

### **MINDWARE: UNDERSTANDING STRESS & CRITICAL STRESS: LEARNING TO UTILIZE, REGULATE & DOWN-REGULATE**

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#### **I. MINDWARE: UNDERSTANDING STRESS & CRITICAL STRESS: LEARNING TO UTILIZE, REGULATE & DOWN-REGULATE**

##### **A. Introduction**

Volatile, Uncertain, Complex & Ambiguous (VUCA) — is the global environment. Professional efficacy of Security Forces must be cognizant of:

Instinct, Intuition and Intelligence — in this strategic environment.

Reformative Trainings should be incorporated in standard correctional trainings to “toughen-up” the internal framework of a correctional officer, through structure of innovative readiness capsule delivering:

- Resiliency: Empowerment, Self-counsel, Situational awareness
- Strategic leadership: high definition design uses cognitive and emotional behaviour markers as competencies by empowering individuals to use:
- Critical thinking learning systems
- Understanding their own operational capabilities to perform with confidence, Improve attention to levels of details, Regulate and down-regulate emotional responses under high stress and deadly encounters.
- nPSYPESt components (nPSYPESt: Neuropsychological Performance Enhancement Skills Trainings)
- Producing an individual who is asset based, operating with optimum effectiveness through premeditated minds.
- The mind is comprised of beliefs, desires, emotions, perceptions, and intentions. WE MANIPULATE THE BRAIN!

Police and prison official trainings must continue to evolve in many crucial ways. The paper bulls-eye has been replaced by mannequins and computerized targets; rubber knives by shock knives; plastic guns by simulations: classroom lecture by reality-based scenario training.

But one thing which remains the same, is the human element. The area which needs focus and development is training the officers in psychological performance skills.

To maximize on physical skills, psychological skills training is a MUST for correctional and law enforcement officers, the real emphasis of which is not learning about weapons or gaining technical skills; it's about strengthening people.

Simulation training and reality-based training (when it occurs) helps develop psychological skills.

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Methods on thinking, “how to think”, when in the stress or critical stress zone. “Get it over with” or “deal with it” must be replaced by “how to deal with it” (Everyone goes through physical and/or emotional trauma, post-incident briefing and critical incident briefing are significant)

1. nPSYPESt (Neuro-Psychological Performance Enhancement Skills Trainings)

Mental Agility and Mental Toughness does not develop with physical training; if mental toughness is not acquired, it can actually interrupt and delay the learning quality of physical and technical trainings because we need mental toughness to learn and perform difficult tasks.

- Sub-optimal mental toughness undermines operational effectiveness
- Mental toughness is utilizing a set of psychological performance skills that will initiate effective and maximum execution of apt action, adaptation and persistence of decision-making. This enhances the confidence in the officer and creates self-leadership qualities. Specific psychological training accelerates the performance and armours the standard trained skills of the officers.

And above all — psychological performance training reduces critical incident stress reaction, aids in self-care of the officer preventing PTSD, depressive disorders, sleep problems and other various physiological and psychological problems.

- Psychological performance skills programmes are meant to be integrated with other trainings to provide a truly comprehensive approach to the preparation and performance of police and prison officers. Each officer, individual or unit responding to a situation is unique despite common characteristics; therefore nPSYPESt should be designed for use in two ways — individual make-up and the unit make-up of which they are a part, this should be evaluated further and adapted or modified.

(nPSYPESt is not gender specific but individual specific in my professional and personal experience.)

2. Traits of a High Functioning Trained Professional

- Self-belief - belief in ability to achieve goals. This promotes “thought-confidence”.
- Motivation (desire/determination)
- Intrinsic motivation and using adversity as a source of determination. (Stress becomes a drive to be utilized for achieving high performance)
- Ability to accept competition anxiety, but have a plan on how to deal with it
- Ability to maintain focus - ability to “balance”
- Ability to maintains technique/effort in face of fatigue/pain.

In my view a facility must have a focus on culture of recovery, a sturdy framework, which incorporates philosophical, strategic, and operational frameworks, and is flexible enough to be effective during a crisis situation.

In simple terms:

3. Corrections

A correction which aims to address the offending behaviour of sentenced persons.

4. Security

Security which aims at addressing the safety of inmates, officials and members of the public.

5. Facilities

Facilities to ensure that the Department has a long-term strategy to ensure conditions consistent with human dignity for offenders.

6. Care

Care intended to address the well-being needs of inmates of various classification and mental, cultural make-up including access to social and psychological services.

7. Development

Development aims to provide for skills development in line with departmental needs plus requirements and national human resource needs.

8. After Care

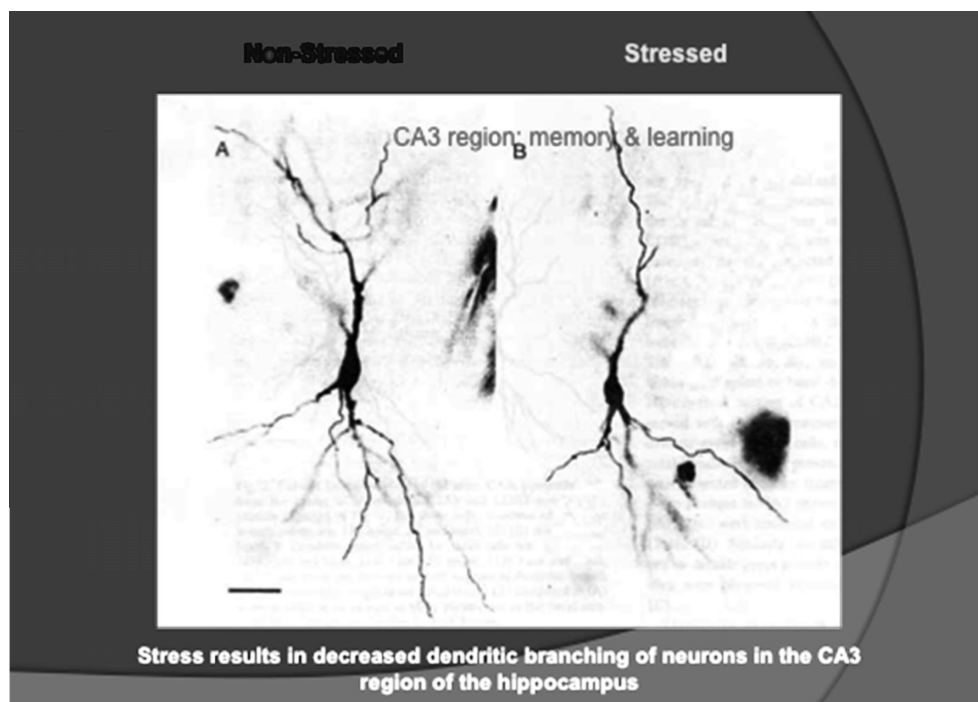
After Care intended to ensure successful re-integration through appropriate intervention methods directed at both the inmate and relevant societal institutions.

