

BIOLOGICAL, PSYCHOLOGICAL AND SOCIAL ASPECTS OF SURVIVAL STRATEGIES

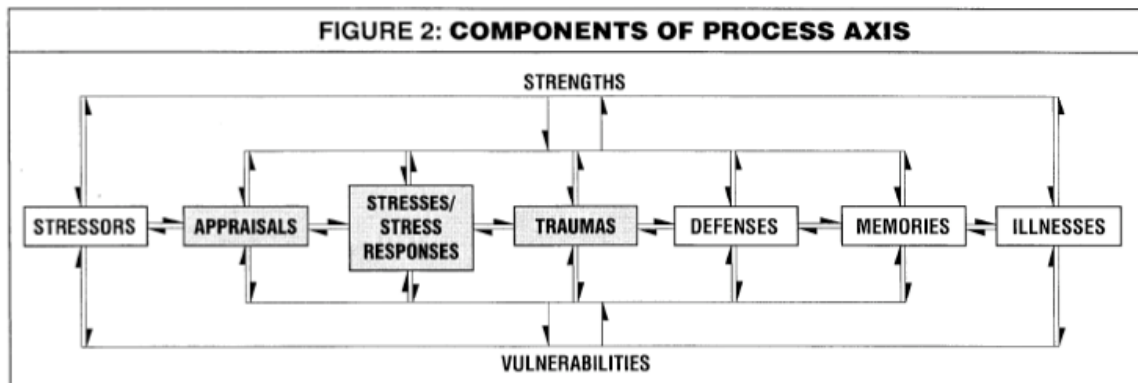
In previous workshops I have briefly described the biological, psychological and social aspects of survival strategies. In this one I want to do so in more detail.

Depending on our specialties, we often forget one or two of biological, psychological and social aspects of our clients. Think of the soldier and the child. Their physical, psychological and social wounds are different faces of their problems. Survival strategies help us to remember each of the biological, psychological and social facets.

We may think of the biopsychosocial human in evolutionary terms as a butterfly. Initially there is only a caterpillar, a worm- let us call that the basic part, the body. Then the butterfly evolved two wings attached to the body. One wing is its psychological wing, the other its social one. Any disruption in any of the three parts of the butterfly affects each other part. Serious dysfunction of any part can kill the whole. We must see each part. In say rape, we cannot just concentrate on the physical, psychological or social wound. We must understand each and deal with them all.

Survival strategies

The following table is a compressed version of Table 1



When we talk about biological, psychological and social responses to stress or traumatic stress, we are not talking minimalist dimensions and proportions.

Intensity of biological responses

For instance, significant circulatory, endocrine and immune system changes occur in the body even with quite minor stress. Blood pressure rises with minor anxiety, winning or losing a tennis match has significant effect on testosterone levels, and even just thinking about exams may diminish immune system function. When we come to extremes of stress, we deal with extreme biological arousals and changes.

Intensity of Psychological Responses

Psychic Pain

When we talk about psychic pain we are talking about the psychological emotional expressions of survival strategies in their stressed and traumatized manifestations.

The following case illustrates the potential intensity of psychic pain.

A patient suffering intense pain from burns to a large part of his body told me how he had been looking forward to his wife's visit. They had not got on well lately, and she had been talking of leaving him. This time, however, he anticipated at least a kind touch, a comforting gesture. She came, and seemed to be angry with him for being a nuisance. She talked about superficialities. As she left without having touched or comforted him, he felt a pain in his heart that was so extreme that he described it as worse than the pains of his burns. Had he had a choice, he would have chosen to pain of the burns ahead of the emotional pain.

This is an example of yearning (attachment) pain.

Intensity of Psychic Numbing

Psychic numbing can be as intense as psychic pain.

A boy saw his family murdered during the Holocaust. As a man he said, "Something tore loose within me as I sank to the floor. The small childish sobs did not come, instead my chest felt crushed." (Kestenberg and Brenner, 1986). His sobs were numbed, as were his responses to all other losses until he thawed in therapy many years later.

Intensity of Social Responses

An employer in a building company helped a fellow Greek immigrant and made him manager. The manager pretended that he was the boss. His inefficiency was ruining the company. The employer was ridiculed by his workmen, "The manager is your boss now." His honour was deeply hurt. Then he discovered that the manager had stolen large amounts of money from him. In fact he was bankrupt. He remembered how his step-father had exploited him and took all his money. That was why he left Greece. He got drunk, drove to the manager's house and shot him.

