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EUROPEAN INTEGRATION
REALITIES AND PERSPECTIVES

New Trends in Psychology

Cognitive- Behavioral Interventions in Depressive-Anxiety Disorder. Case Study

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Abstract: In this paper I used methods specific to cognitive-behavioural psychotherapy in solving a case of *depressive-anxiety disorder with panic attacks*. Cognitive-behavioural therapy (CBT) is a form of problem-focussed psychotherapy, with obvious results centred on ameliorating or curing neuropsychotic (nervous diseases) or psychosomatic symptoms (relating to the mental origin of certain diseases). After a nine-seat sessions, the patient's condition is greatly improved, panic attacks decreased as frequency and intensity. I have noticed in my patient's evolution that depressive symptomatology has been reduced by reducing the anxiety symptoms. I told him that there might be panic attacks, but that this is irrelevant to the idea of reoccurrence of the anxiety disorder. It is good to interpret the possible panic attack as an event from which to learn something - to analyze it, to think about what it has caused.

Keywords: Depression; anxiety; panic attacks; rational/irrational beliefs; cognition; behaviour; self-confidence

Introduction

Psychotherapy is based on the assumption that, even in the case of a somatic pathology, the way the individual will perceive and evaluate his condition as well as the adaptive strategies he uses, plays a role in the evolution of the disorder, and these strategies will need to be modified if we want the disease to evolve favourably. Based on any psychotherapy is the belief that people with psychological problems have the ability to change by learning new strategies to perceive, evaluate and behave.

According to psychology specialists, Cognitive-Behavioural Therapy (TCC) is a problem-focused form of psychotherapy with obvious results centred on alleviating or curing neuropsychological (nervous diseases) or psychosomatic symptoms (on the mental origin of some diseases).

This psychotherapeutic school combines two therapies: *cognitive* and *behavioural*.

In the cognitive-behavioural therapy, special emphasis is given to cognitive and attitude restructuring techniques. The basic principle of therapy starts from the fact that the way a person behaves is determined, first of all, by the way that person interprets the immediate situations. I will present a case study in which I have used methods and techniques in the field of cognitive-behavioural psychotherapy.

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Case Study

Case M.M. – *Depressive-anxiety disorder with panic attacks*

Session. I. Brief description of the problem:

M.M. is a sales agent, aged 39, higher education. The diagnosis I have identified is depressive-anxiety disorder.

Description of symptomatology

Depressive-anxiety symptomatology:

- *palpitations*;
- *dizziness*;
- *feeling faints* (I feel I'm going to fall on the street);
- *general malaise*;
- *insomnia* (constant and they consist in falling asleep and early awakening, unassuming sleeping);
- Feeling of chronic fatigue and drowsiness ("I do not have strength to do anything");
- *moments of sadness* (weekly occurrence);
- *idea of personal devaluation* – the patient is convinced that "the end is near", saying "I do not think I will live much longer, I no longer have a lifetime, no longer use to anyone";
- Inability to focus attention (patient cannot concentrate enough, gets tired very quickly);
- lack of hope (by going to a lot of specialists and not solving the problem, the patient has come to assess the present situation as being out of the solution).

The **onset of the disease** is about 2.5 years ago.

The frequency of panic attacks: Panic attacks occurred every two days, which caused him to isolate himself at home for fear of "not getting ill" or not having a heart attack. Isolated in the house and avoiding to go out alone (even at shopping), the incidence of panic attacks has dropped to 1-2 times a week. But in the last two or three months, they began to appear in the house as well. From the point of view of the level of activism, the following important aspects can be highlighted in the dynamics of therapy: *loneliness, apathetic-passive social withdrawal, lack of social contacts; excessive centering of the person on his/her own health problems; non-involvement of the person in other activities.*

Avoidance behaviours:

-To the question, "What did you quit to do or where you've stopped going because of your problem," the patient replies, "I'm not doing anything anymore, I'm not going anywhere, or going to clubs, discos." The patient has adopted a social withdrawal, has given up any exit to avoid a recurrence of a panic attack. He tries not to make an effort, not to leave the house, not to get tired in the idea that he is "sick of heart" ("I'm afraid to have intimate relationships for fear of not having a heart attack"), this way he was actually trying to protect himself.

Medical and psychiatric history: In the past year, several cardiac examinations have been performed (each time the ECG has gone good), and no cardiologist has been given a specific treatment, the patient fails to explain this and tends to put all his health problems on account of a "heart disease".

Beliefs about problems: As to the patient's belief about his problem and the possible causes of the problem, the patient can not explicitly formulate a particular cause, rather making a vague reference to a cardiac affection.