To ensure the outcome of this, it depends on the correctional environment, a flexible design that allows and creates tools for command, control and coordination of resources. The staff having the know-how on quick assessment of incident objective required to be used in both emergent and non-emergent incidents. Professionals must lead with situational awareness and knowing the management tools and how to use them consisting of SOP's; corrections staff are the most important asset in the organization.

Hence, staff performance training in the areas of corrections and management is crucial for the successful delivery of correctional services through the trained high definition of the human design.

Prison is a component of homeland security, and along with police, prison professionals must be trained to be of high standards, functioning with efficiency not just on the job but internally as a person. The catchers and the watchers are the vanguard of our society; they are the beacons and the sensors and at the same time preciously fragile to the wear and tear of the highly stressful environments they operate in.

## II. STRESS — A DYNAMIC STATE OF LIFE



In neuroscientific language:

One type of neurotrophin, is a growth factor that affects neurons in particular. Research has shown that BDNF plays a role in memory formation and in the connection between stress and depression. Exposure to stress leads to decrease in the expression of BDNF leading to atrophy of the hippocampus. It belongs to the limbic system and plays important roles in the consolidation of information from short-term to long-term and spatial navigation.

BDNF is active in the hippocampus, cortex and basal forebrain — areas vital to learning, memory and higher thinking.

#### **A. What Is Stress? Why Does It Occur? Do We Need It?**

Two things cause stress. Primarily it is down to whether you think situations around you are worthy of anxiety. And then it's down to how your body reacts to your thought processes. This instinctive stress response to unexpected events is known as “fight or flight”. Stress happens when we feel that we can't cope with pressure, and this pressure comes in many shapes and forms, and triggers physiological responses. These changes are best described as the fight or flight response, a hard-wired reaction to perceived threats to our survival.

Stress is a biological response controlled by the brain as a reaction to a challenging stimulation of a physical or emotional nature.

From the brain's viewpoint, everything can be perceived as stress. From walking down the street to handing a difficult report in on time, it is all a question of the degree of stimulation and the level of threat perceived during that stimulation.

A great step to a healthy attitude to stress is to realize our ownership over our brain and learn to engage our brain intentionally to manage the consequences of the fight or flight response.

Self-Efficacy: is a necessity for coping behavior. (Bandura A. Self-efficacy: The exercise of control. New York: W. H. Freeman; 1997)

Primary appraisal of a stressful situation requires that the process employ self-esteem and self-efficacy making the “person-environment” efficient at deploying coping strategies.

Coping is defined as behavioral or cognitive efforts to manage situations that are appraised as stressful. (Lazarus RS, Folkman S. Stress, appraisal, and coping. New York: Springer; 1984.)

Emotion-focused coping is which focuses on managing emotional responses to stressful events and problem-focused coping is where a person responds in a structured manner to overcome the problem and change the problematic aspects of the situation.

Self Efficacy is thus a specific form of self-confidence and perception of one's ability to perform a task successfully using emotional and cognitive coping processes to explain the cause, origin and “sensemaking” of the events and behaviors thus affecting self-confidence and influencing expectations of future success or failure

Modern humans rarely encounter many of the stimuli that commonly evoked fight-or-flight responses for their ancestors, such as predation or inclement weather without protection. Human physiological response continues to reflect the demands of earlier environments; however we are a psychological phenomenon first and then a physiological one.

Personality is a dynamic organization within the individual of those psychophysical systems that determine his unique adjustment to the world.

#### **1. Personality is made up of Certain Elements**

(i) *temperament* — which is of biological and physiological nature.

(ii) *character trait* — which represents a continual form of behaviour.

(iii) *mood* — which is the state of mind.

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(iv) *disposition* — a person's tendency to behave in a certain manner.

(v) *habit* — a sort of a conditioned response.

(vi) *attitude* — a person's point of view that represents a general set of values towards matters.

Personality to some extent is determined by the individual's genetic and cultural make-up. Human behaviour does change as the individual develops and the environment which the individual encounters.

Prison environments are replete with aggressive behaviours, and people learn from watching others acting aggressively to get what they want. Applying behaviour modification, mirroring and social learning principles can work in corrections by using systematic reinforcement of pro-social behaviours. This is a powerful and effective way to change behaviour and stress response.

But behaviour is hard to change if not supported by emotional meaning. We have to remember: we feel first and then think!

Every correctional facility has its subculture, and every prison subculture has its system of norms that influence staff and prisoners' behaviour, typically to a far greater extent than the institution's formally prescribed rules. These sub-cultural norms are informal and unwritten rules, but their violation can evoke sanctions from fellow inmates ranging from simple ostracism to physical violence and death. In these subcultures how efficiently the staff performs and manages themselves is of utmost importance, as they can set the "climate" of the sub-culture.

Many of the rules revolve around relations among inmates and interactions with prison staff. The first step is to train the staff to be of high definition.

Sustainment trainings focus on human high performance and use of brain-behaviour pathways for asset (natural + learned) based optimization. Our goal should be to instil effective behavioural markers through knowledge and application and to recognize traits of a high functioning professional.

The sociology of the prison and the imprisoned represents the vanguard and undercurrent of discontent and malcontent in a society. It also reflects the disorientation, dysfunction, despair, and flaws of society. The breakdown of our institutions and government authority may also be given the "microscopic laboratory" treatment via insight found in the classification criteria of inmates. We must seek more creative, rather than reactive, interactions.