Let us now do a brief tour of Table 2, noting each survival strategy's adaptive and maladaptive biological, psychological and social features, remembering their intense potentials.

Rescue/Caretaking

Adaptive

We know little about the biological associations of Rescue except that the sex hormones are associated with nurturing.

Psychologically, however, we know that an intense bond develops toward the cared for person. It stems from the chest, which feels convex and wants to fill the concavity of the cared for person. The arms ache to pick up and enfold the needy person, and like a mother who wants to suckle her baby, the chest brims with a desire to give nurturance.

The giving is altruistic. Mothers fight to the death for their babies. A mother might sacrifice herself to save her child falling down the stairs, a fireman or soldier his life.

Maladaptive

The other person may literally feel like a heavy weight on one's shoulders, dragging one to exhaustion and doom. The person is felt to drain, consume, scoop, suck one dry, deplete and empty one.

The response is turning away, pushing away with rigid outstretched hands, neglecting. The parent may scream, hit, abuse the child like the one on the stairs. We may get angry with patients, and turn away from millions starving and dying in Africa.

Attachment

Adaptive

Being held in close physical contact to a bonded person is pacifying and satisfying. So is being held psychologically in the other's gaze and mind. Being cared for and nurtured physically promotes healthy physiological settings that are maintained for life, and they enhance physical growth. Similarly psychological empathy promotes psychosocial growth. Attachment figures spread from parents to teachers, leaders, God.

Maladaptive

The painful pangs of yearning, like in the burnt man, are felt as an emptiness in the chest searching for one's bond partner, the other half of one's jigsaw puzzle. One's physiological settings are awry. Opiates are low, ACTH and cortisone are elevated and immune system is depressed, making one vulnerable to infections, allergies, autoimmune diseases, diabetes and cancers may results and later cancer.

Suppressed separation screams may present as breathing difficulties. Lack of proper feeding may contribute to a variety of digestive diseases- indigestion and ulcers. Urticaria, neurodermatitis and eczema have been associated with separation traumas.

Psychosocial dysfunctions include relationship and sexual problems, anxieties of aloneness eg agoraphobia. Lack of recognition as a person and lack of psychosocial attunement may contribute to anorexia nervosa, borderline personalities, and a deadened personality with a false self.

Jim, a psychotherapy patient with a borderline diagnosis had a chronically depressed mother who rejected him emotionally from birth. He developed a state of 'anxious attachment'. Whenever he attempted to genuinely progress in life, he suffered severe anxiety, agitation, loneliness, and sense of alienation.

Assertiveness/goal achievement

Adaptive

Whether in hunting, combat or work, the sympathetic nervous system is mobilized. Mental alertness, decisiveness, strength, and energy are paralleled in physical alertness and strength and social high morale and drive to goals and success. An inner sensation in the chest of strength, elation, fullness and energy radiates throughout the body into one's environment.

Maladaptive

Excessive, frustrating, demoralizing effort leads to intensified sympathetic arousal. This arousal can affect every system in the body. Muscular body tension is common and can manifest as back, neck and chest pains. Chronic tension and sympathetic arousal are accompanied by raised blood pressure, adrenaline and possibly adrenaline, glucose, cholesterol, and fatty acids, and

decreased blood coagulation time- all of which can contribute to coronary heart disease and strokes.

A 58 year old factory owner had channelled early anger to his abusive father into working ten to fourteen hours a day up to seven days a week. He exhibited a typical Type A behaviour pattern - (TABP). With the recession he worked even harder. When he discovered that his factory was on the brink because his partner had stolen money, he developed chest pain. Soon after the man's mother, his prime emotional support, had a sudden stroke. The chest pain became worse and angina was diagnosed. Three days later his mother died, and he developed a myocardial infarct. Throughout this process the man worked ever harder, to no avail.

Psychosocial end results may be demoralization, exhaustion, and burn-out in helpers.

Adaptation/goal surrender

Adaptive

Even just thinking of something sad evokes parasympathetic nervous system activity, increased cortisol secretion and suppression of immune system competence.

Psychically the pangs of grief felt in the heart are extremely painful, like surges of love severed along love bonds. The heart feels wrenched, torn and wounded. Missing is an acute emptiness in the heart. Sobbing and weeping bathe the wound and help healing. Mourning rituals with social participation heal the social wound.

Maladaptive

Grief and mourning are blocked. Parasympathetic symptoms include tiredness, dizziness, nausea. Excess activity of the vagal nerve may produce low blood pressure, arrhythmias and even sudden death.