Engagement, motivation: The level of self-knowledge is weak, verbalization is poor, and identification of the main stressors is poor. This is a state of confusion about the state of illness. The patient declares to be very motivated to get rid of this problem.

At the end of this first session, I considered very important that the *diagnosis be clearly formulated and explicitly communicated*. Thus, the confusion of the patient (fed by the belief that it is a „very special” problem will be reduced.) Moreover, for the success of the therapy I considered very important the clear communication of the costs of the therapy and of a positive prognosis (to motivate the patient and anchor him positively), which could result in greater involvement in the therapeutic process and avoidance of a passive attitude towards the therapeutic process. I communicated the results of the psychological evaluation and diagnosis established at the end of the first session and I told the patient that it was an anxiety disorder, which it was not about “heart problems” but about panic attacks, in which case I proposed the following:

Reducing panic attacks

- by approaching them on the following sessions (implicitly a reduction in the degree of cognitive and affective dissonance, by explaining anxiety and panic attacks);
- identifying and modifying negative cognitions and negative automatic thoughts;
- providing tools to fight panic attacks (a complex of physical exercise, breathing and relaxation, a well-established and respected program);
- inducing better body and affective/emotional control;

Addressing depression reactions

- organization of the patient's social context (currently lacking positive reinforcements);
- assertive training;
- a program of sustained daily activities (to reduce retirement and isolation trends).

Improving self-image and increasing self-confidence by suggestive techniques (the Schultz exercise at the end of each session, and in this exercise I also included organospecific formulas for better body control)

Session no. 2

First, in this session I chose to make the patient differentiate panic attacks from heart attacks.

The objectives of this session were the following:

- Awareness of mechanisms involved in panic attacks;
- Setting strategies to deal with panic attacks;
- Identifying the automatic thoughts, evaluations that trigger panic attack

The first step in this session was to explain to the patient what was happening physiologically during a panic attack, to emphasize that it is not an “irreversible” heart rhythm disorder (it is not a cardiac disease), but a reversible one (as in situations where we feel a strong fear or we are very tired).

I explained that the panic attack cannot cause a heart disease or a heart attack, especially considering that all cardiac examinations did not detect any cardiac condition (this was a great benefit in therapy), meaning that he has got a healthy heart (I emphasized this idea). He denied, but yet he said he was so dizzy that he felt he would faint. I have denied this dysfunctional assessment by telling him that the physiological processes involved in fainting are exactly opposite to those in the states he was experiencing.)

I explained the patient that during a panic attack, the heart beats faster, which is why the blood flow is accelerated, while in the faint states the opposite happens, the blood pressure decreases. There will not be a fall in the legs and will not hinder the movement, although he feels that this would happen feeling the soft feet and dizziness. I told her that he felt that way because a large amount of adrenaline was discharged into the body, causing limb vasodilatation to produce a feeling of muscle weakness (I compared it with intense fears).

I told my patient that panic states are alert states in which our body enters when we are in a dangerous situation, and adrenaline discharges have the potential to give us a “surplus of energy” to overcome the danger. It is only in the panic state that there is no real, objective danger, but rather a mistaken assessment - such as “I’m going to infarct” or “I’m going to fall away.

On this session, I set out the tasks to be done daily the following week:

- *Daily walks in the park (monitoring the states that the patient would feel)*

- *To accomplish a program of daily activities* (through which I aimed to install an anxiolytic effect - to reduce the impact and incidence of unexpected events and to imprint a steady rhythm to avoid the occurrence of agitation:

- Clear definition of daily goals and priorities;

- Establishing an order in performing the tasks;

- Fulfilling one task at a time and trying to complete it before the start of another;

-gap between activities;

At the end of the day I asked the patient to remember how many problems he had solved and to provide himself a reward;

Program organization in such manner to exclude the passivity periods.

I suggested the patient to eliminate the passivity hours in which he remained inactive, doing nothing, thinking about his health and what he could do on that day, told him to think that his disorder was psychological, and these periods of inactivity will feed him endlessly and that we have to break this “vicious circle.” We ended this session with a relaxing Schultz exercise, at the end of which we introduced suggestions for the strengthening of the Ego as well as organospecific and intentional formulas – “my heart is healthy, my heart works by itself, I will overcome these states, it’s nothing but anxiety, which I will manage to overcome”). My patient responded very well to this exercise, entering the relaxation state. Asking him how he felt, he responded that he felt very good. I told him that from now on he would feel better and better, it is just a matter of time until panic states disappear

Session no. 3

During previous sessions, I noticed a type of high breathing (clavicular) on my patient, suggesting him that on this session I would make him aware of this fact and cause him to “reeducate” in this regard. On this session I planed to explain the importance of breathing and relaxation in reducing the intensity of

anxiety states and reducing panic attacks. My attempt is to empower my patient and to induce him an anxiolytic exercise system - a type of breathing (relaxing) and also relaxing method that can also be enjoyed outside of psychotherapy sessions.