Wide-ranging acts of corruption are to be expected in prisons, if only because prisons are depressing places frequently afflicted with stress, low morale, and lack of job satisfaction.

A high performing professional in the prison and correction environment must have three factors going for himself/herself —

- Situational Awareness
- Knowing one's internal mechanism (response action, cognitive maps and overt behaviour) and awareness and ability to decipher another's internal and external mechanisms — this includes peers as well as the population and social movement within the prisons and correction facilities.
- Emotional and mental balance in stressful environments along with knowledge of health and self-care in these settings

These factors are learned skills combining with an individual's natural attributes, which are brought out by various trainings on performance.

Constant need to upgrade the training methods is seeking the mental edge for success in perfor-

mance as officers and staff working in this environment, have the need for the mental-toughness aspect of performance and also addressing issues when in some cases where performance problems manifest themselves as clinical issues.

### **B. Strengthening Cognitive Foundation**

Understanding high performance and knowing how the mind works which will allow performers to gain confidence and operate in the most effective manner. Attention control includes selectively attending to important cues, shifting one's field of awareness, and developing simple standard operating procedures and routines that streamline the execution of repetitive tasks to attain optimum focus and concentration.

### **C. Stress Utilization and Emotional Health**

When appropriately applied, stress utilization training can reduce the degree and intensity of the current stress reactions and help you develop skills for preventing additional, harmful stress reactions.

The overall goal of stress utilization training is the re-orientation of people's typical stress reaction habits into new, more rational and assertive patterns of problem solving. Participants gain new insights into what stress is and how it affects them. They learn skills, which reduce stress to regulatory levels.

#### 1. The Components of Stress Utilization Will Lead to:

- Stress styles, self-image and teaming — self-discovery
- Identifying one's personal effectiveness pattern — self-confidence
- Personalizing strengths — self-management
- Inviting others from "distress" — self-effectiveness
- Change, transition and stress management — self-balance

A wellness modality must be created and set in the correctional doctrine. In order to create a positive experience, everyone in the organization must be responsive to cross-transference feelings.

#### 2. High Performance Development Training is Engaging & Practically Motivating Participants to:

- Develop a balanced, effective personal and professional core.
- Assimilate key dynamics of coherent personal interactions into their work habits
- Apply the content to their jobs, the needs of the organization and its goals.

Using effective interpersonal behavioural model in the trainings through, which the staff learns how stress affects action-behaviour — of their own, of co-workers, and with inmates. This understanding is the key to professionalism and exceptional service.

The treatment of offenders can be stressful. Prison and probation officers who engage in the treatment of offenders experience stress on the job. On the other hand, offenders also experience stress throughout their incarceration. If correctional institutions fail to manage this stress, serious problems, including violent behaviour, might occur within the correctional setting. For the purpose of preventing such serious problems, mid-level staff specially, must improve their capacity for stress management.

The prison environment is characterized by factors, which can have adverse effects on those who work in this environment and individual inmates. In the prison setting some common factors around the world can be summed:

- Chronic crowded conditions



- Anti-social behaviour
- Absence of personal control
- Idleness and boredom can be prevalent
- Achievement of purpose due to the presence of others

But do note: crowding is only indirectly related to mere numbers or density of people. It is possible to feel crowded in the presence of few people, or not crowded in the presence of many. It all depends on the “Climate of Culture of Recovery” and how the staff at all levels carry out their duties.

### 3. Psychometric Assessment Tools

This will enable you to understand your strengths and weakness and how to make the best use of both these dimensions. Optimizing assets also includes using weakness as force multipliers to achieve the goal.

MMPI-2 can identify psychopathology, behaviour problems, emotional instability

Inward Personality Inventory (IPI) predicts variety of job-relevant criteria among police (e.g., absences, lateness, disciplinary actions and anti-social attitudes).

Colour Trails Test — A quick measure of sustained visual attention, visual scanning and sequencing in adults

Memory Assessment Scales (MAS)

Quality of Life (QOL) that is a self-reporting measure to understand one's lifestyle and coping mechanisms with inevitable changes and stress levels.

Stress directly affects staff performance and low performance affects security, which is like oxygen: once you realize it is decreasing, it may already be too late.

- The person approach focuses on the errors of individuals, blaming them for forgetfulness, inattention, or moral weakness
- The system approach concentrates on the conditions under which individuals work and tries to build defences to avert errors or mitigate their effects.

When looked at objectively, stress is not the external events that happen to us. In reality, stress is the experience of our own emotions in response to those events. In essence, stress is being out of sync. But here's something worth keeping in mind. Even though we can't control the external triggers, it is possible to take charge of our emotions and get back in sync. As you become skilled at this, you will feel better on the inside and become more self-confident in what you do.

Many of the parameters of affective style, such as the threshold to response, magnitude of response, latency to peak of response and recovery functions, are features that are often opaque to conscious reports, though they may influence the subjective experience of emotion.

Frequent exposure to negative events over a sustained period of time, leads to over activation of the hypothalamus-pituitary axis (HPA). The failure to recover adequately would result in sustained elevations in multiple systems that are activated in response to negative events. By contrast, the capacity for rapid recovery following negative events may define an important ingredient of resilience. Resiliency is the maintenance of high levels of positive affect and well being in the face of significant adversity. It is not that resilient individuals never experience negative effects, but rather that the negative affect does not persist. Such individuals are able to profit from the information provided by the negative affect and their capacity for “meaning making” in response to such events, and this leads

to their ability to show rapid decrements in various biological systems following exposure to a negative or stressful event. Emotions guide our actions and organize behaviour towards the acquisition of motivationally significant goals; this process requires that the organism have some means to decipher positive affect in the absence of immediately present rewards and punishments and other affective incentives.

A certain amount of optimum stimulation is necessary for peak performance. Forensic evidence suggests that stressful situations that are challenging but not overwhelming may actually contribute to better physical and psychological health.

Challenging situations require emotional intelligence, active coping, problem-solving and solution-focused skills.

Both in humans and animals evidence from various research conveys that those who learn to adapt and work their way out of stressful situations show a distinct psychobiological pattern.