Acute or chronic despair can also be fatal. Bettelheim said that 20%-50% of people gave in concentration camps and died "just through a loss of desire to live." Frankl, another concentration camp survivor said (1959), "The sudden loss of hope and courage can have a deadly effect."

Blocked grief can lead to traumatic griefs. Chronic grief is where the person keeps everything exactly as was just before the loved one's death. Inhibited

grief is where grief is suppressed, though unexplained crying may emerge. Conflicted grief is full of anger and guilt toward the dead.

Depression is another result of traumatic loss, with its sense of darkness, weakness, and hopelessness. Immune system incompetence associated with raised cortisol levels is thought to be the reason why there is a very high increased mortality and morbidity among bereaved people.

Let us not forget social illnesses. Maladaptive adaptation can lead to delinquency in children (Raphael, 1984), shoplifting in women, accidents (p 55, 56), promiscuity, pregnancy and premature marriages, alcohol and drug taking. Suicide may be the final way out.

Fight

Adaptive

The sympathetic system is highly aroused and the HPA (hypothalamic pituitary adrenocortical) axis is inhibited.

Threats which indicate a Readiness to fight are associated with anger, and a sense in the chest like a glowing red furnace radiating energy into muscles that are ready to attack.

Revenge is a smouldering furnace that can ignite at any moment and relieve the pressure.

When in a corner or weak excretory fluids may be used to attack.

While reliving a sexual attack, a patient felt nausea and a need to defaecate. She also coughed up phlegm which accumulated in her lungs.

Maladaptive

Highly aroused sympathetic nervous system contributes to similar illnesses as in maladaptive assertiveness. Many hypertensives are sensitive to danger and malevolence in others, while prone to explosions of rage themselves (Weiner, 1977b). Similarly, high hostility tests predicted premature mortality and coronary heart disease.

In the emotional arena, hatred may be felt as a great turmoil in the chest and a twisting of the gut that requires riddance of the feelings and of those who evoke them.

Without a doubt, the social illnesses of this survival strategy are the most virulent. Danger is seen in ever widening circles, and in symbols of the enemy. Destruction has to be greater in parallel with these perceptions.

Further, physical killing is not enough. The mind and soul have to be killed too. This is achieved by selective killing, terrorism and torture (Simpson, 1993), mass killings and genocide, and attacks on the dignity, fabric and sacred institutions of the enemy. This explains the humiliation inflicted on them, and the attacks on their religion, literature, and even graveyards.

Flight

Adaptive

Flight's aim is to remove oneself from danger. Fear is its great motivator emotionally, and the sympathetic nervous system physiologically. This is accompanied by similar accompaniments to fight and assertiveness, eg decreased secretion of cortisone.

[[Because flight is most closely related to PTSD, many other physiological correlates have been explored. For instance, it is thought that dopaminergic activity, β - endorphin, serotonin, curare, carbachol and excitatory amino acids may facilitate Flight and freezing behavior. Alcohol, benzodiazapines and GABA may ameliorate its fear and anxiety (Dixon & Kaeserman, 1987; Panksepp, 1989b).]]

While Fight is red and hot, *fear* is yellow and cold. Avoiding enemy attack is associated with trembling, weakness, knees giving way, muscles turning to jelly. In this case, cortisol may be secreted. Alternately, the body is frozen still, ready to flee if the opportunity arises.

Maladaptive

In full flight, terror is the main emotion. If in reliving escape is uncertain, the person feels anxiety and panic. Sensations are palpitations, one's heart being ready to burst or being in one's throat, chest pain, pressure in the chest, inability to get breath and hyperventilation. Hyperventilation can reproduce a wide array of psychophysiological symptoms (Lum, 1975). Hence anxiety is a common differential diagnosis for many somatic symptoms and is a recognized factor in the amplification of symptoms in many organic illnesses.

When terror is symbolically displaced on to the body, it is called **somatization or conversion hysteria**. When it is focused on objects and places it is called **phobias**. If focused on people, it is **paranoia**. If the terror is of thoughts and compulsions, they may be obsessively and compulsively avoided by substitute thoughts and actions. This is called **obsessive-compulsive disorder**.

Let us clarify some commonly used terms. *Arousal* is a general alerting signal, but is commonly applied to Fight and Flight (Öhman, 1993). *Fear* accompanies flight, and in its intensity it is called *terror*. *Frozen terror* is fear that cannot lead to movement. *Fright* refers to short term surges of frozen terror. *Startle* is terror or fright which arises unexpectedly such as in sleep. *Anxiety* refers to fear from an uncertain source.

