends, schoolmates or co-workers to give you his or her definition of stress but don't be surprised when you discover that there is no clear and precise consensus among them and that their answers vary widely.

Additionally, what some persons may define as their sources of stress some others will tell you that they are not bothered in the least by them and may even find them acceptable if not outright pleasant. I would advise you not to get upset or, if you would forgive my well-intended humour, be stressed by such a finding, such a 'discovery'.

I will help you overcome your puzzlement with such findings from your informal survey by noting that each one of us experiences stress in a very personal way. In other words, it is normal that we all have different stressors, emerging from our personal experience in everyday life, which can put us in stress. Commuting to school or work by riding a bus or train or driving our car may be a stressing experience for some of us, given the bus time schedules and the overcrowded conditions or the traffic jams but they turn out to be very pleasant experience for others.

If leaving behind your informal personal survey you proceed to consult an English language dictionary you will find that it describes stress as "*Pressure or tension exerted on a material object.*" This definition refers to the concept of stress as it was, and continues to be, used in the fields of physics and engineering.

It would, then, appear legitimate for you to wonder how stress relates to us humans and to human behaviour.

Searching further the English language dictionary you will encounter another definition of stress as "*a state of mental or emotional strain or tension resulting from adverse or demanding circumstances.*" This is the definition that we will be working with as we will be examining the concept, the noun stress which can be found in a vast multitude of essays, pamphlets, books, seminars or course topics.

Etymologically the noun can be traced to the Latin verb '*stringere*' (to draw tight), or to the French concept '*estresse*' (narrowness).

Following this brief references to the definition of stress some of you might be lead to ask if there are among us some people who do not experience any type of stress in their everyday life. And since in this book we will be looking at the concept of time and how to effectively manage it some of you might ask if there among us any persons who are free from the pressure of time in their daily routines.

I will first beg your forgiveness and ask for your gracious understanding as I proceed to answer both of the above questions on stress and time with a somewhat *macabre* answer which will help eliminate, once and for all, questions relating to freedom from stress, anxiety and time limitations for all of you curious readers.

YES there are people who not do not experience stress and are liberated from all time limitations! You can find such persons in your local cemetery, under a RIP (Rest in Peace) headstone but, unfortunately and understandably, they would not be able to give you the answers you crave for.

Whether we like or dislike it the undeniable reality is that stress and time are two variables well interwoven in our nature as living organisms. The success in limiting stress to the lowest levels humanly possible and managing our time most effectively rests in our ability to learn how to cope with every day stressors which confront us continuously and often time without any prior warning and using creatively the time we have at our disposal since there are no ways of increasing it.

It was a century ago, that the renowned, Hungarian born physiologist Dr. Hans Selye borrowing the concept of '*stress*' from physics and engineering used it in reference to humans and human behaviour in his pioneer research of the body's General Adaptation Syndrome to environmental demands. A relevant reference at the site of AIS (American Institute of Stress) suggests that the concept of '*stress*' emerged formally in the late 1940s when Selye gave a lecture to the prestigious French Academy.

Since then the concept of stress has been widely used and, of course, continues to appear in both medical and psychosocial scientific literature as well as in popular magazine articles and everyday vernacular.

A few years before his death Selye using the Greek word '*eu-eu*' meaning 'good' added it to the word stress and the concept of '*eustress*' was born distinguishing some pleasant and positive aspects of stress in contrast to unpleasant and negative aspects relegated to the concept of '*distress*'.

After the above brief reference to the historical evolvement and application of the concept of stress to biology, physiology, psychology and medicine, coming to the present we are faced with the simple indisputable, widely accepted definition which states that:

“Stress is our body’s normal reaction to sudden environmental demands.”

Indeed, a variety of stimuli acting as ‘stressors’ elicit the reaction of stress. What is interesting and should be noted properly is that ‘stressors’ which put us in the stress mode can emanate from both negative and positive sources and be related to unpleasant as well as to pleasant experiences.

Therefore it should not be a surprise to any of us that we can get stressed by the failure to gain that much desired promotion or a distinction in our university dissertation as we can get stressed by the official announcement of a long awaited promotion which goes along with the need to move to another corporate location, by the preparations for a forthcoming holiday or the exchange of rings with our love partner.

When we enter the stress mode our body will immediately mobilize all necessary energy and spend it in attempting to successfully deal with the stressors that caused it.

The advertisement features a header with five silhouettes of people's heads in profile, each against a different colored background (red, purple, blue, green, orange). The text "YOUR CAREER. YOUR ADVENTURE." is overlaid in white. Below this, the text "Ready for an adventure?" is in a large, bold, black font. This is followed by "We're looking for future leaders. Idea generators. And strategic thinkers." in a smaller black font. A paragraph of text follows: "We're looking for future leaders. Idea generators. And strategic thinkers. Put your degree and skills to work. We'll help you build the roadmap that's right for your career – including a few twists and turns to keep things interesting. If you have passion, a brilliant mind and an appetite to grow every day, this is the place for you." Below this is the URL "Begin your journey: Accenture.com/meetus". At the bottom left, it lists "Strategy | Consulting | Digital | Technology | Operations". At the bottom right is the Accenture logo, which includes a stylized ">" symbol above the word "accenture" and the tagline "High performance. Delivered." below it.

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Placing the stress process in a continuum we may say that we go from a normal state of functioning to sudden heightened arousal and then to a gradual return to the state of normalcy or equilibrium. In completing the process our body will spend the extra energy (in the form of hormones) mobilized to deal with the sudden demands.

Things become somewhat blurred when the stressors originate internally (when threats and fears are imaginary and not real) which may lead to heightened anxiety levels as the mobilized energy is present but cannot be actually spent.

It is imperative, at this point, to come to grips with the reality that we all need a certain amount of stress or pressure to experience wellness in our everyday life. We need some stress to get us out of bed and going in the morning and it is normal stress levels that keep motivating us to go through our study or work schedules throughout the day.

Normal day stress levels we may experience pose no threat and are not a problem, in other words, stress is a natural and useful mechanism in dealing with intense stressors. However, stress turns out to be a problematic state of being when it gets to be too much or, (this may sound strange but it is true) too little.

2 OUR NERVOUS SYSTEMS AND THE PHYSIOLOGY OF STRESS

I happen to have grown up in an environment that encouraged the pursuit of knowledge and I have spent my professional life as an academic and a practitioner encouraging my students, clients and trainees to enjoy the pursuit of knowledge and to absorb information that could someday prove to be useful both in their personal daily lives as well as in exercising their duties as students, workers or professional managers.

Having said this I will proceed with a very basic presentation of the apparatus involved in the stress response. My aim is not to mislead you in thinking that you can become amateur neuropsychologists or physiologists but to help you acquire a better, not highly but somewhat sophisticated view, of your bodily reactions relating to stress convinced that this will help you better understand its nature and manifestations and enable you to control and manage it more effectively if and when it is needed.

We as humans poses a very sophisticated nervous system which can be divided into two major parts, namely, The Central Nervous System (CNS) which includes our brain which is located in and protected by our skull, that is the cranial structure, and the spinal cord which is protected by our spinal vertebrae, and The Peripheral Nervous System (PNS) which is made up of all our nerves and nerve cells laying outside the CNS and which operates relaying information from the CNS to our bodily organs and from our bodily organs to the CNS.

The Autonomic Nervous system (ANS) is fundamentally a major part of our PNS and serves the significant function of ensuring that all our internal organs and glands function properly.

The ANS is made up of two subsystems, namely the *Sympathetic* and the *Para-Sympathetic* both of which relate to the same internal organs and glands but serve opposite functions.

At the moment our brain decides that we must engage in the '*fight or flight*' response immediately the *sympathetic* subsystem is aroused first and mobilizes our resources which bring us to a raised stress level; subsequently when the threat has disappeared or effectively dealt with the *parasympathetic* subsystem comes into play helping us return to a state of calmness and rest.

Within our brain the Autonomic Nervous System is regulated by the area known as the hypothalamus.

2.1 THE 'FIGHT OR FLIGHT' RESPONSE

I will kindly ask you to follow me in a mental trip to 'yesterday'. Please permit me to take you back, very far back, to humanity's 'memory lane' when our primeval predecessors walked naked and barefoot in the proverbial forests. Dangers were abundant and so were myriads of life threatening experiences. When our predecessor's brains would register a real and present danger they should be able to react immediately mobilizing all body resources and strengths and, at a moment's judgement, decide to engage in fight or run away from the threatening stimuli.

This threat perception and response behaviour is known as the "fight or flight" response which requires immediate and total mobilization of the body's strengths and resources as it engages the brain and sends appropriate command signals to the adrenal glands. The ensuing experience materializes as a state of heightened stress caused by a surge of hormones in the body.

The "fight or flight" response was first discussed early in the 20th century by the American physiologist Dr. Walter B. Cannon who described it as a mechanism present in all animals. This response is also described as acute stress response and manifests itself in cases where the animal perceives a life threatening situation and must respond by engaging in a fight, if this is inevitable, or fleeing away from the danger and escaping to salvation if this alternative behaviour is possible.

Surely nowadays human beings do not face on a regular basis dangers such as wild animals or poisonous serpents as our predecessors did in the primeval forest or in the primeval grassland. There are, however, plenty of dangers associated with modern living ranging from the seemingly simple routine of crossing a street to riding a bicycle or a motorbike to driving a car.

Dangers nowadays, however, eliciting the 'fight or flight' response are more often of a symbolic or psychological rather than a physical nature. Experiences which may create stress include missing the bus or train that takes you to your workplace or back to your home, having a quarrel with an office mate or a dispute with your boss.

Your brain can differentiate between physical and symbolic dangers but your body cannot and so it reacts to both in the same manner eliciting the same defence mechanisms. The 'psychological', or emotional cost, is added to this type of misreading a danger as it is not usually easy to 'fight' your boss nor can you stand up and 'walk away' from your office unless you decide to engage in a 'brave farewell' and by walking away risk to lose your job.

The “fight or flight” response follows a specific path. When the brain (human or any animal’s brain) detects danger through one of our senses (seeing, hearing, smelling) it goes into alert and immediately the hypothalamus, a specific region in the base of the brain, through the pituitary gland, reacts by stimulating the body to produce “epinephrine” (known widely as adrenaline) and cortisol hormones. The function of these two hormones is to help the human being or animal to deal with the threats or pressures they are facing.

Adrenaline increases the heart rate, raises the blood pressure and provides needed extra energy. Cortisol, widely referred to as *the stress hormone*, also increases the body energy levels by triggering the release of glucose into the bloodstream while, simultaneously, other bodily functions which are not immediately needed, such as digestion, are suppressed.

Going into the ‘fight or flight’ response your eye pupils will dilate so that you can receive more light and scan a larger visual area, blood vessels near the skin will contract to reduce dangerous bleeding should you suffer a wound, and your skin will sweat to keep you cool as body temperature rises.