If inexperienced or untrained, subjects in stressful situations will over activate their nervous system leading to a variety of maladaptive effects, which include:

- High blood pressure
- Sleep disorders
- Mood disorders
- Gastrointestinal problems
- Chronic anxiety
- Depressive disorders
- Body aches and headaches
- Hives
- Skin disorders

However, stress can be mastered and manipulated and those who “toughen up” their system show a more efficient and adaptive nervous system response that is appropriate to the specific episode of stress and returns promptly to normal baseline when the crisis is over.

Psychological body armour: As an individual learns to cope with challenges in an adaptive way, a positive spiral develops. More effective coping leads to a smoother psychobiological stress response; the more this happens, the more the person learns to have faith in his or her own coping abilities, and so the stress response becomes even more adaptive and less disruptive. This is what the toughening response is all about. Mentally tough people — in the sense of resilience, not resistance — are able to cope adaptively with adverse situations and are therefore less likely to succumb to stress-related illnesses.

### **III. COGNITION AND PERCEPTION**

1/100<sup>th</sup> of a second to form memory, 16 seconds for emotion-reaction and 24 seconds for cognitive process initiation.

William James’s famous question: Do we run from the bear because we are afraid or are we afraid because we run.



The neural basis of emotions, the build-up, neural clogging and neural detoxification — all these factors can be trained and an individual can learn to regulate and down-regulate emotions by being equipped in emotional intelligence and its myriad applications in our daily existence.

Emotional proposal is made of 3 primary sources:

- Verbal & Visual Conditioning
- Modelling — What we have witnessed
- Specific meaningful incidents — what we have experienced

1. Environment

Environment influences our thought process, so for optimum functioning, create changes in the environment or change the environment.

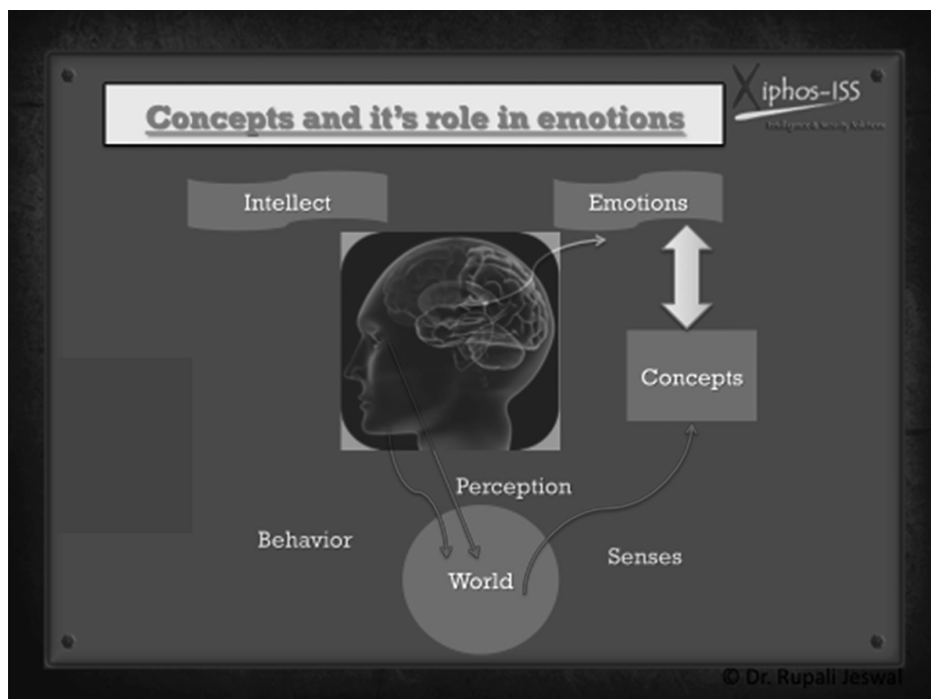
2. Cognition & Perception

Changing the belief behind a particular undesirable behaviour and reinvent a new view.

- personal competence: self-awareness, self-management
- social competence: social awareness, relationship & management (group emotional intelligence)
- knowledge of concepts and behaviour systems.

Example: Our brain maps the sensory stimulus from the outside world against the concepts we hold (inner world). In the training the participants will learn to combine the concepts and experiences and emotions, which will result in effective situational awareness, high drive and motivation. (Our concepts influence emotion and attention level.)

Some existing concepts, which we have when encountering a stimulus from the outer world needs no conscious manoeuvres and a habitual behaviour is likely to follow.)



We are designed to have more than one perception. A conscious act of looking at something keeps the image on the retina constant and at the same time our visual cortex is playing a greater role behind the scene, deciphering the details, relating the message and triggering a response all in a blink of an eye thus forming memory in 1/100<sup>th</sup> of a second.

Sub-conscious is a reservoir for everything learned and experienced; solutions to problems originate from this area. Sub-conscious works in imagery, so if we have pictured a certain kind of a day or an event we will ultimately achieve it.

### 3. Convergence

In the absence of more specific context, the approach is towards a definite value or a goal to reach a fixed state of mental equilibrium. If depression for example is the fixed state the client has reached, then the therapist has to make the client unlearn that fixed state and co-dependencies of “nothing good ever happens to me” to “something good will happen if I relearn and adapt a new approach to overcome my negative situation”.

### 4. Connectedness

Where incongruence within a person can be made congruent by connecting the points of conflict by a path so what the person feels and what the person wants to do is achievable (can be negative and positive).

### 5. Continuity

Based on emotional meaning — everyone manages life according to their emotional meaning. As life is a continuous process due to feelings, thoughts and actions, which contain each other and morph into each other.

For an individual to function in life which in itself is a systemic process, the individual relates to the stimulus which it relates to through emotional meaning (following our biological make-up — the brain learns innately) and this emotional meaning is set into motion in the form of action through emotional support received by the individual which helps in self-expansion. This systemic process works either way, negatively and positively.

Depressed staff makes more negative appraisals of their surrounding, peers and inmate behaviours, feel less confident in their efficacy and use maladaptive techniques more often.

Topology of our emotions can be changed through Convergence, Connectedness and Continuity. Emotions are a systemic process — they collectively represent the whole YOU. Emotional meaning, Emotional Support and Self-Expansion are the 3 wheels of this process; imagine if one wheel freezes, the process will be incomplete. To achieve continuous motion we personify our emotions by giving them expressions; if not regulated, the channel acquired for the release will freeze the wheel. To understand the emotional dimensions through resilient affective style leads to self-expansion by creating an emotional resonance through the right channel once emotions are elicited. Clarity should define YOU because at the end of the day all that matters is “How you felt”.