Starting with this session, I told my patient that he would have tasks to perform like abdominal breathing (diaphragm) and progressive muscular relaxation exercises (Jacobson). The exercises' frequency will be 2 times a day. Asking him how he felt in the previous week, he replied, "I guess, I felt more peaceful!"

I started this session evaluating the tasks my patient had to accomplish in the previous week. He told me he walked, but only twice, because he was afraid something could happen. I asked him what could happen? He replied "It scares me that my heart is starting to beat faster, I'm afraid something could happen when I'm moving!" "It's natural to beat faster, just make physical movement", "And if I do a heart attack?", "Physical movement does not hurt anyone, but it strengthens the body. Cardiac patients, daily walk, a set of daily exercise are recommended. I tell you this though you are not cardiac, the more these exercises cannot hurt you. Your problem is not organic, it is psychologically conditioned! Physical movement will only help tone your body and strengthen your immune system!". "For your healing, it is important to realize that this is a misinterpretation of a physiological reaction that has no relevance in terms of affecting your longevity or health!"

We continued the session by doing an exercise of abdominal breathing (telling him this would have a relaxing effect), teaching him to do abdominal breathing exercises as many times a day as possible with a time limit (minimum 10 minutes) and also a Jacobson exercise.

We did a Jacobson relaxation exercise, watching how each body segment tightens and relaxes, and I told him he had to do this exercise three times a day after the breathing exercises. For better patient motivation, I told him that these two exercises are essential in combating panic attacks. Further on the current session, I set up with my patient what he had to do when he thought a panic attack would trigger:

Breathe abdominally - while I am telling this in my mind I breath abdominally, this will help to establish a state of physical relaxation and psychological association;

Not to resist the panic attack, to let the body get out of it, nothing will happen - I wrote on a file that I gave him at the end of the session the following suggestions to use: "I don't resist my states, I let them down, it will not take more than 10 minutes. The condition will be released and I will feel much better. If I resist, I will only emphasize the negative state and make it last longer. I'm letting myself go with the flow, everything will go much faster if I do not resist. I let time pass - If I'm still, the discharged adrenaline will be metabolized within 5 minutes and I will feel much better".

To live the present -I focus on an object around - If it happens in the house I try to do something simple (I read a newspaper, I watch TV, etc.) or number from 1000 to 1 out of 7 in 7; if it happens to me outside the house, I try to talk to someone, but not on my own.

Manage positive suggestions - nothing will happen, the state will be consumed without anything happening; I told my patient that every time he experiences panic, he will follow these steps and notice that the panic attack will diminish in intensity. That is why he must not avoid them, but on the contrary overcome them all, doing so will speed up his recovery. Avoiding panic-stricken situations will strengthen the vicious circle in which it revolves (I explained this idea to his case - his isolation in the house led to the installation and reinforcement of panic attacks). I continued then to do the Schultz relaxation exercise. The patient feels good after these exercises.

In this **session**, thinking that my patient better understands what anxiety and panic attacks are, and that he will better understand the consequences of his condition, I tried to re-explain anxiety and panic attacks. Asking him how he felt in the previous week, he answered, "I felt much better. It's like I'm not really so scared. I'm trying to think about how you told me and I'm going over them!"

I started this session by evaluating the tasks my patient had to accomplish in the previous week. He told me that this time he made the walks in the park (but not all, on some days he seemed "not in the mood", I told him that the lack of mood is part of the same vicious circle we try to break), being able to pass much better over the fear of "not feeling anything at heart". I've been trying to reinforce the idea, "You'll never do anything, nothing will happen to your heart," "It's natural for heart rhythm to become stronger when we do more exercise or feel a strong emotion." The patient went out to the market, each time unaccompanied, and each time the panic states tried to settle, but he did the steps we set up and managed to cope with. It is important that he realizes that nothing is happening by himself, that the heartbeat is calming for itself.