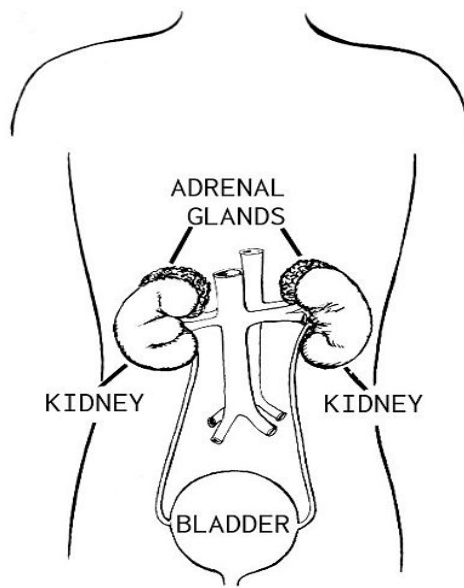
The body’s response to stress is self – regulating and as the epinephrine (adrenalin) hormone levels gradually diminish, nor-epinephrine is released into the blood stream helping the heart and blood pressure return to normal levels as do all other body functions which were slowed down and disengaged while engaging and dealing with the management of sudden heightened stress.

Sequence of the stress response pattern from state of Calmness to Alarm and return to Calmness:

- *A stressor triggers the hypothalamus – Command is given for mobilization of resources to the pituitary gland*
- *The pituitary gland secretes Adrenocorticotrophic Hormone (ACTH) –*
- *ACTH activates the adrenal glands to secrete cortisol and adrenaline directly into the blood stream*
- *Heart beats increase – breathing rate increases – blood pressure rises – muscles tense for action*
- *Eye pupils dilate so that the visual field is increased receiving a wider range of stimuli*
- *Skin blood vessel contract to avoid excessive bleeding if a wound occurs*
- *Non critical body functions go to slow motion – We engage in fight or flee the scene*
- *Nor-adrenaline is released – Heart beats decrease – Blood pressure falls – Muscles relax*
- *Digestion, bladder and bowel operations resume*

All body functions return to normal, calm, pre-stress, operational levels.

2.2 THE ROLE OF THE ADRENAL GLANDS



The adrenal glands are two triangular shaped organs located on top of each of our two kidneys. They are made up of two parts, namely the outer part which is known as the *cortex* and the inner part which is known as the *medulla*. Each part of the adrenal glands plays a different role in operating within our body and contributing to our wellbeing but they are both related to the “fight or flight” syndrome which we briefly discussed above.

Should the need arise for immediate reaction to clear and present danger the adrenal cortex (the outer part of the gland) produces cortisol to help our body respond to stress and aldosterone (which helps control blood pressure).

The adrenal medulla (the inner part of the gland) produces adrenaline which helps our body go into heightened stress levels and nor-adrenaline which helps restore calmness after the stress causing stimulus or event disappears or is handled efficiently.

3 CAUSES OF STRESS

In the daily life of our distant ancestors living in the primeval forest or in primitive villages in the grassland, surely there were stressors such as the need to find food, to secure shelter from adverse weather conditions, to overcome all sorts of dangers and successfully confront and deal with various other challenges.

You, I and all of us, though, can bring testimony to the fact that the modern, multicultural societies in which we are born, grow up and spend our lives while solving many of mankind's older problems have amassed a host of challenges that easily transform into stressors catching us very often off-guard. Losing a bus or a train when in a hurry, being late for an important job interview or for a romantic date, getting stuck in our cluttered highways are just a few day-to-day samples of stressors.

It is not an exaggeration to state that the causes of stress, (we already have referred to them as stressors), count almost in the myriads for some of us and in the dozens for some others. They can occur over a short period of time or they can be a chronic state of affairs. Indeed, many aspects of everyday life can cause stress coming from the external environment or coming from our inner self.

For young people external stressors are usually related to school, grades and performance demands and to interpersonal and romantic relationships with peers of the same or opposite sex. Stressors can also originate from the person's family in the form of possible friction with siblings and parents as well as from the behaviour of parents facing marital and/or financial problems.

For young adults and more mature persons external stressors are usually related to money and financial concerns, to difficulties encountered with work peers or supervisors. Within the family setting stressors emerge from possible friction with a partner or spouse and with child problems when the persons are parents.

For all of us the internal problems related to our personality and psychological make-up when they become acute can operate as stressors creating stress and necessitating proper handling and solutions. Some people get themselves into stress because their ambitions are too high and very difficult to materialize, some because they are incurable perfectionists, while some others may be eternal worriers unable to accept their given realities, adjust and be happy.

It is true that some stressors, be they negative or positive, may constitute an enormous challenge to all of us. In the vast array of negative stressors examples are the serious illness or even loss of a loved person or being laid off from your job; among the variety of positive stressors we encounter the preparations for an engagement party or for our first day in our new job.

There are other, minor stressors, however which are usually managed fairly easily by some of us but may present serious challenge to some others. To put in other words, what constitutes a critical issue is not only the severity of a stressor that matters but also the psychological make-up, the personality each one of us has and the behavioural patterns we have adopted in dealing with various stressors.

Persons who overly stressed, suffer lessened ability of managing responsibilities, which tends to pile on yet more pressure and intensify the stress condition.

4 DIFFERENT TYPES OF STRESS

It may appear somewhat repetitive and perhaps tiring to state that there are myriads of stressors leading each one of us into stress, hour after hour, day after day and week after week throughout our life time. All of these stressors are usually, in scientific essays and articles as well as in popular presentations, classified into four major types of stress.

The four main types include the familiar to all of us *basic* everyday stress which is referred to by some as *acute* stress; the less familiar *cumulative* stress known also as *episodic acute* stress, the very serious *critical incident* stress and the *post-traumatic stress disorder* (PTSD).

Basic, everyday stress also referred to as acute stress, encompasses all the stressors present in our daily life and ranging from minor problems in the family, to problems at the work place or in school and problems with our social network. Most psychologically well-adjusted individuals can and do manage to handle fairly well and without major consequences the various stressors. In the case of heightened stress well-adjusted individuals do go efficiently through the calmness-arousal-and return to calmness continuum described earlier above. Basic or acute stress may stem from and indeed relates to various difficulties we faced in our recent past or to challenges anticipated in our foreseeable future.

Cumulative stress which by some is referred to as episodic acute stress, is the type usually affecting individuals who are not very well adjusted, may be 'stuck' in a miserable emotional relation, dysfunctional marriage or in a 'leading to nowhere, non-motivating and not-promising' work or employment setting.

Surely there are plenty of so-called external factors placing burden and stressing some persons. There are also many individuals who are overburdened by stress as they have the personality types characterized by pessimism, lack of optimism, self-deprecating attitudes. Furthermore many others are overstressed as they have overambitious wishes, not supported by the necessary skills, dexterities and talents required to handle them efficiently and successfully.

In the cumulative or episodic acute stress type the variables of frequency, intensity and duration some into play and exacerbate the stress in which these psychological types of individuals find themselves. Cumulative or episodic acute stress is seen by some as the end result or piling-up basic manageable stress which is not properly dealt with and ends up going out of control.

For some writers in the field this type of stress is referred to as chronic stress and it involves persons trapped, because of personality structure or external social commitments and demands, in situations where the challenging and demeaning pressures of stress are continuous, overbearing and detrimental to their health necessitating medical intervention which, depending on the person and the physician, usually combines medication with psychological support therapy.

The critical incident stress relates to major, almost catastrophic events that engulf and imprison a person into unmanageable stress overtaxing physical and emotional reserves. The death of a loved person, engagement in a serious automobile accident involving loss of life or major injuries or the loss of a job through a redundancy program are some examples of such critical incident stress.

Finally the post-traumatic stress disorder (PTSD) is the type of stress emanating from extremely frightening or threatening experiences ranging from cases of severe child abuse, victimization to sexual assault and military combat experiences. Not all persons experiencing catastrophic events will develop PTSD; those who do may exhibit the symptoms at time periods long after they occurred.

PTSD as a term was used to describe the suffering of soldiers having participated in the Vietnam War. However, as a medical-psychological condition was not new to physicians and psychologists since it was known and had been described as ‘shell shock’ or ‘combat fatigue’ and post-traumatic stress syndrome starting with diagnosis and treatment of soldiers who had participated in WWI, referred to historically also as the “trenches War”.

PTSD was added to the 3rd edition of DSM (Diagnostic and Statistical Manual of Mental Disorders) of the American Psychiatric Association (APA) and its description and characteristics have been revised several times in the efforts to update the scientific definition of the problem.

5 SYMPTOMS – EFFECTS OF STRESS

I was often time surprised to find out from participants in my courses in understanding, controlling and managing stress that many of them (and surely many of you in everyday affairs) are excellent diagnosticians for the problems others face, for example relatives at home, fellow employees at work or class mates at their school environment. To put it differently it appears that we can see the effects of stress in others but we are not so skilful in diagnosing ourselves as being victims of stress.

Be it as it may, let us now take a brief look at the range of symptoms we may experience as we are experiencing stress or we are diagnosing it in relatives, friends and associates.

There are four major categories of effects (symptoms) related to uncontrolled stress:

- *Physical-organic changes*
- *Emotional changes*
- *Behavioural changes*, and,
- *Cognitive changes*



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5.1 PHYSICAL-ORGANIC CHANGES

In order to better understand the physical-organic changes resulting from excessive stress, which the suffering individual experiences as effects or symptoms, I would ask you to recall our previous brief discussion of the relationship of the hypothalamus, the pituitary and the adrenal glands to stress. The stress response involves the secretion of hormones directly into our blood stream as part of the ‘fight-flight response’ which provide extra resources of energy to our aroused body.

The circulation of adrenaline will cause tachycardia (increased heart beats), while the increased rate of breathing may result in making us feel dizzy and physically unstable and additionally we may experience sweating. These physical-organic symptoms aim to enhance our fighting ability, if engagement in fight with the threatening sensor is unavoidable, or our fleeing speed should our judgement dictate avoidance of engagement and running away toward ‘salvation’.

5.2 EMOTIONAL CHANGES

The emotional changes while we are experiencing the stress mode include an increased sense of irritability, significantly increased sense of overload and inexplicable sadness, exhibition of some rather inappropriate states of shock and, finally, a gradual sense of sinking into a state of depression.

5.3 BEHAVIOURAL CHANGES

The behavioural changes we experience when our stress levels escape our ability to control them encompass alterations in our usual social manners, in our personal hygiene and in our eating habits. Typical and easily observable changes in our behavioural patterns which we may easily observe in our relatives, friends, schoolmates and fellow employees and, when we are the victims they can observe in our behaviour include a tendency to long periods of silence and an unusual but easily noticeable avoidance of participation in group activities.

5.4 COGNITIVE CHANGES

When we lose control of our stress levels and we enter the overstressed region others can see in us or, vice versa, should that happen to others we can notice some serious cognitive changes in them. Excessive and uncontrollable stress will result in lowered concentration levels, sudden memory dysfunctions and a tendency to procrastination coupled with obvious inability to decision making.