Competition

Adaptive

Testosterone is sensitively correlated with status and hierarchy in animals and in winning and losing in humans.

The desire to win is felt as a covetousness in the chest that can only be satisfied with the prize. Victory is felt as a triumphant exhilaration swelling in the chest that radiates to the whole body, making it feel large and tall. There may be an impulse to beat one's chest and let out a triumphant roar. There is a comfortable enjoyment of the prize, but a need to share it down the line.

Status and position in the hierarchy may be enjoyed wherever one finds oneself. A lowly person may be pleased to not have the responsibility of power and wealth, and to have leaders who worry about his affairs. The cost is appeasement and deference. But even a servant may value being a good servant.

Maladaptive

Along with maladaptive fight, this maladaptive survival strategy has caused many of the world's problems.

Defeat is sensitively correlated with low androgens and high ACTH and cortisone levels. Immunocompetence is compromised in defeated animals who may die of infections.

In defeat the chest feels oppressed and collapsed, filling the space where the prize should have been. The body feels shorter and smaller, such a self-image may lead to a spiral of defeats. Psychological crushing may be experienced if the winner gloats and "puts the boot in".

Strains in hierarchy lead to greed, jealousy and envy. *Greed* is an insatiable craving, a gnawing inner void, which no amount of grabbing, sucking and devouring (Segal, 1975) can fill. Greed for food is called gluttony, for money avarice, for sex lust. *Envy* is a torment of spite and vindictiveness in the chest or gut, likened to venom or an acid which if not hurled at the

envied person corrodes oneself. *Jealousy* may be special form of envy where a rival possesses a love object and envious feelings are turned on the rival (Klein, 1975).

Exploitation of power at the expense of those lower in the hierarchy has been common unfortunately in human history. Intimidation, terrorization have been used to extract more power and wealth, as well as to feed vanity and lust. Kings have waged wars on the basis of envy, and nations have conquered weaker ones in order to exploit them. Revolutions and colonial wars have resulted, but many weaker peoples have been eliminated.

Cooperation

Maladaptive

In this case I will highlight maladaptive Cooperation first, because I want to finish this workshop on a positive note.

We know little about the physiology of sexual and relationship abuse.

Betrayal, which may be in the nature of abuse of trust, broken promises, or unpaid debt, may be felt as a piercing in the heart, or a stab in the back. Abuse is the coercive, destructive exploitation of the love and creativity of another being of another. The sexual abuse of a child by a parent is most soul destroying.

Seduction, lying, stealing, cheating, broken promises are corrosive of love and bonding and disconnect bonds and the glue within people. Without psychosocial coherence and meaning one experiences alienation. Albert Camus described in *The Outsider* a world without significant emotional bonds, love, enjoyment or creative thrust. One lives a counterfeit life, which one may try to pierce through drugs, cutting oneself, sex and violence.

Relationship and sexual problems flood mental health clinics, and divorce courts. Childhood sexual abuse precedes almost all psychiatric disorders.

Adaptive

Opiates and serotonin are likely to be involved in social affiliation. Sex hormones are active in sexuality.

Among the most cherished of human aspirations is the growth of trust, generosity and love.

Generosity is felt as a fullness in the heart needing to be shared through hands and body; "...a centrifugal act of the soul in constant flux that goes

toward the object..” (Ortega Y Gasset, 1959, p 20). Giving increases one’s own wealth. As Shakespeare’s Juliet says,

My bounty is as boundless as the sea, my love as deep;
The more I give to thee, the more I have. (Shakespeare.
Romeo and Juliet, II:133)

Love is also a feeling of fullness in the chest often referred to the heart. An ache reminiscent of an overfilled breast may carry the person to the beloved with a readiness to give them one’s heart. Reciprocated love provides excitement, happiness, tenderness, pleasure, a sense of health and inner and outer glow and unbounded future (Christie, 1969, Liebowitz, 1983). It may also provide a sense of union, safety, exultation and transcendence (Hatfield & Rapson, 1993). The initial intense bonding or falling in love mellows to affection and companionate love (see below).

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From the mutual sea of gifts and love arises *creativity*. Y Gasset (1959, p 11) said,

Nothing is so fertile in our private lives as the feeling of love...Many things are born out of a person’s love..like the harvest from a seed..

Summary

You will have noticed that I have described the biological, psychological and social aspects of survival strategies sometimes separately, sometimes together. They are inextricably combined, like the three faces of a single pyramid. This overarching view has been called biopsychosocial.