Develop an instant checklist. Assess, Alert, Attack & Adapt. V.I.M is used to attack — vim and vigour is the force, *I* is increased sharing makes the negative emotion fragment and *M* = you use the force to motivate change and then manage the positive change you have injected.

### 6. Amygdala

Picks up, on all micro cues, which has obvious results physically: you start to perspire, saliva secretion is decreased, hunger diminished, pupils dilated, and your heart rate increases.

### 7. Proxemics

Proxemics is what brings us together today. The term “proxemics” was coined by researcher Edward Hall during the 1950’s and 1960’s and has to do with the study of our use of space and how various differences in that use can make us feel more relaxed or anxious.

Proxemics comes in two flavours:

- physical territory, such as why desks face the front of a classroom rather than towards a centre aisle, and
- personal territory that we carry with us, the “bubble” of space that you keep between yourself and the person ahead of you in a line.

Frequent exposure to negative events over a sustained period of time, leads to over activation of the hypothalamus-pituitary axis (HPA). The failure to recover adequately would result in sustained elevations in multiple systems that are activated in response to negative events. By contrast, the capacity for rapid recovery following negative events may define an important ingredient of resilience. Resiliency is the maintenance of high levels of positive affect and well being in the face of significant adversity. It is not that resilient individuals never experience negative effect, but rather that the negative affect does not persist. Such individuals are able to profit from the information provided by the negative affect and their capacity for “meaning making” in response to such events, and this leads to their ability to show rapid decrements in various biological systems following exposure to a negative or stressful event. Emotions guide our actions and organize behaviour towards the acquisition of motivationally significant goals; this process requires that the organism have some means to decipher positive affect in the absence of immediately present rewards and punishments and other affective incentives. Example of bidirectional molecular communication in the case of anxiety and stress:

- Fear
- Breathlessness
- Choking Sensation
- Palpitations of the heart
- Increased muscle tension

Both pleasant and unpleasant stress affects the body and mind in similar physiological ways. For example, winning a large sum of money may result in pleasant stress producing a happy response, the physiological aspects may include increased heart rate, blood pressure, energy, and mental activity, to name a few. Encountering loss of a loved one, however, can also cause an increase in heart rate, blood pressure, mental activity, and other similar biological reactions.

Effects of chronic stress in the brain: Chronic stress creates excessive levels of cortisol in the brain, impairing the function of the hippocampus, leading to neuronal atrophy and destruction of neurons, decreased short term and contextual memory, and poor regulation of the endocrine response to stress.

#### 8. Conceptualization of Stress

A certain amount of stress is needed to assist our design for motivation, to achieve a goal but when stress becomes an obstacle instead of a motivator, one experiences negative by-products which hamper our performance of a task and throw us off-balance emotionally. Somatisation may be noticed if stress is of chronic nature. This is a term that describes the expression of psychological or mental difficulties through physical symptoms.

To overcome negative patterns we have to train neural substrates of our emotions. The process needed involves:

- Experimentation of your emotions
- Acquiring new knowledge, and allowing new experiences to come

This way one broadens their horizons and at the same time mitigates risk of negative emotion. Have

your awareness increase of yourself by analyzing your joint concepts, for example: “I hate Mondays — because...” (Analyze the why?) instead of “I hate Mondays just like that”.

Have a good idea about your capabilities so you can facilitate and utilize your internal resources, eliminating the feeling of helplessness. Have a clear idea about your capabilities and strengths, so you facilitate and utilize your internal resources, eliminating the feeling of helplessness.

- Stress-induced cardiomyopathy is known as “broken heart syndrome”. It is a condition in which intense emotional or physical stress can cause rapid and severe heart muscle weakness. It is often found in patients who have been through a major crisis such as a tragic loss, accident or unexpected turnaround in life.
- Conversely, happy people have stronger hearts. There was a study in which people were asked to think positively for 30 minutes. It was found that during that time their blood pressure lowered and the heart rate declined to normal, just as how a well-trained athlete has a slower pulse. Optimistic people could be likened to an athlete without the need for bodily effort.

When strong emotions generate fear, anger or rage and these are not expressed in a healthy way then the body’s natural response is that of the sympathetic nervous system as demonstrated in the fight or flight syndrome.

Stress should not be portrayed as something, which can be avoided at all cost; stress is a pre-requisite to deal with challenges. What is needed is learning of adaptive, coping and utilization skills.

#### **IV. OPTIMAL AROUSAL CONTROL (OAL)**

OAL is knowledge of self, individual emotional make-up, natural coping skills and then how to increase the level of arousal and control the psycho-physiological effect, having the ability to be flexible, which requires positive cognitive make-up and maintain the inner harmony in the external environment of stress or critical stress, efficiently so that the individual experiences peak performance.

Paying attention to refine and strengthen your mental radar

In psychological terminology, attention is what allows you to focus on a critical task while maintaining situational awareness (Levels of Situational Awareness (SA): Awareness of information, Comprehension of its meaning, Projection of future status) so that sensory input is processed in a meaningful pattern. Concentration is the ability to consciously and purposefully direct and maintain your attention to a particular object or activity. At the same time, it’s important to be able to switch attention to another subject when necessary, and even maintain different types, levels, and targets of attention and concentration as needed at any given time, such as focusing on a suspect while broadly scanning the environment for possible danger. Mindlessness arises from “automatic behaviour.” Here, professionals rely on automatic responses as the basis for their behaviour.

Both fixation and relaxation contribute to intelligence failures. For intelligence practitioners, focusing on the wrong factors and failing to recognize the significance of novel indicators are examples of fixation. Looking wrong basically.

The antithesis of mindlessness is mindfulness

- A mindful state corresponds with: situational awareness, basic assumption consideration and creation of new categories
- Openness to new information and knowing what can be utilized
- Awareness of more than one perspective (the most important factor)

### **A. Metacognition**

Metacognition is, with what you are thinking about.