5.5 THE ‘BURN-OUT’ SYNDROME

The current section in our discussion will come to conclusion with a reference to the ‘*burn-out*’ syndrome originally introduced in the 1970s by psychiatrist Herbert Freudenberger. The American psychiatrist used it to describe the state of physical, emotional and mental exhaustion of ‘helping professions’ members (psychiatrist, psychologists, nurses, social workers and counsellors). The New York psychiatrist formulated the thesis that as a result of continuous, uncontrolled high levels of stress combined with high ideals and earnest dedication to their calling this type of professionals may end-up losing all motivation for their work and could ultimately, if they did not receive timely and proper help, sink into depression.

Although Freudenberger originally focused on members of the helping professions, today the term is widely used to describe a multiple of similar cases of people who are not only in the helping professions but in many other types of private and public employment. Currently beyond the traditional areas and journals where scientific research findings are presented, almost routinely we encounter many journalistic references to the ‘burn-out-syndrome’ in the audio-visual and printed mass media.

6 A BRIEF VIEW OF ANXIETY

Stress and anxiety are not two entirely different conditions and, vice versa, they are not identical conditions either. It should be clear by now from our previous discussion that stress is our body/mind reaction to situations that are threatening and require mobilization and response.

We can be stressed not only when obvious and real threat stressors (perceived as dangers) are present but sometimes as we ‘perceive’ of threats which are not part of the so-called *objective reality* but emanate from inner thoughts and subconscious feelings, threats and challenges; the same holds true for anxiety.

Anxiety is part and parcel of the human condition and relates to situations or challenges which are not clear and present but are perceived as threatening, uncontrollable or unavoidable. Some relevant research findings show that anxiety resembles long term, chronic stress while chronic stress appears to be a component of the anxiety disorder. However it is not necessary for people who face stress problems to manifest anxiety disorders as well.

Anxiety is defined as a pervasive feeling of unease, worry or fear which ranges from a mild level to more acute levels of severity. Everyone has some feelings of anxiety relating to challenging situations such as facing a job interview if you are seeking employment, or preparing for an examination if you are a high school, college or university student. These are normal phenomena for the average person but things become problematic for those who are continuously worried and suffer from anxiety.

Sigmund Freud, the father of psychoanalysis, in his early theoretical formulations and writings had considered anxiety as the cornerstone of neurosis and defined it as a warning that some form or type of danger is present and overwhelming feelings would ensue culminating in what could turn out to be unmanageable helplessness. In his later writings Freud continued to hold the view that anxiety performed the crucial function of preserving us from physical or psychological dangers and distinguished two types of anxiety:

The ‘*automatic*’ or ‘*objective*’ anxiety which is more primitive and primary and relates to feelings of fear emanating from some real and present threat of potential severe trauma and perhaps total annihilation of the self.

The ‘*signal*’ or ‘*neurotic*’ anxiety which is not related to real and present danger but more to some imaginary signal/warning that a threatening experience which could prove catastrophic might be coming and the individual should react by immediate mobilization of resources for protection.

Modern views of anxiety which are useful in the present context of our discussion encompass a widely accepted typology which is made up and includes the following types:

The generalized anxiety disorder, obsessive-compulsive disorder, panic disorder (anxiety attacks), post-traumatic stress disorder, and social anxiety disorder (social phobias).

Generalized Anxiety Disorder (GAD) is a specific type of problematic anxiety levels that causes some persons to be anxious about a wide range of events, situations or conditions to be met. Persons suffering from GAD are the ones popularly referred to as ‘*chronic worriers*’. Unresolved stress has a magnifying impact on the anxiety levels experienced by persons with GAD.

In the obsessive-compulsive disorder (OCD) the persons are obsessed with thoughts and behaviours which they cannot control, avoid or stop. Often time the obsessive-compulsive sufferers will admit that their thoughts border on silliness but they cannot avoid returning to make sure they have locked their car’s or apartment doors, or turned off the oven, or even washing their hands again and again.

The panic disorder or anxiety attack involves experiencing panic which propels the individual to avoid open places or run away from crowded places (this is known as agoraphobia – from the Greek word ‘αγορά’ meaning market place) and avoid closed places (known as claustrophobia – from the Greek word ‘κλειστό’ meaning fear of closed spaces) such as cinema or theatre halls, airplanes or buses. Persons suffering from anxiety/panic attacks end up confined to their house and, I have had experience with some persons, ending up confined to their own bedrooms avoiding the other rooms and spaces in their own apartment or house.

The Post – traumatic stress disorder (PTSD) has been briefly presented above. This type of anxiety disorder may occur weeks, months and in some cases even years after the individual has had a severely traumatic, life-threatening experience and its symptoms include nightmares, intense irritability and fears, avoidance of social contacts and isolation.

Social anxiety disorder involves symptoms of social phobia ranging from extreme shyness and the avoidance of public places as the individual is afraid of rejection to the so-called ‘stage fright’ which involves avoidance of public performance such as standing in front of your class mates or having to address an audience.

7 A GLIMPSE INTO TYPE 'A' PERSONALITY

The references to people who have the so-called type 'A' (and to those who have type 'B') personality have been steadily decreasing in scientific journals and textbooks as the relevant theory has been put into question. The type 'A' references continue, however, to appear in vast numbers in various audio-visual and printed popular mass media of communication. Since it is closely related to our current discussion on stress and anxiety the type 'A' concept will be presented briefly below.

Type 'A' personality describes over ambitious, hard driven individuals sitting, so to say, at the edge of their professional, academic or corporate 'chair' ready to jump up and grab the next chance to career advancement.

My reference to a 'chair' is not symbolic or metaphorical but relates to the research published several decades ago by two cardiologists who anecdotally observed that some patients did not sit, as the rest of us do, on a chair and rest their arms on the armrests but wore out their chairs and armrests at the front edges. They were, in other words, literally sitting at the chair edge ready to jump off if needed.

The concept was not created and introduced by psychologists, psychiatrists or sociologists but by two cardiologists, namely Meyer Friedman and RH Rosenman who in the 1950s were researching the underlying causes of propensity to coronary disease. Examining several thousand healthy male adults aged 35 to 59 the two researches came through with a serendipity type discovery establishing a relationship between what they termed type 'A' personality individuals and heart diseases.

The type 'A' personality individuals are so high strung, overstressed and impatient to succeed that they become victims of their overambitious nature and have a higher risk to suffer coronary problems. In contrast type 'B' individuals seem to have a more calm nature, exercise effective control over their stress and bridle their ambitions.

Nowadays the tendency in scientific journal writing is to avoid references to type 'A' personality and to treat the phenomenon as Type 'A' behaviour pattern. Popular magazines, however, still use the original description as coined by Friedman and Rosenman.

8 STRESS REDUCTION STRATEGY AND TECHNIQUES

Strategy is defined as ‘a plan of action designed to achieve a long-term or overall aim’ and its etymological origin is from the Greek language (the Greek word is ‘στρατηγική’). Although the term originally concerned military actions it has eventually permeated most areas of human action in individual, group or institutional levels. Governments set out their strategies and so do educational institutions and corporations.

In this section strategy will be dealt with as a broad attempt for you to alter the way you have been living your life and help you draw a new plan of actions and behaviours.

I will remind those of you who may already be familiar with it and bring to the attention of those who are not the proverbial statement made by Socrates that ‘*an unexamined life is not worth living*’. The attempt to come to know ourselves, our potential and limitations, our strengths and weaknesses, has been a psychosocial practise ever since our forefathers sat down quietly and introspectively examined their inner world delving into a different sort of consciousness. The ancient Greek aphorism ‘know thyself’ (γνώθι σε αὐτόν – or – γνώθι σ’αυτόν) was one of the known Delphic maxims inscribed at the forecourt of the Temple of Apollo in Delphi (seat of the famed ancient Greek oracle).

After thanking you for reading this book, I would kindly ask you to recall the last time you sat down in a quiet place, relaxed and free from everyday burdens and, after taken some deep breaths, you introspectively tried to examine your life in its current status. If you have not done this but my question might prompt you to do so, your introspective mental journey might be aided by posing the following fundamental questions:

***Am I pleased with the way my emotions operate leading me to high levels of stress and anxiety?
Are the problems and challenges confronting me insurmountable or am I handling them wrongly?
Are my attitudes in life, toward loved ones and friends and toward my work the right ones?
Can I change what are for me challenges and problems or should I change the way I handle them?***

For those of us who live and work in the industrialized parts of the World (given the reality that for large numbers of people the place of birth is not the place where they currently live and work) the daily realities of demanding work schedules, living by-the-clock, getting involved in the rush hours to and from work and lack of time to devote to personal needs, friends and family and to reflect on life and its meaning have been sometimes described as ‘the rat-race’.

Matters are supposed to be somewhat different for those living and working in other less industrialized, economically developing parts of the world. However, when it comes to measuring stress and anxiety people experience in different parts of the world, or in different sub-cultures within the same society, surely one can discern differing levels but not a total absence in everyday experiential realities.

Far eastern cultures have used the techniques of meditation not only in the Socratic and Delphic sense of examining our life and coming to know ourselves, but in managing to gain insights and to balance internal states with external demands.

Throughout the centuries and millennia Meditation has taken a variety of forms as practiced in Hinduism and Buddhism and so has yoga which combines physical, mental and spiritual practice.

Before we proceed to examine stress reduction techniques we will harbour a bit longer on the questions listed above and in addition I will bring to your attention a paragraph from Aristotle’s book ‘Nichomachean Ethics’ in which the great philosopher and teacher discusses the feeling of anger; I happen to be one of those who believe that Aristotle’s view served as the nucleus, the live seed if you would prefer, which blossomed conceptually into the theory of ‘Emotional Intelligence’.

“Everybody can feel anger – that is easy, but to be angry at the ‘right’ person, to the ‘right’ extent, at the ‘right’ moment, for the ‘right’ reason and in the ‘right’ way, it is not in everyone’s power and it is not easy.”

8.1 IMPLEMENTING CHANGE

Changing your life strategy in dealing with stress and anxiety is surely and undeniably not an easy task. It requires fundamental changes in your attitudes toward people, events and situations. Attitudes are formed from childhood on to adulthood and they are functionally interwoven in the structures of our personality and so resistance to change them is not only a very difficult task but for some persons it could perhaps be a threatening experience.

Changing our individual life strategy is indeed a major call and will demand examining each and every aspect of our socio-psychological being in the process of replacing the dysfunctional attitudes and behaviours with more functional ones. To put it in simple terms, or in other words, changing our life strategy will demand time, psychological resources, social support from family and friends and financial means which most of us do not possess.

However, it should by now be clear that if stress is not effectively dealt with, if you do not currently poses and are not willingly and conscientiously striving toward acquiring all skills, dexterities and knowledge needed to control your stress then its effects will be evident in all aspects of your life. You will be experiencing difficulties in your interpersonal relationships in the family or at work; you will be more prone to have a minor, fender-bender car accident and will not enjoy driving your car for entertainment; you will encounter difficulties in trying to conclude school or work related assignments and duties efficiently and in time.

In other words uncontrolled stress and anxiety will tend to place your daily life in serious jeopardy. So stress control and reduction of anxiety levels is needed if you desire to improve the quality of your everyday life and of your relationships.