I tried to play a supportive rather than interpretive role. The improvement achieved gave hope to my patient and increased the therapeutic alliance. I have tried to emphasize these states through formulas such as "you are on the right track, from now on, it is only a matter of time, everything will be fine!" Prior to the Schultz relaxation exercise, I set out the tasks to be done daily in the next week:

- Daily walks (on foot and accompanied - minimum 30 minutes);
- Abdominal breathing exercises (with time limit- minimum of 10 minutes, minimum 3 times a day before the Jacobson exercise);
- Jacobson Progressive Muscle Relaxation Exercises (3 times a day);
- Contacting former colleagues to establish a meeting.
- I ended up with a relaxing exercise Schultz.

Session no. 5

I started this session re-expressing my mechanisms involved in the panic attacks setting in, underlining that, although I do not resist my states, I can replace catastrophic interpretations by positive self-suggestions ("nothing will happen, everything will be fine"); Instead of focusing attention on the inside of the body, it can focus attention on anything else (around). To avoid suppressing anxiety as a condition by my patient, I tried to redefine the state of anxiety by saying that anxiety is an essential energy state for survival, that it exists in all people, except that when it exceeds a certain limit it becomes harmful ("everything that is too much, ruined).

I partially took over a formula from the Higgins hypnotic intervention: "Like any other form of energy, anxiety can damage too much, so it can be used optimally, you cannot be anxious without being a person with a lot of imagination, people with no imagination rarely experience anxiety; therefore, anxiety is not a totally negative state, it must only be controlled, which you have begun to do!"

I considered very important for him to understand that these states can be controlled, that they do not simply discharge, and that he does not passively participate in these states.

The effects of this control can be seen by themselves - attacks have decreased in intensity and frequency since he has a strategy of fighting against them (I have tried to use this improvement as a positive anchor in therapy and make my patient get he feels responsible for the progress he has made).

Tasks to be performed daily the following week remained the same:

- Daily walks (on foot and accompanied - minimum 30 minutes);
- Abdominal breathing exercises (with time limit- minimum of 10 minutes, minimum 3 times a day before the Jacobson exercise);
- Jacobson Progressive Muscle Relaxation Exercises (3 times a day);
- Contacting former colleagues from work, high school/faculty to establish a meeting;

From the evolution of my patient up to this session, it can be said that lack of hope, the uncontrollability of body feelings (accompanied by feelings of renunciation) and negative expectations as depressive (associated with panic attacks) have diminished. I concluded this session with a relaxing Schultz exercise.

Sessions no. 6, 7, 8

I considered my patient's evolution was good, and he was on the right track, so I opted for a supportive approach, running the next two sessions only with accompanying exercises without trying a significant recall of my patient's thoughts and states. In these **sessions**, I focused on supportive formulas ("you are on the right track, your condition will be greatly improved, etc.") and on relaxation exercises. I communicated the decision to terminate therapy (as a result of the very good improvement of his general condition) at the end of the eighth session.

Session no. 9

This is the last session (patient's condition is greatly improved, panic attacks are reduced as much frequency and intensity), for which I have proposed to be more supportive, and try to induce my patient a state of optimism.

I considered that the general therapeutic objectives were achieved; the most important is that the premises were created for their better realization. I have noticed in my patient's evolution that depressive symptomatology has been reduced by reducing the anxiety symptoms. I considered that although my patient's condition was not completely improved, he was on the right track, and he can now manage his own states (he also became aware of most aspects that influence the emergence and evolution of panic). I thought that in this session I would prepare him for the eventual relapse. I tried to resign the possible panic attacks that may occur. I told him that there might be panic attacks, but this is irrelevant to the idea of reshaping the anxiety disorder. It is good to interpret the possible panic attack as an event from which to learn something - to analyze it, to think what exactly has caused it.

I resumed the formulas to strengthen control and to emphasize the absence of danger – "For your healing, it is important to be aware of the absence of danger. Now you know that this is not about a weakening of your heart, but just about a misinterpretation of a physiological reaction that has no relevance in terms of affecting your longevity or your health." I tried to emphasize these states through formulas such as "You are on the right track, from now on, it is only a matter of time until panic attacks are gone, everything will be fine. From now on, you know what to do."