1. Awareness: where an individual is in their personal and professional development process.
2. Evaluation: Evaluating their own capacities, limitations, thinking and feeling styles.
3. Regulation: when an individual can draw upon their own knowledge and skills and direct their internal force multipliers for planning, self-correcting and setting the goals.

Mindfulness is, with how you think as you go about what you are doing. Noticing involves remaining open to both internal and external stimuli. Through much research we know that ultimately, situational information is conveyed from external sources through sight, sound, touch, smell, and taste. People can think consciously about these but they tend to process them using more autonomic brain structures, often without noticing they are doing so. The unease one feels about getting into a taxi or onto an elevator in an unfamiliar setting are examples of such input.

Guided imagery technique using self-hypnosis (which can be easily trained to an individual, it is “self-talk” with focus) and metaphorical speech helps to channel energy in the imagination to follow the individual’s intentions. This when applied to a treatment not only helps the patient and self-image but it changes them through their own map thus making the learning ingrained.

Using guided imagery, visualization may also reduce stress, thereby boosting the immune system and helping the body to fight disease. Relaxation response and cognitive restructuring have been shown to effectively reduce stress and relieve symptoms associated with it.

Guided imagery helps us to mentally project and create mindsets for specific situations, this technique is used by athletes, and professionals of performing arts and now even law enforcement have started to use this technique.

Multisensory imagery exercises can be used to simulate training scenarios, enhance real-world skills, analyze and correct errors, mentally prepare for action, and enhance overall confidence. Imagery trainings then must be combined with real-life mock-up trainings to enhance performance in the field.

### **B. The Art of Reflection**

Thinking and language, mutually reinforces words into plans and on to actions. If trained we can motivate ourselves during critical-stress incidents and or the untrained mind will succumb to delusional despair. Thought-stopping, cognitive restructuring, positive affirmations and self-instruction leads to self-management of the human design in the face of stress.

Reflection is:

- Looking back for reference, comparison and evaluation of the present experience
- Pulling apart ideas for deeper understanding and methods of contribution
- Addressing omission and ambiguities
- Considering alternative perspectives and making connections
- Drawing conclusions and unravelling questions

## **V. PSYCHOLOGICAL SURVIVAL TRAINING**

This is specific to deadly-force encounters, and the ability to perform in this scenario requires that the individual is able to regulate and down-regulate the emotional context and still adhere to critical thinking strategies to maintain situational awareness and avoid confusion.

Psychological survival prepares you to anticipate danger (this is described in depth in the Leadership manual), capture the initiative, size up the situation, respond and recover quickly and efficiently and at the same time maintain peak physical and mental power to survive and overcome.

As we shift our attention to something our mind will direct senses to give it the information it needs in the speed it needs, if whatever we are focusing on creates an emotional reaction such as fear — a whole new set of physiological and psychological response will be in motion and which will amplify the senses, thoughts and behavioural processes.

If trained in nPsyPESt we will refrain from brain-sabotage; if not trained we will suffer psychological pathologies in the future, or worse, we might perish. This sort of response has to do more with “how we think” of our “situational awareness” and “perceptual past memory” than just what eyes and ears are experiencing in the present.

Do remember:

Components of a stress situation:

- It's objective
- It's your perception of it
- It's your emotional response towards it

This is inevitable human mechanics; this employs your past experience, evaluation and judgement of a similar situation and last your behaviour response for action which uses your physiological and psychological response which will determine the consequences.

- Reduced awareness of environmental cues (Loss of task awareness and situational awareness)
- Increased awareness to signs of anxiety
- Decreased tolerance for pain and frustration
- Decreased efficiency in mental processing
- Increased mistakes and injury

This is our innate way of our brain telling us something is wrong, to protect us, evolutionary survival but in our jobs we have to overcome all these traits and move forwards, and we can only do it if we know what they are, why these traits are there and how we can down-regulate them so it does not bring us to a “freeze” state. You must be able to replace fear in situations by seeing them as challenges. For this we must be psychologically trained.

Knowing in brief about TMT (Terror Management Theory) is salient for correctional professionals because they must rise above their innate behaviour during critical crisis and be able to regulate and function with high self-esteem. According to TMT, all humans are motivated to suppress the potential for innate terror of non-existence due to the human awareness of vulnerability and mortality by investing in cultural belief systems (or worldviews) that instil life with meaning.

People who are threatened with death and the fear or issues of marginalization (which is occurring more in today's time due to globalization and acculturation) that relates to it are more ready to embrace cultural values and belief systems which give them a sense of security, identity and camaraderie. They are more likely to cling on to that which affirms and provides meaning to their existence. This is known as the mortality salience hypothesis. The fear of death is rooted in an instinct for self-preservation that humans share with other species. Although we share this instinct with other species, only we are aware that death is inevitable — that is, that our self-preservation instinct will



inevitably be thwarted. This combination of an instinctive drive for self-preservation with an awareness of the inevitability of death creates the potential for paralyzing terror.

A cultural anxiety buffer, consisting of the cultural worldview and self-esteem, manages this potential for terror. The cultural worldview is defined as a set of beliefs about the nature of reality shared by groups of individuals that provides meaning, order, permanence, stability, and the promise of literal and/or symbolic immortality to those who live up to the standards of value set by the worldview.

Self-esteem is defined as one's belief regarding how well one is living up to the standards of value prescribed by the worldview. Because the cultural anxiety buffer is a social creation (humanly created, transmitted, and maintained), individuals are highly dependent on others for its validation and maintenance.

The anxiety-buffer hypothesis states that if a psychological structure (worldview, faith or self-esteem) provides protection against anxiety, then strengthening that structure should make one less prone to exhibit anxiety or anxiety-related behaviour in response to threats, and weakening that structure should make one more prone to exhibit anxiety or anxiety-related behaviour in response to threats.

Self-esteem is negatively correlated with general anxiety, death anxiety, and physical and mental health problems associated with anxiety.

Further support for the anxiety-buffer hypothesis is provided by experiments that have demonstrated that self-esteem threats cause anxiety (e.g., Bennett & Holmes, 1975), that defensive responses to self-esteem threats are mediated by anxiety (e.g., Gollwitzer, Earle, & Stephan, 1982), and that the use of self-esteem defences reduces anxiety (e.g., Mehlman & Snyder, 1985).