So progressing in our discussion and leaving the issue of strategic change of your total life style aside we will now deal with more manageable tasks such as examining the techniques through which you will be able to control your stress and lower your anxiety levels.

8.2 USE OF ALCOHOL, CANNABIS AND PRESCRIBED DRUGS

Surely the easy thing to do when faced with intense uncontrollable stress and debilitating anxiety levels is to extent you hand and arm, and grab that glass in which you or the barman at the pub you frequent poured alcohol in the familiar form of wine, beer or whiskey. In most western and eastern societies and cultures (but not among Muslims) alcohol is a legalized ‘social pacifier’ which does have a ‘calming effect’ on our nervous system lessening tensions and stress when consumed sensibly but it does turn into a potent addiction substance when used too often and in large quantities.

The Japanese have a very useful proverb which states ‘*as a start I take a drink, then the drink takes a drink and finally the drink takes me...*’

You could, alternatively, choose to use another type of ‘social pacifier’ by accepting and smoking that rolled marijuana joint, the weed or grass cigarette the host or one of your friends at the party you are attending is so politely and generously offering you.

Finally, if alcohol and cannabis ‘do not do the trick’ for you, then you could pull out of your bathroom-house pharmacy a couple of these ‘miracle pills’, namely medications your physician has prescribed which affect your nervous system and aim specifically to control your stress and anxiety levels and to lessen their detrimental effects on your emotional, social and professional well-being.

After all, stress and anxiety reduction is the very reason that pharmaceutical companies with global marketing facilities engage in extensive and costly research, and after successful testing in animals and humans, sell through pharmacies their ‘pacifying’ products.

The problem with prescription medication for stress and anxiety control is that some people, unable to lessen their stress/anxiety levels with the specified dosage levels will resort to the dangerous practice of using pills in combination with alcohol or cannabis.

Is alcohol, marijuana smoking or legally prescribed pills the solution?

Personally I will respond with a resounding NO to the use of alcohol and cannabis (also known as marijuana, weed, grass, joint, pot, Maryjane, locoweed etc.) to control your stress and lower your anxiety levels.

As far as prescription drugs are concerned, my advice would be to use them only when your physician has determined that you will not be able to perform your daily duties without them. In such cases your physician will keep in touch with you making sure that the medications are used only within a specific time span and at the specified dosages and, sometimes, in conjunction with supportive psychotherapy.

The web is full of advertisements offering drugs without prescriptions but I would strongly advise you against it.

My categorical answer in the form of the two letter word NO might surprise you. Please bear in mind that it comes to me naturally after having amassed substantial experiences and first-hand knowledge working for several decades with drug dependent persons of both sexes, all ages and ethnic backgrounds, religious affiliations, educational and socio-economic status.

Half a century of experience working with persons attending various rehabilitation programs including 24-hour live-in drug free therapeutic communities, or as clients in my private practice at both sides of the Atlantic Ocean I have enough good reasons to be so negative on alcohol, drugs and prolonged use of pills.

Indeed if the use of alcohol and illegal or legally prescribed drugs were the ‘solution’ in attempting to control your stress and ease your anxiety it would be senseless for me to write this book, and even more so for you to spend time reading it.

My personal aim is to offer you a good understanding of the causes, the mechanisms involved and the nature and types of stress (and anxiety) and to provide you with some down to earth, simple and yet effective drug-free ‘solutions’.

As you can imagine I will not dwell any longer on the subject of alcohol and illegal drugs but I feel obliged to briefly expand on the issue of medication prescription as it is something that involves large numbers of persons plagued by uncontrollable stress and anxiety levels.

The psychiatric intervention in aiding overstressed patients and disabled by anxiety persons usually involves the prescription of benzodiazepines (for example Librium, Valium, Xanax, clonazepam), Buspirone, antidepressants and so called ‘beta-blocker’ drugs which may have excellent results with persons plagued by specific type of anxiety such as agoraphobia and ‘stage fright’ namely the fear of addressing live, large audiences.

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One of the main problems associated with these and similar drugs is that the persons may become dependent on them as they control the symptoms but do not help the sufferer learn more about stress or anxiety as is the case with other, drug-free methods in effectively dealing with them. The reality remains, however, that people are in a hurry, time may not translate always and for everybody into 'money', but in seeking 'quick relief and quick solutions' prescribed medications are preferred by many who are seeking immediate, symptom liberating help.

8.3 PSYCHOTHERAPEUTIC INTERVENTION

Prescribing drugs which can help you control your stress and anxiety levels falls in the domain of medical doctors, who could be general pathologists or specialists in psychiatry. It is not a rare occurrence but a frequently encountered reality that some psychiatrists are properly trained and may in addition to prescribing drugs provide to their clients psychoanalytic or some other type of psychotherapeutic services.

Psychologists, and specialized and properly trained and licensed social workers and counsellors come into the picture when psychotherapeutic treatment is needed for serious stress and anxiety problems. Psychotherapists are trained and specialize in a variety of psychotherapeutic orientations and forms but as experience has shown for those seeking specialized help the most effective type of therapy for stress/anxiety problems seems to be the 'Cognitive Behavioural Therapy' (CBT).

CBT belongs to the general area of Behaviour Modification therapies and so while undergoing CBT the individual is made aware of irrational or maladaptive thoughts that underlie severe, uncontrollable stress and anxiety and progressively helped to replace them with logical and functional patterns of thought.

The individual is, furthermore, guided in learning breathing techniques and muscle relaxation techniques. In some cases the psychotherapist, psychologist, social worker or counsellor, while providing psychotherapeutic treatment may cooperate with the physicians-psychiatrists who may have already prescribed medication to their clients.

The reality, as a plain, down-to-earth fact that cannot be easily overlooked, is that psychotherapy involves financial costs and it may require relatively substantial time commitment unless it falls in the category of 'short-term' treatment. Considering these facts psychotherapy may not be the choice for people who do not possess the needed financial resources or the patience and time required for this type of treatment.

8.4 MEDITATION AND TRANSCENDENTAL MEDITATION 'T.M.'

Classic approaches mostly associated with the far eastern cultures aiming to improve conscious control of body functions included various types of meditation and yoga, but were not exhausted by them. Meditation requires the presence of a teacher and participation in special classes and so do the various types of yoga, containing mental and physical elements, which necessitate the presence of a trained teacher-instructor and the willingness to attend the required classes at specific days and hours.

The various forms and types of meditation originating in the far Eastern cultures which are considered (to some extent erroneously) to be free from the pressures, time demands and stress ridden daily schedules of the industrialized world were a challenge to many westerners. Additionally there was a mystique attached to meditation alienating those who felt no affinity to Eastern philosophies.

Less challenging, but not as popular, was the ancient Greek technique of hypnosis (going into a trance which simulates sleep but the person is not in sleep) which requires a trained hypnotist but can ultimately be practiced by the individual without the need of an instructor being present.

Back in the 1960s and '70s, while I was a university student and later a university lecturer in the USA, I recall the immense publicity the late Maharishi Mahesh Yogi was receiving in introducing the American public to the 'TM' (Transcendental Meditation) philosophy and technique which traced its origin in the ancient Vedic Hindu tradition of India.

Maharishi Mahesh Yogi, after practicing and teaching his 'TM' techniques to audiences in his native land of India, embarked upon a series of World tours in teaching and practicing 'TM' and, as it turned out, the American public was the most important receptor of his novel message.

The 'TM' technique is taught by properly credentialed instructors at a relatively substantial cost and it involves a 15–20 minute twice a day practice in which the individual with eyes closed, sits somewhere comfortably breathing slowly and repeating the 'mantra' which provided by the 'TM' instructor. The practice is supposed to help the individual control stress levels, acquire an optimistic view of life and to function more smoothly being able to handle successfully the small and big daily challenges at work or in school, in family settings or in the social networks. Further benefits of 'TM', according to its late creator and the instructors-teachers trained at the 'TM' institutions, relate to heart health and general physical and emotional well-being.

8.5 RELAXATION TECHNIQUES

At this point I will kindly ask you to recall the ‘fight or flight’ response involving body arousal through the secretion of hormones directly into our blood stream as it flows in our cardiovascular system. Arousal, as you can recall, is desirable in order to confront an imminent danger or run away and escape from it. Subsequently, once the episode has been dealt with, other hormones will be secreted restoring our body and mental conditions to calmness.

Muscle tension with rigidity is usually one of the bodily effects of intense stress and anxiety. It does make sense then to learn to use and apply one of the so called ‘muscle relaxation techniques’ in implementing a consciously controlled program aiming to reduce stress and anxiety without the use of medication. Muscle relaxation is something that you can learn to do by yourself and the presence of an instructor may be useful but not always necessary.

It was the work and publications of Harvard medical school cardiologist Dr. Herbert Benson who introduced what he termed ‘The Relaxation Response’ which helped demystify oriental meditation techniques and made things more amiable and adaptable to westerners and the western way of life.

Attempting to put matters in simple terms we could see meditation as a variety of techniques which involve focusing in our breath tempo, creating a visual imagery, or repeating a specific ‘tailor made for each one of us’ word or phrase known as a ‘mantra’.

Meditation in its different forms and types and Benson’s relaxation response are closely related to providing us with the ability to minimize, and ultimately control the debilitating effects of the ‘fight or flight’ produced arousal, muscle tension, raised blood pressure and increased heart beat rate.

8.6 PROGRESSIVE MUSCLE RELAXATION TECHNIQUE

The progressive muscle relaxation technique appears to be one of the most popular in this group. If you will not be upset by complying with my kind request I will now ask you to stop your reading for only a few minutes and follow these simple directions in progressively tensing and relaxing your body muscles.

You can start the process from the neck and carry it through to your feet or, if so pleases you, take the opposite route:

Stress and clench the muscles of your left leg from your thigh all the way down to your ankle and foot for a few seconds while simultaneously taking slowly a deep breath. Exhale deeply and slowly, relax all muscles of your leg all the way down to your left foot and keep calm for half a minute.

Repeat the same sequence with your right leg tensing for a few seconds and relaxing for half a minute.

Go to your belly, clench and tense your abdomen muscles for a few seconds while taking slowly a deep breath, then exhale deeply and slowly and relax for about half a minute.

Repeat the tense-inhale, relax-exhale sequence with the upper torso-chest area.

Now do the extending, clenching and tensing of the muscles from your left shoulder all the way to your left hand fingers while you inhale deeply. Follow the muscle relaxing deeply exhaling sequence with your left hand through your arm stretching all the way to your left shoulder.

Repeat the tense-inhale, relax-exhale sequence with your right hand, arm and shoulder.

Conclude by clenching and tensing both of the upper shoulder muscles all the way to your neck while inhaling deeply and slowly, then relax all muscles while you slowly exhale deeply and stay relaxed for about half a minute.