I told him that the tasks he had to accomplish daily during psychotherapy are good for him to continue to use, because they have certain advantages, regardless of whether the anxiety states have disappeared (the advantages are psycho-physical relaxation, preservation of a good psychic tonus, much healthier breathing, better oxygenation of the body, etc.). I used the following tools:

Cognitive level:

1. Dysfunctional Attitude Scale (DAS);

2. Attitude and Belief Scale, (ABS -II);
3. Automatic thoughts questionnaire (ATQ).

Personality structure:

1. Eysenck Personality Inventory (EPI);
2. Defensive- coping mechanisms (B-Cope).

Subjective affective level:

1. The profile of the emotional distress (PDE);
2. Beck Depression Inventory.

Bibliography

- Beck, A.T.; Freeman, A. & Davis, D.D. (2004). *Cognitive herapy of depression*. New York: Guilford Press.
- Dryden, W. & Di Giuseppe, R. (2003). *A practioner 's guide of rational emotive behaviour therapy/Ghid de terapie rațional-emoțională și comportamentală*. Cluj-Napoca: ASCR Publishing house.
- David, Daniel (2006). *Clinical Psychology and psychotherapy/Psihologie Clinică și psihoterapie*. Iași: Polirom Publishing house.
- Holdevici, I. (1998). *Psychotherapy elements/Elemente de psihoterapie*. 3rd Edition. Bucuresti: BIC ALL Publishing house..
- Schultz, I.H. (2011). *Autogenous training, Concentrated self-relief - Clinical-practical presentation/Antrenamentul autogen, Autodetensionare concentrativă –Încercare de prezentare clinică-practica*. Trei Publishing house.
- (2000). *Manual of Diagnosis and Statistics of Mental Disorders/Manualul de Diagnostic și Statistică a Tulburărilor Mintale*. DSM –IV-Tr.



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The Spoken Language and Our Brain

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Abstract: One of the main characteristics discriminating the man from animals is the spoken language. Once the man acquired this ability to express himself by words he is then able to do this in different pattern languages, such people are called polyglots. Our brain is such a powerful machine, to a certain degree we follow the same development course as animals in terms of breathing, eating, walking but higher on the evolution scale the man achieved this higher level of communication by words. Language, i.e. spoken language, is a complex communication system consisting in speech-sounds combinations expressed by words. Assembled correctly, to specific and coherent patterns words create then sentences which result in ideas and thoughts. Human nervous system plays a huge role in facilitating this communication function. How do we do this? Is that a mystery or a predictable pattern that our brain creates to code and decode spoken language?

Keywords: Language; brain; neuron patterns; phonemes; sound; communication; nervous system; cortical structures

Language- the Miracle of Speech

Our brain is genetically predispose for language, while writing is an optional skill, spoken language is the main form for communication. Toddlers have a genetically predisposition for spoken language, whereas for other skills like eating, dancing they need special assistance.

What scientists mean by genetic predisposition? It means that long before walking or sitting babies start uttering different sounds or babbling incoherent sentences, around the age of 2-3 months. The miracle takes place about age of 8 months when babies succeed to articulate the magic word “mama” or “dada”. The “big bang” of the language universe when the language centers of the brain became active occurs soon after the birth. It is very interesting that this window for acquiring the spoken languages tapers off for the first time around the age about 5 years, then again around the age of 10 to 12 years. Scientist revealed that beyond that age learning any language becomes more difficult.

Human beings are born with this language instinct which is very strong so that in the absence of the spoken communication some toddlers invent words, whereas others become very affected by this lack of human spoken interaction and die. Human being is a social being who needs interaction with other beings, and one the most wanted interaction is the verbal one. People need to express themselves and language is one of the most fascinating ways of expression as words carry emotions that lead to thoughts which create out reality.

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So spoken language is a huge accomplishment in many ways, actually language is a complex system not only at a semantic level but also at a neuro-cognitive level. If we think of words as a trigger to our memory we can understand how powerful the words are, they can lock and unlock many drawers in our brain.

Cognitive neuroscience has revealed a deal of how the brain acquires and process spoken language. The neurons in a baby's brain can respond to sound of all the languages on this planet. This could explain our predisposition for the all the languages not only to a specific one like our mother tongue. Studies revealed that adopted babies acquired the language of the adoptive parents not the biological parents in cases where both languages were substantially different like Chinese and English. Why is that?

At birth, newborns respond first to the rhythm, cadence, pitch-off of their mother's voice, not the words. Language is a system including among others minimal units of sound, that we call phonemes which combine to form syllable. The number of phonemes in the entire world's languages is more than 200, representing the maximum number of sounds that human voice apparatus can create, not counting changes in pitch and volume (Sweeney, 2009).

Although the infant's brain can perceive the entire range of phonemes, only those that are repeated get attention, as the particular neurons reacting to the unique sound patterns are continually stimulated and reinforced. The mother helps in this process by speaking in slow, lilting tones with exaggerated emphasis. This precise enunciation is found in all cultures and is called *parentese*. By the age of 10 to 12 months, the toddler's brain has begun to distinguish and remember phonemes of the native language and to ignore foreign sounds. For example, one study showed that at the age of 6 months, American and Japanese babies are equally good at discriminating between the /l/ and /r/ sounds, even though Japanese has no /l/ sound. However, by age 10 months, Japanese babies have a tougher time making the distinction, while American babies have become much better at it. During this and subsequent periods of growth, the ability to distinguish native sounds improves, while one's ability to distinguish nonnative speech sounds diminishes (Cheour et al., 1998; Yee, 2007).