(Terror Management Theory and Self-Esteem: Evidence That Increased Self-Esteem Reduces Mortality Salience Effects. *Journal of Personality & Social Psychology*; Copyright 1997 by the American Psychological Association, Inc. 1997, Vol. 72, No. 1.24-36-0022-3514/97/53.00)

#### **A. Integrative Design of Mind & Body Synchronization**

Molecular communication is the interrelationships between the biological, psychological, social and behavioural factors of health and illness. Human beings may be physiological entities, but fundamentally we are a psychological phenomenon, and being aware of this inter-relationship forms a roadmap to facilitate a positive change in another and down-regulate the impact and understanding of negative emotions.

The concept is based on psychoneuroimmunology (PNI), a controversial topic of the past, but with successful findings we have learnt that there is bi-directional communication among the nervous system, the endocrine (hormone) system, and the immune system, and the implications of these linkages for physical health. PNI is not a therapy but a science, which gives us the blueprint for understanding the internal communication and how we may manipulate it to aid healing from within by using tools of hypnosis, psychotherapies, biofeedback emotional intelligence and interpretative phenomenological analysis.

#### **B. Culture-responsive Design**

Cultural mapping is a significant marker also to be considered due to the reason that culture is:

- A body of learned behaviours perceived as state of nature
- Cultural templates shape behaviour & consciousness

#### **C. Cultural Context**

Social process and dynamics, interpersonal and interaction. Culture is for society what memory is for individuals. It is a set of distinctive spiritual, material, intellectual and emotional features of a

society or a social group. It is further expanded by ways of living together, value systems and beliefs:

- It relates to the essence of culture as a medium
- Relates to the relationship between members of culture and their own culture
- Relates to our competency to understand our own culture

Culture encourages people to sustain the symbolic view of security and life of themselves and of the world by promoting a world-view, which conveys that the world is orderly, meaningful and permanent. This symbolic immortality comes through identification with the ongoing culture and lasting symbols, offspring and culturally valued achievements. A rich culture births a satisfied society that in turn fuels the individual's sense of belonging and self-esteem.

What happens when the cultural values and symbols are shattered? Insecurity, conflicts, pain, stress, anxiety, fear and aggression — are the responses.

Cultural differences and our natural models of resiliency and recovery are embedded in the culture we have been raised in, and it plays a significant role in how one verbalizes and cognitively and emotionally performs whether in their own culture or when immersed in another culture.

Stress and anxiety may befall when the two points of cultural map and world-view come into conflict leading to some stress and anxiety or in some cases major impact is felt, and behaviour-action might be formed. All holistic treatments must consider cultural mapping of the patient to create wellness modalities.

The way emotions are verbalized and expressed or not is also culturally ingrained, for example: speech is especially important in the Western cultural context as a means to express and clarify one's thoughts; in contrast, speech is not as valued in the Eastern cultural context. Rather, it is viewed as a distraction to thinking. This suggests that a patient of different cultural background will have varying responses to the way they address their issues to the practitioner. It is the practitioner's responsibility to lead the patient with the goal of recovery beyond cultural factors.

Post-incident follow-up and critical stress debriefing. A truly comprehensive mental toughness training programme includes post-incident follow-up and critical stress debriefing.

Critical incidents produce characteristic sets of psychological and physiological reactions or symptoms (thus the term syndrome) in all people, including emergency service personnel. Typical symptoms of Critical Incident Stress include:

- Restlessness
- Irritability
- Excessive Fatigue
- Sleep Disturbances
- Anxiety
- Startle Reactions
- Depression
- Moodiness
- Muscle Tremors

- Difficulties Concentrating
- Nightmares
- Vomiting
- Diarrhoea
- Suspiciousness

The physical and emotional symptoms, which develop as part of a stress response, are normal but have the potential to become dangerous to the responder if symptoms become prolonged. Researchers have also concluded that future incidents (even those that are more “normal”) can be enough to trigger a stress response. Prolonged stress saps energy and leaves the person vulnerable to illness. Under certain conditions, they may have the potential for life-long after effects. They are especially destructive when a person denies their presence or misinterprets the stress responses as something going wrong with him.

The ultimate goal of post-incident follow up is to build you up and make you stronger and vigilant against any physiological symptoms of stress; any broader issues will have to be addressed separately. Critical debriefing is a talk-through process, it does not involve any “note taking”, “investigation of the event”, “giving operational critique” and “no blaming session”.

This frame requires a multi-component approach to manage traumatic events, it is integrated and systematic.

It is resilience and not resistance, which makes a person “tough” — those individual who knows how to deal with stressors of various base levels and critical levels, perform as high functioning individuals.

#### **D. Biofeedback**

These sensors allow persons to monitor their own muscle relaxation, heart rate, breathing patterns and perspiration and concentrate on changing it through either the visual or auditory information provided by the equipment.

How to create a healthy empowered relationship with anger?

The first step is to realize that it's a vital key to your inner strength. It is important to recognize the value of your emotions and to understand that anger isn't a “bad” emotion. It is a messenger in your life telling you that change is needed. When you honestly feel and deal responsibly with it you'll quickly express and release it from your heart and mind. Then, the energy trapped inside your anger becomes a constructive force offering you untold will power and renewal of your life force. Taking responsibility and allowing yourself to connect with a negative emotion to understand that part of you is the start of re-patterning of your thoughts.

Use your imagination to unhook the negativity from your mind. Research has shown us that within the brain some parts are switched on whether in action or imagination. This is how the body-mind connection works. It is powerful when you use it for personal growth.

Self-leadership is vital to the success of the therapeutic plan, to instil taking control of your life and how to use critical thinking systems helps the patient to use correct form of thinking and feeling where one is taught how to think and how to react to feelings with awareness and responsibility.

Using guided imagery, visualization may also reduce stress, thereby boosting the immune system and helping the body to fight disease. Relaxation response and cognitive restructuring have been shown to effectively reduce stress and relieve symptoms associated with it.

At every step we are using our internal assets and optimizing it's potential, but doing with

awareness instils three things: Knowing who you are today. What you can do today.