Stay relaxed, breathing calmly and feel your whole body wrapped-up with a pacifying and desired feeling of calmness. Some instructors of progressive muscle relaxation techniques suggest that once you master well the procedures involved, keeping your eyes closed as you are in a relaxing state you can add some pleasant mental visual imagery and transfer yourself in these imaginary icons so as to succeed in forgetting the present state you are in as you are being absorbed into the visualization.

It is important to note that as the sequence involves our body, controlled inhaling and exhaling it is a matter of skill and, surely, this skill will be improved with practice and so will the corollary states of a gratifying sense of both emotional and physical well-being. As the adage suggests that ‘*practice makes perfect*’ I will recommend that you practice the above routines a couple of times a day and you will be able to see actual results in no more than a few weeks. Closing I would also suggest that if conditions permit it practicing the tensing-relaxing sequence at your office should prove beneficial.

8.7 AUTOGENIC TRAINING

Etymologically the word ‘autogenic’ comes from the Greek word ‘αυτογενής’ and it means ‘self-generated’. The concept of AT (autogenic training) was introduced in the early 1930s by German psychiatrist Johannes Schultz and made popular in North America by his young collaborator the German psychiatrist Wolfgang Luthe who migrated to Canada practiced psychiatry and psychotherapy and taught at Montreal and McGill Universities. He co-authored with Schultz a multi volume work on ‘autogenic training’ as an aid to controlling and reducing stress.

Autogenic training, as does Benson’s relaxation response and the progressive muscle relaxation technique, requires that you find a silent place, sit or lie comfortably on a bench or on the floor and with eyes closed engage in giving a series of commands to your body. Schultz and Luthe have suggested that you follow progressively a command-scenario which includes the states of heaviness, warmth, calm breathing, calm heart beating and complete relaxation as follows:

Sit or lay down in a comfortable position, sense the quietness, feel calm, be in touch with yourself.

You keep your eyes closed and without verbalizing you say:

my left arm from shoulder to my hand feels heavy,

my right arm from shoulder to hand feels heavy,

my left leg from my thigh to my foot feels heavy,

my right leg from my thigh to my foot feels heavy, then

my abdomen feels heavy, and finally

my neck and head feel heavy.

The sequence is repeated as shown above but you substitute the word heavy with the word warm.

You progress saying:

my breathing is calm and regular,

I feel my heart beating calm and regular,

my forehead feels cool, and you conclude saying:

my body feels comfortable and deeply relaxed.

The process should last about 15 to 20 minutes and most people do it twice a day one in the morning and one in the afternoon and start seeing pleasant results after a few weeks.

8.8 BIOFEEDBACK TRAINING

Biofeedback is the process of making the individual aware of internal organ functions through the use of specialized equipment. You have used biofeedback equipment and gained appropriate experience every time you stepped on a weighting scale and saw your weight in kilograms and every time you used a thermometer to assess your fever level.

Biofeedback combines neurophysiological, psychological and electronic knowledge and principles in collecting data from internal organ functions of our bodies. Biofeedback training goes one step beyond the process of measuring muscle tension, heart beat rates and blood pressure levels adding the methodical conscious effort to try to control these autonomous functions by the use of some specialized relaxation techniques.

Biofeedback equipment has been in use by physicians, physiologists and psychologists since the early 20th century and today there exist some very impressive electronic instruments in collecting internal organ information.

Biofeedback gained wide publicity in the 1960s when some simple and easy to use gadgets became available to the average non-specialist consumer helping the individual to assess levels of stress and anxiety and experience them as auditory or visual stimuli.

The idea behind the gadget use is to help the users receive information on the state of their bodies and internal organs and train them to exercise some control over functions once considered impossible as they are autonomous, meaning that they are not subjected to conscious control.

Initially, as biofeedback gadgets came into the market as consumer goods not requiring a medical prescription or a license to use and operate, biofeedback proponents had embarked upon a rather grandiose scale and made promises which as the time passed did not materialize. There still exists, however, nowadays a wide range of areas where biofeedback can and is being used and when properly applied in conjunction with other relaxation techniques it has proven to be beneficial to many people helping them control and successfully lower heightened stress and anxiety levels.

Biofeedback equipment from the early stages of pioneer work from physicians, physiologists and psychologists to nowadays monitor a wide range of functions of our internal organs and our bodies. Most laymen users, however, concentrate on monitoring stress and anxiety levels using specific type of devices which in their simplest type are small gadgets with two electrode poles that can be attached to two fingers of our left or right hand.

Based on the ‘Galvanic Skin Response’ principle (GSR) most biofeedback gadgets will provide you with an auditory (sometimes visual) indication and assessment of your muscle tension as it relates to your state of stress (or level of anxiety). Initial use of the equipment may require a trained instructor to guide the user through the basic steps but numerous models are available on the internet and can be purchased on line and they come with explicit ‘do it yourself’ instructions.

Regular use of some type of biofeedback equipment with simultaneous use of the autogenic training technique, the muscle relaxation technique or Benson’s progressive relaxation technique you can learn to reach a desired state of calmness significantly reducing your stress and your anxiety levels.

To satisfy even the most minimal curiosity this section may have aroused in you my suggestion would be to google the words ‘biofeedback equipment’ on your laptop, I pad, table or table pc This technique involves the expenses of buying the appropriate equipment and having initially a psychologist, or properly trained social worker or counsellor to teach you the necessary procedures.

Proceeding with the purchase of biofeedback equipment and using for a couple of times the advice of trained instructors even if biofeedback training does not liberate you totally from excessive stress and anxiety it will not cost, as the proverbial phrase goes ‘an arm and a leg’.

After all is said and done using biofeedback training will prove to be far less detrimental to your financial, physical and psychological health compared to using traditional legal and illegal treatment remedies such as alcohol and cannabis.

8.9 HOLISTIC WELLNESS APPROACH

‘Holistic wellness’ constitutes a new approach aiming to go well beyond the techniques we discussed above and beyond the focused concern with controlling stress and lowering anxiety levels. Holistic ‘ολιστική’ is a Greek word meaning ‘total, or whole or complete’ and the ‘holistic approach’ shuns away what it considers as the treatment of symptoms, stress or anxiety, suggesting that we should deal with the whole person encompassing physical, mental, social and psychological parameters.

The holistic wellness approach does not involve the use of expensive equipment, or attending regular sessions under the supervision of trained instructors to show us procedures and lead us through processes. However, this approach is not simple or easy to accept and adapt in our daily routine as it demands radical changes in the way we live, in the way we have set and structured our goals. Holistic wellness begins with systematic efforts to change attitudes which produce negative symptoms. And all things being equal, as you have discussed earlier, attitude change is not an easy task.

The holistic wellness program includes changes in our eating habits as well as our meal hours, in our food intake which should avoid sugar and fats, excessive consumption of alcohol and smoking and prefer foods which are high in fibre, vitamins and nutrients. In addition it requires the adoption of a program of regular physical exercise aimed to increase our physical, muscular and cardiovascular wellness. Furthermore it foresees the incorporation, on a daily basis, of some program of muscular relaxation or autogenic training which should lower stress and anxiety levels and avoidance of environmental or mental and emotional stressors.

In other words, the holistic wellness program requires drastic changes in our daily practices and adapted behavioural attitudes which require strong will and high levels of stamina and perseverance promising in return substantially improved quality of life, physical health and psychosocial fulfilment.

PART TWO – MANAGE YOUR TIME

1 BEFORE WE DISCUSS...TIME

I do hope that you will forgive my unorthodox preamble to the second part of this book which will deal with the concept of time. I will take you back towards the end of October, 1957 (some of you were not even born at that time) when the Greeks heard the news from the National Greek Radio news service that Nikos Kazantzakis, famed Cretan-Greek author-novelist-philosopher, had passed away on Saturday October 26, in a Freiburg, West German clinic.

At the time of his death Nikos Kazantzakis was 74 years old.

At that time TV was not available in Greece and all news were made public in printed newspapers and magazines and over the Greek National Radio Service. In 1957 my classmates and I were teenagers and we had already read some of his works so our discussions centred on the sad news and on the Cretan Greek's age of 74 years. The number seemed far too distant for me and my classmates as 15 year old teenagers.

You can legitimately ask how does this relate to a discussion on time and I will respond immediately.



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It is not because of ethnocentric bias or a desire to pay tribute to Nikos Kazantzakis that I mention the year of his death and his age. I was prompted to dedicate this unorthodox preamble relating to time and age to him as I recall reading in the introduction to his last book (his “swan song”) bearing the title *Report to Greco*, which was published for the first time in 1961.

In the introductory note to the book, written by his second wife and partner for many decades Helen Kazantzakis, she starts by noting that his health was frail and worsening in 1957 as he was finishing the *Report to Greco*. She prayed for Nikos to be granted by God 10 more years of life, Helen wrote, in order to conclude this, somewhat autobiographical book, and 3 more projects he had in mind. She wrote that she felt like going out to the streets and asking passers-by to donate some of their extra time to Nikos so that he could conclude his creative work.

The *Report to Greco* carried the symbolism of a soldier, the Cretan-Greek Kazantzakis, reporting to his sergeant the Cretan-Greek artist-painter-sculptor and architect Domenikos Theotokopoulos who lived, created and died in Spain known by his nickname ‘El Greco’ noting his Greek origin and his Spanish citizenship.

It is in that same introductory note Helen Kazantzakis quotes Nikos Kazantzakis saying ‘*I feel the need, like Berenson, to go out to the street corner and beg every passer-by for just a quarter of their time so I can conclude my work*’.

The reference was to Bernard Berenson, the American Art Historian who was born in Lithuania, as Bernhard Valvrojenski, studied at Harvard and established himself as one of the most noted Renaissance Art connoisseurs, before he died in Florence on October 6, 1959 aged 94. Berenson was the first to make reference to begging passer-by’s for a donation of some of their time so that he could conclude his life work.

I do beg your forgiveness for this unorthodox preamble, and I do hope that its relevance to the concept of time is obvious. We all waste some of our time and, to some extent, we are all guilty of doing so while some of us would be able to do significant things if they have had more time at their disposal before passing away.

When one has significant goals and objectives that require time to be reached the lack of the needed time becomes an excruciating painful punishment.

1.1 SOME CLASSIC 'TIME' RELATED QUOTES

Continuing this unorthodox introduction to time I will invite you to follow me in sharing a real experience familiar to most of us when we do not have a cup or a glass with which to carry water. In such a case we usually cup our palms and fingers and try to hold some water in them. I don't have to say, as I assume you already have experienced it, that sooner or later the water will slip through our cupped fingers and palms and will be lost.

James Joyce's remark in the *Ulysses* is most appropriate in this instant, *'can't bring back time. Like holding water in your hand.'*

Carry the analogy over to the handling of time and you will end up agreeing with Benjamin Franklin that *'lost time is never found again'* and, as he wrote in the Advice to a young tradesman, *'remember that time is money.'*

Franklin's advice bears significant resemblance to the laconic statement of Chilon (Χίλων or Χείλων) of Sparta, one of the 7 sages of ancient Greece, who lived in the 6th century B.C. and suggested *'χρόνου φεόδου'* meaning *'time should be used sparingly, with prudence.'* Chilon's advice was widely accepted not only by Spartans but throughout ancient Greece.