The Language and Thinking

There is a strong relation between language and the act of thinking. Of course language is an interface that fosters the thinking process. Our brain is a magic machine that processes lot's of data almost instantaneously. There is a huge difference between written language and spoken language in term of patterns recognition. In case of the written language the brain recognizes the letters, words meaning but the process is more profound for the spoken language as our brain has to work harder. If for the written language the brain could recognize the spaces between words giving the sentence the proper meaning in the spoken language people don't pause between words when speaking and yet the brain has to recognize the difference between, for example, "greenhouse and green house" or the difference between "sea horse" and "see horse", such operation being related very much to thinking.

Every nanosecond we receive a huge bunch of information through our senses and the language is one of the tools coordinating this chaos and storing information in separates compartments. It's the brain who organizes categories and concepts. The great linguistic Noam Chomsky is sure that language was not created for communication but for thinking, and communication is a secondary outcome of the information received.

How the Language is computed in the Brain?

Sapir Whorf hypothesis is that language systematically influences how one perceives and conceptualizes the world. Language as previously mentioned is a complex system consisting in words, rules, syntax, morphology, phonology, etc. All these microsystems connect to each other helping us to understand the language coming from others and also to produce the same language that others understand us. In other words, when we spell a word, table, for instance, we don't focus on spelling the word, sound by sound, rather than remembering the image of the meaning of the specific word. This is the field where semantic memory plays a huge role. Several decades ago, Tulving (1972) coined the term "semantic memory" to refer to "memory necessary for the use of language. It is a mental thesaurus, organized knowledge a person possesses about words and other verbal symbols, their meaning and referents, about relations among them, and about rules, formulas, and algorithms for the manipulation of these symbols, concepts, and relations." (p. 386).

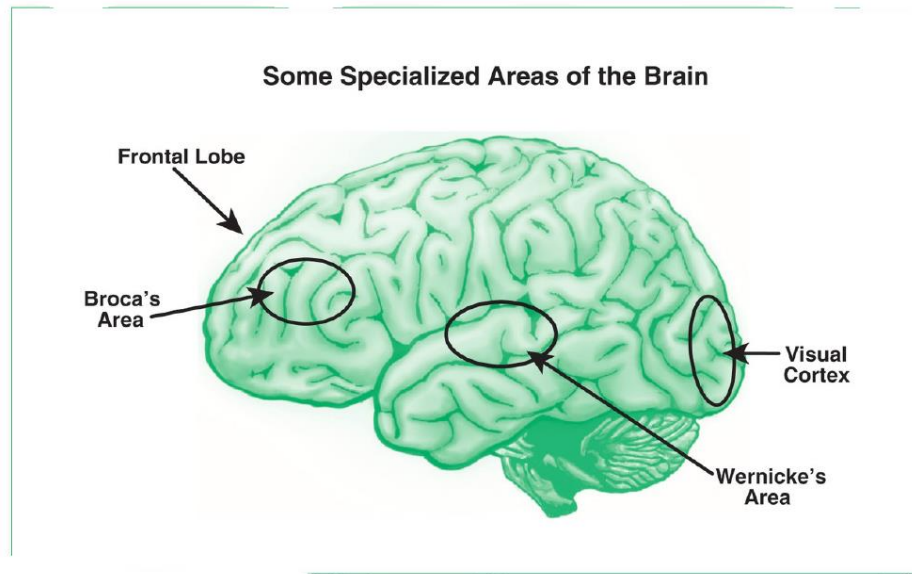
So, when we learn a language we don't take our memory like a drawer full of bunches of words that come out to express our meanings, we actually assimilate the grammar or the algorithm to combine the elements into brand new assemblies. This is why Chomsky sustained that linguistics is a branch of psychology; it is a window into the human mind. Language is the stream through which we express our thoughts to one another, it's a gate to new cultures, experiences, it's an artefact constructed on identity.

Where Exactly Language Lies in our Brain?

At neurophysiologic level sub cortical structures such as cerebellum, thalamus, and basal ganglia have a great contribution to the language computation. However the most complex computation is carried out in the cerebral cortex which contains approximately 30 billion neurons connecting with other at least 1000 neurons resulting in a massively interactive data processing system fostering the high level mental functions.