**Colour:** Colour antedates civilizations and is both a subjective experience (limbic) and an objective feature of the world. Giving colour to your emotions makes a visual connection, and it is easier to re-pattern behaviour and thoughts when one can see and not just hold an abstract concept of change. Change must be seen and felt for re-patterning brain behaviour and healing. This is done through specially designed modules.

We have a visceral emotive relationship with colour. Just imaging our world to be monochromatic, like all shades of grey, would immediately instigate a dull, aching feeling. Colours transmit distinct physiological, mental and energetic information throughout our system; it is tied to emotion and a physical reality. Learning how to give colour to emotions and responses can serve as a tool, which can be used for cognitive restructuring with the help of an experienced health practitioner.

The analysis of this short study emphasizes the fact that human design is constantly shaped and reshaped through experiential learning. When an individual encounters experiences through situations and makes assessment due to the feelings which arise, this individual goes through a change process but remains relatively unchanged till practice and experimentation of those feelings are challenged and exercised further. The outcome then is based on judgment, an aftermath of reasoning and then assessment of the outcome of that judgment and reasoning set, due to memory tags reinforcing the change within an individual. It is during practice and experimentation when the help of a facilitator might be needed to induce wellness modalities, creating healthy memory tags for future use.

Habits and personality do not cause mental disturbances; however, it's the mental disturbances that often cause unhealthy habits and disorders of personality.

## VI. NUTRITION AND THE BRAIN

### A. Imagination + Motivation + Action

To imagine is to execute an action in your thoughts. Imagination and action are integrated into each other. You must have indulged in mental practice before a game of badminton, tennis or basketball.

From a neuroscientific viewpoint, and brilliantly expressed in the book "Phantoms in the Brain", it has been explained that, when we close our eyes and imagine the letter "a", the visual cortex in the brain lights up as if we were actually looking at the letter "a". Try it and you will know what I mean. Brain Scans show that in action and imagination many of the same parts of the brain are activated. Visualizing can improve performance of any task.

### B. Motivational Neurotransmitters + Nutrition

Neurotransmitters are made from amino acids obtained from the protein in the food you consume. These are the brain chemicals that motivate/sedate/focus or frustrate. The complex interaction is what shifts your mood and changes your mind.

Examples:

1. Dopamine: is important for motivation and to give a sense of readiness to meet life's challenges. Stress and poor sleep will deplete the levels of dopamine.

Dopamine results in:

- Feelings of pleasure
- Feelings of attachment/love

Food Source: Apples, Celery, Chicken, Cucumber, Fish, Green leafy vegetables, Honey, Cheese, Watermelon

2. Noradrenalin: is the other neurotransmitter needed for motivation, alertness and concentration.

Like a hormone it travels in the bloodstream to arouse brain activity.

Noradrenalin results in:

- Arousal, Energy, Drive
- Stimulation
- Fight or Flight

Food Source: Bananas, Almonds, Avocado, Pineapple

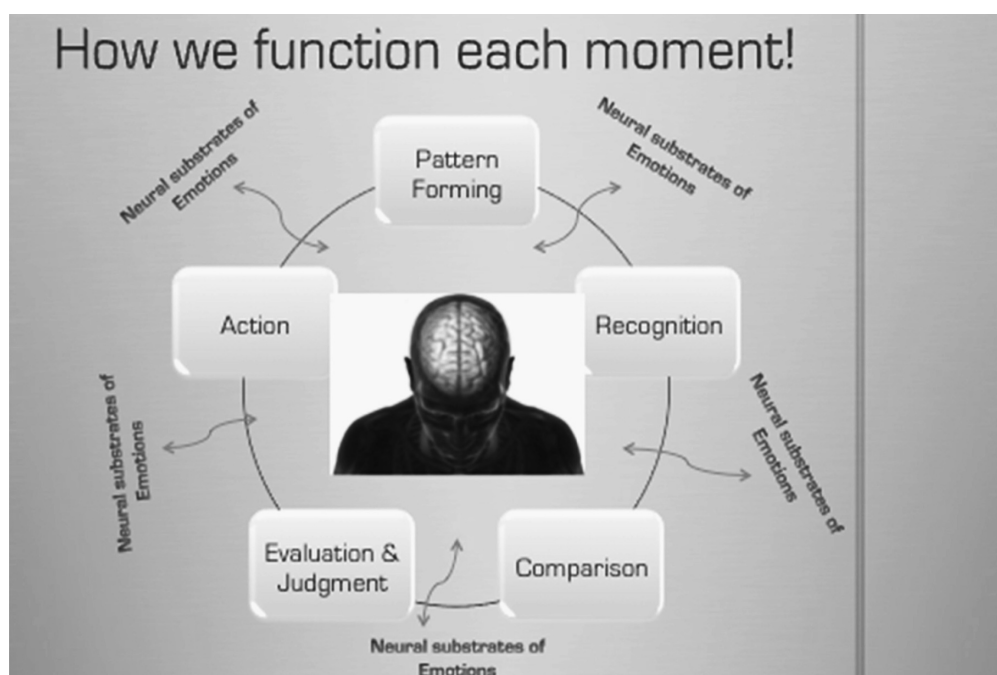
3. Serotonin: Serotonin acts in a variety of ways and is involved in about one quarter of all the body's biological processes.

Serotonin results in:

- Emotional stability
- Reduces aggression
- Sensory input
- Regulation of sleep cycle
- Appetite control

Food Source: Legumes, Milk, Nuts, Pasta, Potatoes, Radishes, Spinach, Tomatoes

There is a vast variation in stress adjustment to adversity from severe incapacitation to resilience to growth. Much research has shown that the brain is geared to grasp negative cues faster than positive adhering to the innate make-up of human survival. So a systematic approach is needed for professionals in the field of corrections regarding emotional regulation, cognitive reappraisal of situations (re-evaluating a situation to change its emotional impact). Positivity is not the pursuit of pleasure or even well-being, but rather involves the states and traits that promote broad thought and flexible action.



The vehicle that the mind and body use to communicate with each other is the chemistry of emotion. The chemicals in question are molecules, short chains of amino acids called peptides and receptors, the “biochemical correlate of emotion.” The peptides can be found in your brain, but also in your stomach, your muscles, your glands and all your major organs, sending messages back and forth.

## VII. APPENDIX

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