More recently, just a few decades ago, Alan Lakein in his best-selling book 'How to control your time' which was initially published in 1973 and with many subsequent editions has sold over 3 million copies, wrote that *'Time=Life, therefore waste your time and waste your life, or master your time and master your life.'*

In his 'Fellowship of the Ring' J.R.R. Tolkien has suggested that *'All we have to decide is what to do with the time that is given us.'* And surely, I would add, remembering that unlike money or other commodities *'time cannot be saved and made available for later use'*, not forgetting or overlooking Edward Young's advice in 'Night Thought' that *'Procrastination is the thief of time.'*

'Be happy for this moment. This moment is your life' suggested the Persian mathematician-astronomer, philosopher, poet Omar Khayyam and he treated past, present and future as the three dimensions of time in a poetic manner in his Rubaiyat, verse XXII

*Ah, my Beloved, fill the Cup that clears/ To-day of past Regrets and future Fears –
To-morrow? – Why, To-morrow I may be/ Myself with Yesterday's Sev'n Thousand Years.*

1.2 MECHANICAL OR 'PUBLIC' TIME

For primitive men the separation of time was related to sunlight and darkness, to day and night. Ancient Egyptian and later on Greek and Roman astronomers studying the movement of the Sun introduced more precise measurement units. Time measuring devices were also developed in ancient China and India.

A device measuring time periods with specialized instruments is the 'clepsydra' in which either sand or water flow from the upper section through a tiny passage to the lower section of the instrument. the word 'clepsydra' originates from two Greek words, namely from the verb 'to steal' (κλέπτει) and the noun 'water' (ὕδωρ).

In most printed books and verbal presentations, almost as a rule, you will find the standard sub-divisions of time into the units familiar to all of us from grammar school. Authors and speakers make reference to a typical seven day week made up of 168 hours, to a day made up of 24 hours, to an hour made up of sixty minutes, to a minute made up of sixty seconds. In the same line of presentation the year has 365 days and each month (except the month of February) has either 30 or 31 days.

Authors and speakers usually emphasize that the above time units are available in the precisely same amounts to all students, school teachers, or university lecturers and professors. If you happen to be a working man or woman the same analogy holds true for you and your shop manager, for the owner of the company that employs you or the CEO of the corporation in which your branch is a unit. ALL of us have at our disposal, within a day's 24 hour span, a week's 168 hours and a year's 365 days the same amount of time!...

Such an analysis serves to show that it is not the amount of time that matters since seconds, minutes, hours, days are provided in the same amount to all of us, but the ways we have learned to and, indeed, use the time we have at our disposal.

To be honest with you, dear readers, I had promised myself to avoid this type of reference to time in this book, but I succumbed to the temptation since this simple time-units breakdown is such a didactic paradigm that lures most of us as writers or Time Management course leaders to make reference to it.

This differentiation of so-called ‘mechanical time’ became available when the first instruments of measuring seconds, minutes, hours were invented and constructed in the late thirteenth century in Europe. These special mechanical time measuring machines were so expensive that they were used only on city hall and church steeples creating the perception of ‘public’ time. They were also bought and used in the residences of very affluent citizens who wished to show-off their wealth.

Time, as measured mechanically, is objectively and undeniably the same for all of us irrespective of what country on Earth we are born, grow up and reside in as well as irrespective of other socio-economic, educational or religious variables. But a crucial question arises at this point, namely, do all of us humans, all over the globe, share the same lifespans, or in other words, do we all live the same length of time when it is measured in years?

The truth is that if we look at time as it relates to life spans then some significant variations in the longevity of our personal existence emerge differentiating among men and women as well as among residents of the same country. These variations on lifespans become even more impressive when we look at life spans globally as we will briefly see below.

1.3 THE DEMOGRAPHICS OF LIFESPANS

We are living organisms, we are finite beings and our lifetime, by definition, has a beginning and an end. Whether we like it or not the undeniable truth is that the human existence, from a time perspective, is an ‘ephemeral’ entity. However, compared to average lifespans of 35 years in the middle ages, or 50 years in early 19th century, it is true that nowadays we live almost twice as long as our forefathers used to live.

For all of us, men and women, our personal lifetime starts counting from the moment we are born and face the world with a loud cry and ends at the precise moment we exhale our last breath ceasing to be a living organism.

Looking at the most recent demographic data of the United Nations on lifespans, that is the duration of existence of an individual human being, we are faced with some interesting, perhaps even unsettling facts. On top of the life span demographic scale (life expectancy from birth to death) for the time period 2010 to 2015 is Japan where the estimated average life span, combined for both men and women is 84 years (81 for men and 87 for women). The very last place, at the bottom of the same scale is held by the Central African Republic where combined life span stands at appx 46 years (44 for men and 47 for women).

The average life span for China, the world's largest country, with almost 1.4 billion residents is close to 74 years, whereas for India which has close to 1.3 billion residents is only 65 years. Statistically speaking the numbers mean that these two countries alone comprise almost 40% of the World's current population. The statistics concerning life spans become even more interesting when we take into account the fact that in 40 countries the average combined (men and women) life expectancy stands at under 60 years.

Among the 34 OECD countries (Organization for Economic Cooperation and Development) on top of the list we find, not surprisingly so, Japan with the 84 years combined life expectancy and at the bottom place Mexico with appx 75 years combined life expectancy. It is interesting to note that in the OECD list the residents of 25 countries have a combined life span of over 80 years and 9 range between Chile's appx 79 years and Mexico's appx 75 years.

Leaving aside life span differences among residents, men and women, in the 193 member nations of the U.N. we should come to grip with the reality that except for minute numbers of centenarians that we can find in almost every country of the World, the majority of us humans are born, grow up, mature and die within the span of 6 to 8 decades. We are indeed 'ephemeral' but as individuals, groups and collective entities we have created civilizations, we have made giant leaps in all scientific disciplines and the arts, and eliminated many diseases which *as epidemics* in earlier times had threatened the very existence of Humanity.

Before closing this section and the universal statistics of time and life spans would it be useful for all of us to ponder the crucial question '*are our families and educational systems in the country where you were born or in the country where you live today helping us to learn to use the time given to us as efficiently, productively and creatively as we could and we should?*'

2 PHILOSOPHIC VIEW OF TIME

Viewing the concept of time from a religious perspective we see that western religions consider time as existing on a continuum, in other words, it has a linear nature. The Biblical ‘genesis creation myth’ in both Judaism and Christianity refer to God’s 6 day labour and the universe and the seventh day of His rest (surely the reference to a ‘day’ has nothing to do with the 24 hour period as we know it). Muslim teachings refer to the creation of the Universe by God in “six days” although their measurement of “a day” differs significantly from that of Judaic-Christian “days” and furthermore in the Quran the seventh day is not God’s day of rest.

For Eastern religions such as Hinduism creation and time are not seen as a linear progression from point “A” (nonexistence) to point “B” (existence) since time is considered to have a cyclical nature consisting of several cycles and each cycle has 4 epochs. Buddhists see no beginning or end but a repetition of the cycle: life, death, re-birth. For some Buddhists there are four types of time, namely past, present, future and ‘timeless’ time.

Nowadays you and I, as all of us, measure time using wristwatches and bedside alarm clocks which count seconds, minutes and hours and we count days, weeks, months and years using calendars. In fact we, residents of the western world and fellow humans living in industrialized countries in other parts of the Globe, are so time-bound that we have watches in most kitchen appliances and in our cars as well as in our cell phones and clocks hanging in different walls in our apartments, houses, school and university amphitheatres and workplace walls.

We also have clocks at church or city hall steeples some of which are world renown. Two examples are London’s Elizabeth Tower (named so since 2012) which was previously known as the Clock tower or St. Stephens’s tower and popularly known by the ‘nickname’ ‘Big Ben’ and the ‘Rathaus – Glockenspiel’ located in Marienplatz at the heart of the city of Munich in Germany which features 43 bells and 32 life size figures who perform a ‘show’ every day at 11 am (as well as 12 noon and 5 pm during the summertime).

It is an interesting issue in philosophical discussions that although some 25 centuries have lapsed since Plato and Aristotle tried to define time and we are still engulfed in pro-and-con arguments, discussions and dialogues relating to 'time' in its three dimensions, namely present, past and future. Despite all that has been recorded from antiquity to today and all that has been written about time concerning the definition of the concept and referring to the meaning, the dimensions as well as the influence of time in our daily affairs we have not reached universally accepted conclusions.

Two and a half thousand years ago the two spiritual giants of the western world, the Greek philosophers, Plato and Aristotle, considered time a significant subject and included it in their quest for knowledge and understanding of the universe, of mankind and of human behaviour.

In one of his later works, written in the advanced years of his life, an essay named *Timaeus* which is referred to as a 'dialogue' but is more of a soliloquy, Plato delves into the exploration of creation and the work of the creator and conceiving time as it relates to motion he states: "*Wherefore he resolved to have a moving image of eternity, and when he set in order the heaven, he made this image eternal but moving according to number, while eternity itself rests in unity; and this image we call time.*"

For Aristotle time was fundamentally linked to change and movement and he dealt with the concept of time in his physics noting that: '*Time is a number of change with respect to the before and after*'.

2.1 SETTING GOALS

Setting our life goals is not and should not be viewed as a '*once and for ever*' static action but should constitute a dynamic process permitting us to evaluate, revise and even totally change previous goals as we progress in the various stages of our lifespan.

Relatives and family friends, routinely ask children to tell them '*what do you want to be when you grow up*' and they usually get a grin, a smile or wide open eyes filled with surprise and inability to articulate an answer as well as occasionally something like '*a teacher, a nurse, a doctor or a mother*'. Surely children are free from committing themselves to life goals or choosing their avocation.

Things become more focused and specific with late stage adolescents who may choose ‘to go to the market-place and find a workplace’ or continue with university studies. Late stage adolescents and young adults have to set their life and career goals and diligently work toward achieving them. Their choices, however, are not permanently fixed and do not by any means preclude their freedom to change mind and change goals.

Goal setting is a useful and necessary process as it will help you focus your attention, concentrate your efforts and channel your physical, mental and emotional energy expenditure to a specific direction. ‘*If a man does not know what port he is steering to no wind is favourable*’ is an aphorism found in many public speakers’ ‘help books’ and it is attributed to the Roman philosopher Seneca the Younger. The quote surely catches the usefulness of setting life goals and objectives.

However, when you engage in the act of setting goals and objective make sure that they are specific (avoid dubious and general goals), realistic (keep your feet attached to the ground and don’t fly to the clouds) and achievable (which necessitates an objective and sensible assessment of your own talents, capabilities and skills).

Being cautious in your goal setting does not necessarily mean that you should aim much lower than your true potential as judged subjectively by yourself, or objectively by other significant persons in your life, such as teachers and work supervisors. Setting your goals at the range of your potential and even somewhat over it will act as a positive motivator forcing you to ‘stretch creatively’ in order to achieve them and taste success.