The ability to understand language and produce speech is associated with several areas of the cerebral cortex. Researchers discovered that left side of the brain hosts the so called "language centers" such as Broca's area responsible with process that leads to speech utterance and Wernicke's area whose main role is to decode the speech. Once these areas are damaged the ability to speak or to understand the speech is also affected.

Basically spoken language is first perceived in the auditory cortex, while written text or sign language is processed in the visual cortex. The information is then sent to the Wernicke's area, in the temporal lobe where is matched against the person's vocabulary stored in the memory. This is where meaning is assigned to words and the language comprehension is achieved. The signals are then transmitted to a bundle of nerve fibres known as Arcuate fasciculus to Broca's area in the frontal lobe.



Source: David A. Sousa (2017), *How the brain learns*, SAGE Publications Ltd

Broca's area is responsible for production of speech. The output from Broca's area goes to the motor cortex which controls muscles movement necessary for speech. A language disorder caused by brain damage (stroke, epileptic seizures) is called Aphasia. Lesion caused in the Werniche's area cause sensory or receptive aphasia. Werniche's aphasia causes troubles understanding language whether is spoken or written, but have no motor problems. They can speak but their speech is often incoherent. It can be described as a strange mixture of words that may sound like completed sentences but they make no sense and have nothing to do with the subject of conversation Patients with lesion in Broca's area on the other hand can understand language but have difficulty to speaking. They talk slowly searching for words forming incomplete sentences with poor syntax, but usually manage to say important words to get their message across. In the early days research on language pathways was based on mainly on steady patients who had specific language deficit that can be associated to brain specific damage. Nowadays advanced brain imaging techniques (PET Scan- positron emission tomography) allows mapping in real time the areas of the brain that are activated when a person carries on a specific task. Thanks to these techniques a third area is found to be essential for the language comprehension – the inferior parietal lobule. This lobule is not only connected to both Werniche's and Broca's but also to the auditory, visual and somatosensory cortical areas. The inferior parietal lobule is therefore perfectly wired to perform multi modo complex synthesis if information. It can process different word element such as sound of the word with the look and feel of the object. The language centers are usually located in only one hemisphere. The dominant hemisphere of the brain which is the left side in the right handed people. The corresponding areas in the right hemisphere are responsible for the emotional aspect of the language. Lesions in the right hemisphere do not affect speech comprehension or formation but result in emotion less speech and the inability to understand the emotions behind speech such as sarcasm or a joke. The right hemisphere may also to develop take over the mean language function if the left side is damaged in the early childhood. This phenomenon is known as neuroplasticity.

Does Language Change our Perception?

Journalist Flora Lewis once wrote, in an opinion piece for *The New York Times* titled "The Language Gap" that:

“Language is the way people think as well as the way they talk, the summation of a point of view. Its use reveals unwitting attitudes. People who use more than one language frequently find themselves having somewhat different patterns of thought and reaction as they shift.”

A study that appeared in the journal *Psychological Science*, for instance, has describe how bilingual speakers of English and German tend to perceive and describe a context differently based on the language in which they are immersed at that moment.

Another example is the Russian people who have many words for shades of blue are good to better discriminate between colours. The same with people working in fashion which are better in describing a colour, so they actually see more colour than other people who don't have words for that. So the people knowing more words for many different colours (pink, magenta, fuchsia) they will actually see those colours in reality. So language is changing our perception on the world.

What Exactly Happens in our Brain when we Hear a Word?

The sound arrives to our hearing analyzer, the ear, in sequential orders. Then brain starts to process the rest of the words it's hearing, the analogy would be the Google search motor or the telephone text assistance that when you start typing a word you're getting things as the motor is trying to figure out what you're typing. The same thing happens with our brain, when we try to say the word canister, the brain hears “can, and is just starting putting words together, in a sort of” “can, Canada, canary...” it's a way our brain is trying to figure it out.

In case of bilingual individuals the process includes also words from the second language, and if trilingual...from the third language and so on, the brain is trying out all these different combinations. It's a lot of processing. Language is kind of software by which we express our thoughts. So, language doesn't determine what you think but it can determine how you think about things.

The Effects of the Bilingualism on the Brain

The journal *Neuropsychologia* published the findings of a study where authors explained that speaking two languages helps developing the medial temporal lobes responsible with memories.

In fact, when a bilingual person hears words in one language, the other language also becomes activated. Scientists think that the brains of bilinguals adapt to this constant coactivation of two languages and are therefore different to the brains of monolinguals.

Does Language makes our Brain Bigger?