On the other hand, setting goals below the threshold of your true potential may give you the sense of security and comfort but will deprive you of the exhilarating sense of achievement over and above your potential.

Finally, if your unrealistic ambitions lead you to set goals far beyond your potential you will end up being overstressed, unable to cope with goal achieving demands and if you do not abandon them in time you may even bring yourself to a ‘breaking point.’

Closing this section it could be useful to bring to your attention a goal related quote reattributed to Confucius which I will slightly paraphrase to show its relevance to our discussion stating ‘when it is obvious that the goals cannot be reached, you shouldn’t adjust the goals, but adjust the action steps.’

2.2 GOALS IN A TIME PERSPECTIVE

Your goals and objectives relate to a time perspective which helps differentiate them as long-range life goals, medium range career and social-psychological attachment goals and short range goals.

The time element comes strongly into play as short range goals by their nature demand full concentration and step-by-step, level-by-level creative efforts to bring them to life and to successful completion.

There are myriads of stimuli that may attract your attention and steer you away from the necessary focus and time commitment to achieving your objective, to reaching your desired short range goals. Surely there are also plenty of persons around you that could act as obstructs in your pursuit of reaching your objective, achieving your goal. And finally, as you have probably experienced it, unexpected demands and problems may act as obstacles.

Unlike medium and long range-life goals the short range goals demand increased attention and care in avoiding time waste.

The preparation of a seminar paper or a dissertation if you are a student and the completion of a report to be presented to your fellow managers or superiors if you are a working professional demand that you set carefully delineated priorities of activity.

You may have already encountered a reference to the '20-80' rule ascribed to Italian economist Vilfredo Pareto which states that 80% of our success is the result of 20% of our effort. Consequently it is your responsibility to determine that 'crucial and useful' 20% of your efforts that will provide you with the 80% of success.

In this process you must learn to say the significant and so simple in its synthesis two letter English word 'NO' which is found also as a 2 letter word in some languages but may involve 3 or 4 letter in other languages.

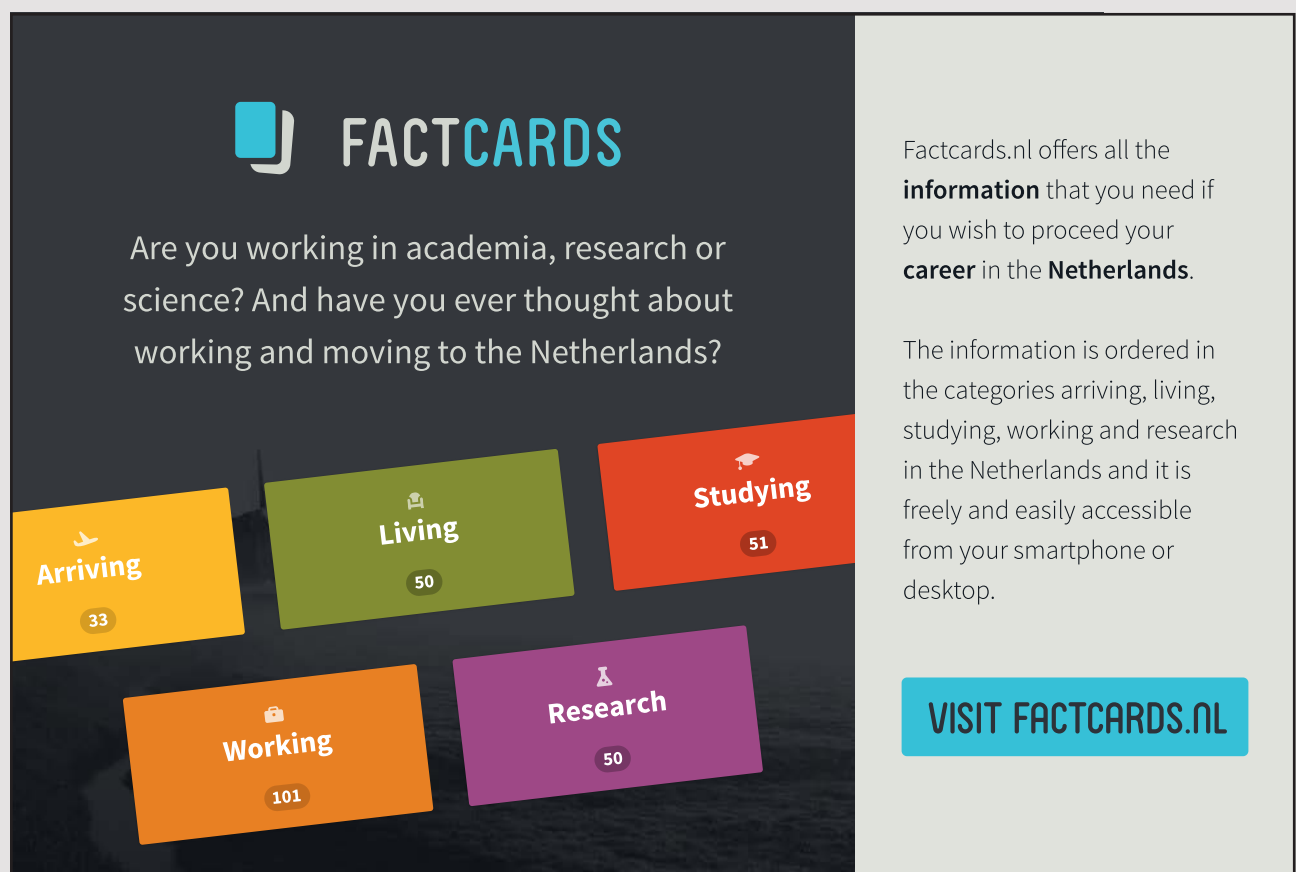
In its vocal expression a 'NO' is a simple word but psychologically it involves your ability to respect your priorities which will lead you to fulfil your objectives and reach your goals when you say it to distracting stimuli in the form of persons or attractive events. Learning to say 'NO' without guilt, or arousal of needless but debilitating inadequacies stemming from the fear of disappointing good friends, relatives, classmates or colleagues will give you the time needed to devote to completing your task and reaching your goal.

Things become a bit more perplexed when it comes to medium range goals as those, by their very nature, involve larger periods of time which may create in some of you the false impression that 'you have plenty of time' to successfully reach them. In the medium range type of goals careful utilization of time, avoidance of time waste, application of the prioritization process and usage of 'NO' whenever necessary are fundamental requirements if you truly desire to reach them successfully.

As medium range goals involve longer periods of time to be achieved, another parameter comes into play which serves to keep intact your motivation and this is nothing else than learning to reward yourself each time you successfully complete an given task or progress from one level to the next.

Saying a 'bravo' or briefly applauding yourself is necessary not only because you deserve it but additionally because others may not be aware of your successful progress, and often time because relatives and friends are not naturally inclined to '*pat you on your shoulder*' when you need it to keep going on.

In a popular quote referred to many including singer Frank Sinatra the suggestion is made that '*you should occasionally tout your own horn and don't expect others to do it for you...*'



The advertisement for Factcards.nl features a dark grey background with the logo at the top left. Below the logo is a text block asking if the user works in academia, research, or science and if they have thought about working and moving to the Netherlands. Five colorful cards are displayed: 'Arriving' (yellow, 33), 'Living' (green, 50), 'Studying' (red, 51), 'Working' (orange, 101), and 'Research' (purple, 50). To the right, a light grey box contains text about the website's offerings and categories, followed by a blue button that says 'VISIT FACTCARDS.NL'.

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Long range, life-time goals involve different amounts of time but they also should be examined at given stages, evaluated and when the realities so dictate even changed so as to give you the sense of fulfilment which operates both as a reward for all you have done thus far and a motivator for what lies ahead and must be done.

Remember Socrates aphorism '*an unexamined life is not worth living*' and decide after proper and careful examination if one or more life-goals are worth keeping or should be changed.

2.3 'THINGS TO DO' LIST

The picture that comes to mind, as the title suggests, is a familiar one in home kitchens, or in the kitchens of students and working young adults when one looks at a refrigerator door. There they are attached with little magnets to the fridge, A4 size sheets, notebook pages or small index self-adhesive cards filled with 'to do' things ranging from supermarket lists for mothers and fathers, to assignments for course work papers for students and task objectives for the young gainfully employed adults.

Do not look with condescending attitude to such '*things to do*' lists which have been used and continue to be a familiar sight for countless decades. They are supposed to, and most of the time they do, help poorly organized persons to keep track of their responsibilities or, this also happens to be true, to penalize them with remorse and guilt feelings as they discover that they are continuously falling behind schedules, missing deadlines and jumping over some 'thing to do' list items!

Printed or hand written on paper lists of '*things to do*' continue to serve their purpose magnetically attached to refrigerator doors or pinned at the office wall board. Nowadays with so many electronic gadgets available to all of us students and professionals alike such lists are digitalized and stored in cell phones, iPad, tablets, laptops and table pcs. They do help to improve our ability for effective time management and, as said before, occasionally they penalize us with remorse and guilt feelings when looking at them we realize that we are falling behind.

Some people like to differentiate categories of urgency and significance on their 'things to do' lists and some use colour markers to prioritize items noted on them by calendar time or by significance or urgency. In the digitalized electronic gadgets such differentiation may be marked by stars attached to each item on the list.

For professionals time saving techniques may take one or more of the following forms:

Keeping scheduled meetings as brief as possible,

Avoiding interruptions,

Refusing to answer the phone while engaged in creative activity.

For students effective time management necessitates keeping the 'chit chat' sessions with friends to a bare minimum when deadlines for paper submission approach or when examination period starts. The use of telephones has dropped significantly among office personnel while the volumes of e-mails have risen dramatically. Effective time management necessitates appropriate ranking of the significance of e-mails so that reading and responding to them do not steal away from you valuable time.

3 TYPES OF TIME

We know that in a 24 hour period the sun rises in the East and sets in the West and as a result we have a daylight and a night period. Over and above this division of a 24 hour day, we have our watches and clocks which provide us with what is known as '*mechanical*' time or 'public' time shared publicly under the widely accepted consensus that measures units as seconds, minutes, hours. Daylight and darkness, seconds, minutes and hours constitute the objective reality of time.

Our bodies, subjectively, measure for each one of us on a very individual and exclusive base our personal '*biological*' time as it relates to all vital, primary and secondary, physiological operations of our body organs. Throughout centuries and millennia, as living organisms, we have developed an internal 'biological clock' to help us adapt to the daily cycle of light and darkness following the Earth's rotation around the Sun every 24 hours. What is popularly referred to as the 'body clock' is formally known as the '*circadian rhythm*' which describes the 24 hour cycle between night and day (*from the Latin words circa=about and diem=day*).

The 'master clock' that controls our circadian rhythms consists of a group of nerve cells in the brain known as SCN (*Suprachiasmatic Nucleus*) which is located in the hypothalamus (the brain area we discussed in the first section of this book in relation to the 'fight-or-flight' response) located just above where the optic nerves from the eyes cross. It is useful to note that the periodicity of our bodily processes does not depend on the periodicity of external factors and when there is a reason (*as in jet lag, discussed below*) this becomes obvious.

If you, for one or more times, have travelled by airplane crossing the Atlantic Ocean or the Pacific Ocean, or overland from Europe to the Far East (and the opposite route) then you have probably experienced the so-called '*jet lag*'. The term refers to a series of symptoms, among them insomnia, fatigue, constipation and irritability, experienced by airplane travellers who pass through two or more time zones.

The high speed of jet travel, affects the length of daylight or darkness with which people are used to in their normal place of residence and as a result the 'body clock' falls behind the mechanical clock.

The ‘jet lag’ or ‘time zone adjustment’ syndrome is experienced as a discrepancy between the objectively measured mechanical time shown by our watches or airport clocks and our internal, biological time as felt by our bodies. ‘Jet lag’ is related to a disturbance of our circadian rhythm and seldom has a duration of more than a couple or, at worst, a few days before it disappears.

Some research findings point out that jet lag symptoms and effects are more intense with older persons than younger ones and when we cross time zones with eastward direction as daylight gets to have longer duration than darkness.

Beyond these two, mechanical and personal types of time there is a third type usually referred to as the *psychological* time which, again, is very personalized and relates to the way we feel about interfacing with persons, experiencing events and ensuing emotions.

Psychological time may run faster than the physical time as measured by our wristwatch or wall clock when it relates to pleasant, satisfying experiences and stimuli or it may run far behind giving us a sense of long duration than the clock time if we are experiencing anxiety, fear or unpleasant events and stimuli. In other words in the first case of pleasant experiences time seems to ‘run’ very fast and in the second case of unpleasant experiences time sort of crawls or fully ‘stops’.

3.1 BIOLOGICAL ‘PRIME TIME’

Let us now deal with a very interesting topic that involves you and your daily performance levels. In industrialized societies, for most public servants and office personnel, the 9 am to 5 pm program is an established routine that varies with provisions for flexible time schedules starting one or two hours earlier and ending one or two hours later.

In industrial production settings as working in a factory, the 8 hour work day is usually divided in 3 shifts which are scheduled as 6 am to 14 pm, 14 pm to 22 pm and 22 pm to 6 am. For most working people these time schedules running Monday through Friday (except those who may have occasional week-end schedules at work) are well known realities.

The old suggestion, if one had the luxury to adopt and follow it as a life style, was to work for 8 hours, sleep for another 8 hours and do none of the previous two during the next block of 8 hours. Needless to say that students and academic research and teaching staff, along with self-employed individuals have different time schedules than office personnel or factory workers which may run for much longer periods than the traditional 8-hour period.

Considering the differentiation of mechanical, biological and psychological types of time presented above, a brief look at your personal biological 'prime time' is necessary and useful. Popular writings supported to some extent by relevant scientific research point out that there exist two basic types of biological prime-time, namely the morning (early bird) and evening (night owl) types. Some writers tend to bring into the picture a third, so-called afternoon type.

Each one of you, before reading this book or some other time management article or book, already had determined and knew which biological prime time describes you. Surely if your work schedule does coincide with your biological prime time things have been, are and will continue to be fine. And when your work schedule allows it, agreeing with your boss to have a substantial chunk of your working schedule close to your biological prime time would prove beneficial for both the employer and the employee. This, however, is not a usual practice and since the optimal condition does not describe the daily routine of all working people, for those who are 'evening' types working during day hours further enforces the widespread use of coffee and as a corollary coffee breaks come in very handy.

For college and university students, research staff and self-employed professionals not bound by rigid 8-hour work shifts, the ability to determine their personal biological prime time and to structure study or work schedules on that basis could greatly improve both their creativity and productivity levels.

4 A 'THIEF' NAMED PROCRASTINATION

Let us start with Cyril Parkinson's Law which aptly states that '*Work expands so as to fill the time available for its completion.*' To tell yourself that you have plenty of time to complete your task is a luxury most of us seldom possess or it could be just a perpetual excuse for perennial victims of that certain culprit, the well-known 'thief' of time named procrastination.

'Procrastination is the thief of time' Edward Young wrote three centuries ago in his Night Thoughts.

Procrastination is the tendency to postpone doing something at a later time although it has to be done if not immediately as here and now at least very soon. In other words, procrastination describes the human tendency to put aside tasks such as preparing term papers or reading assignment materials if you are a student or postponing the preparation of the report that you must present in the next staff meeting if you are a working person.

For some people procrastination has been and continues to be their life-style but what emerges from many relevant psychosocial studies is that all of us at certain times do engage in some form of procrastination.

Surely falling behind our time schedules as we procrastinate is not something anyone of us could live with for long periods of time. Procrastination may, and often time for many people does, create serious problems with those who supervise your work and decide for your progress and promotion, such as teachers at school, lecturers and professors at your college or university, or supervisors and section heads at your employment place.

These are some of the problems procrastination creates for those of who fall victims to it either occasionally or chronically. A legitimate question could arise in your mind relating to the causes that make you procrastinate. There is ample academic research, and countless popular literature articles, which relate procrastination not only to individual character and personality structures but to the core substance of being human, namely to human nature. Relevant here is a prevalent well established human tendency to avoid, through procrastination, the demands of engaging with and completing unpleasant tasks preferring instead to spend the available time engaging in more pleasant ones.

'Time you enjoyed wasting is not wasted time' is a familiar slogan attributed to Beatle John Lennon, as well as to a variety of philosophers, novelists and journalists. In practical terms it is a meaningful statement and a good excuse for procrastinating as long, of course, as there are no deadlines that have to be met and penalties for not completing prescribed tasks.

For some people procrastination may have as its hidden cause their need to reach perfection in their task be it a term paper or a dissertation if you are a student, a report to be presented to supervisors or Board members if you are a young professional. Such an emotional need may hinder your attempts to sit down and start working on the task at hand. It does not always pay being a perfectionist.

You may have already encountered a popular reference found in many time management articles and books and given in many seminar presentations relating to the Malaysian culture where only Gods are considered capable of producing something perfect. When something is created by humans it contains, on purpose, a flaw so that the Gods will not be offended.

Surely it is proper to aim to high standards that reflect your talents and capabilities in completing a report or preparing a presentation but it does not, and in most cases it cannot be considered useless unless it has reached the point of being perfect.

Dealing with the characteristics of procrastination should bring to mind situations familiar to most of us. Examples include staring at a blank word document on our laptop or pc and wondering how to start writing that term paper or at a power point slide show unable to decide what ideas to put along the bullet points or numerical hierarchy differentiation.

Filling the page with words, phrases, sentences and paragraphs that make sense or the power point slide with laconic but useful and impressive statements appear to be a huge tasks convincing us to leave these tasks for...tomorrow!

And since tomorrow, by definition of the term, never comes, A. Lakein in his best-selling book suggested using the 'Swiss cheese method' according to which a remedy to postponing the difficult, appearing as huge and insurmountable task is to chip away little chunks of time creating something like Swiss cheese type holes which eventually end creating a large hole, meaning that the task is completed, or leaving so little to be done motivating us to get it over with and finish the job. What initially appeared insurmountable is now completed.

Doing a little of the job to be done at small pieces of time will fill-up the word pages or the power point slides and it will save us the remorse and guilt procrastination brings.

EPILEGOMENA

I will conclude this book by citing the opening verse from Joe South's historic hit song titled 'Rose Garden' in which the first verse reads: "*I beg your pardon, I never promised you a rose garden...*"

Hopefully you will not misread this as a futile attempt for absolution in my role as an author.

In the preceding pages I have aimed to give you a basic understanding of the concepts of time and stress along with some practical suggestions in learning to control your stress and effectively manage your time.

I do hope that reading the book was a useful and rewarding experience and I would like, in this laconic epilogue, to suggest that we should all dare be a bit rebellious and stand up against the belittling impositions of social institutions and social structures which imprison us in debilitating stress and agonizing time frameworks.

Socrates has stated that '*An unexamined life is not worth living*' but for most of us, engulfed in the demands of our daily personal and occupational routines taxing our emotions and time, any attempt to philosophizing appears, in simple words, to be a luxury too hard to reach and realize.

Be that as it may, we still can look at our reality and creatively try to put stress and anxiety under our wilful control minimizing emotional drain and see time as a manageable entity which effectively utilized should help and not hinder us from realizing the goals we have set and decided to achieve.

Modern Man's tendencies towards super-individualism, absolute reliance on one's own self, physical capacities, emotional resilience, intellectual prowess and creative talents, ends up negating Aristotle's philosophic aphorism '*that Man is by nature a social animal*' and John Donne's poetic reference '*No man is an island, Entire of itself, Every man is a piece of the continent, A part of the main.*'

Affiliation, the 'belonging' need, ranks high in the pyramid of human needs. We need to be part of an entity, be it the family, friends, school and work peers, religious, political or sports related groups. The sense of belonging acts as a behaviour motivator and simultaneously as a supporting mechanism.

I certainly cannot suggest a specific group you should choose to belong to but, as part of my epilogue, I do urge each one of you to choose a group and start belonging. Once you commit to a group and integrate in it you will succeed in getting useful emotional support and a functional sense of assurance which will act as strong creative motivators while simultaneously will be lessening the stress of loneliness.

Yes, if we try, learning to control our stress and effectively manage our time is possible...

REFERENCES

Benson, H. & Klipper, M.Z., 'The Relaxation Response' Harper Torch, re-issue edition, N.Y., 2000

Bourne, E.J. 'The anxiety and Phobia Workbook' New Harbinger Publications; 6 edition, Oakland, California, 2015

Cannon, W.B., 'The Wisdom of the Body', W.W. Norton & co., Revised & Enl. Edition, N.Y., 1963

Franklin, B., 'Selections from autobiography, Poor Richards almanac, Advise to a young tradesman, and others', hardpress publishing, Lenox, M.A., USA, 2013

Freudenberger, H. & Richelson G. 'Burn Out: The High Cost of High Achievement. What it is and how to survive it'. Bantam Books, N.Y., 1980

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Friedman, M. & Rosenman, R.H. 'Type A behaviour and your heart' Alfred A. Knopf / Random House, N.Y., 1974

Lakein, A., '*How to Get Control of Your Time and Your Life*', New American Library, N.Y. 1973

Luthe, W. & Schultz, J.H., 'Autogenic Therapy', *Grune and Stratton*, N.Y., 1969.

Mai, J.K. & Paxinos, G. (editors) 'The Human Nervous System' Academic Press, Inc. 3rd edition, Cambridge, Massachusetts, 2011

Schiraldi, G., 'The Post Traumatic Stress Disorder Sourcebook' McGraw-Hill Education; 2nd edition, N.Y., 2009

Selye, H. 'The Stress of Life' McGraw Hill Education, 2nd edition, N.Y., 1978

[J.R.R. Tolkien](#), '[The Fellowship of the Ring](#)', Harper Collins, paperback, N.Y., 2012

Young, Edward, 'Night Thoughts', Edited by Stephen Cornford, Oxford University Press, paperback, Oxford, 2008