The answer is Yes!

When we learn a new language our brain has to essentially grow in size, it has to make more connections; it has to learn how to do a whole new thing. MRI scans showed that specific parts of the brain were getting increased in size; they were getting bigger, just because they were learning a new language. Another group was scanned for doing something else, different from learning a new language. Their brain structures didn't change in size at all. Learning a new language helps a lot, significantly improves the cognitive function. A study revealed that younger adults proficient in foreign languages proved to

have high scores on attention tests, better concentration, than other who spoke only one language. (study published in journal *Frontier in Psychology*).

Conclusions

Knowledge of a language involves the ability to assign deep and surface structures to an infinite range of sentences, to relate these structures appropriately, and to assign a semantic interpretation and a phonetic interpretation to the paired deep and surface structures. (Chomsky, 2006, *Language and mind*). All these operations could not be possible without the complex cognitive matrix that brain is capable to release by its specializes cortical and sub-cortical structures creating one of the most precious tool that human kind acquired throughout the phylogenetic evolution.

Bibliography

Anjan, Chaterjee & Branch, H. Coslet (2014). *The roots of cognitive neuroscience*. Behavioural Neurology and Neuropsychology. Oxford University Press.

Pinker, Steven (1995). *The language instinct- how the mind creates language*. First Harper Collins publisher.

Sousa, David A. (2017). *How the brain learns*. SAGE Publications Ltd.

Pinker, Steven (1998). *How the mind works*. Penguin Books.

Aitchison, Jean (1987). *The words in mind*. Padstow: T.J Press Ltd.

Cohut, Maria, Scientific article- *Language in the brain*. Medical news today.

Chomsky, N. (2006). *Language and mind*. UK: Cambridge University Press.



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REALITIES AND PERSPECTIVES

Traveling between Our Own Fear and Courage

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Abstract: There is a hidden power inside us that helps us overcome all the obstacles. We just have to learn to get that unmaned power and energy out. We can do it through body discipline, breathing, senses, concentration and meditation. When breathing wanders so does happen with the mind, when the breath is quiet, so is the mind. To reduce stress, breath control is the most relevant tool to calm the mind. When we are scared or nervous, breathing is shallow, fast and irregular, when we are relaxed or in a deep state of thinking, breathing becomes slow. Since our state of mind reflects in this way, it results that we can also control our mood. By regulating breathing, not only increases oxygen intake but prepares us for exercising concentration and meditation.

Keywords: Breathing; meditation; mind; stress; body discipline

It's frightening, it's bad. It is evil. It sneaks in all aspects of our lives. We have known it all in depth since childhood. It influences our thoughts, choices, decisions, reactions, behavior, relationships, squeezes into discussions, forces us to do things we do not intend to do. It's contagious ... it's pungent ... it's implacable ... It's her, the fear! We know it. We feel it. We all suffer because of it; it's part of the human condition.

But what are we afraid of? Anything! Whatever happens to us or may happen to us in a lifetime. In fact, we are afraid of life itself, and we feel it daily, because every day we need something, and fear is based on the idea that our needs cannot be satisfied. Everything we do, our thoughts, the choices, have the objective of meeting these needs.

The most important thing, on the other hand, is what we do in such a situation, the way we react to the needs that are not fulfilled, what we do think, how we react to ourselves and others. The quality of our lives is reduced to how each of us chooses to react when his needs are met and the way he behaves when those needs don't find their fulfillment.

How do we get rid of this fear? The solution would be that whenever we feel fear, let us ask ourselves what do we want to get? Are we sure we need that? In a deeper analysis, we may conclude that we do not necessarily need that in our lives. We could dare to see our lives unfolding without that. This is the first step on the road of courage, fearlessness. No one says it's easy, the world is in a continuous go-come, we oscillate and we turn between fulfilled needs and unfulfilled needs. We want things to slow down a little, to breathe deeply, longing for a clear and objective view, to make the best decisions, to be

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proud of the choices we make, to talk and to act spontaneously and right to us and others. But ... stupor! We wake up on a hurricane of fears, worries, confusion, thoughts, acting regretfully, spontaneous emotions and uncontrollable reactions. We are invaded by thoughts like I will not get something that I really need or I will lose something that I already have and which I cannot miss.

If we managed to screen ourselves correctly, we would understand that whenever we believe that happiness comes from outside, we live in fear. When we realize that the source of happiness is not outside of us, but comes from within us, fear will just disappear. Nobody says that it would be an easy process to become aware of the perfection of our being, the revelation that we have everything we need to be happy with and that the source of our happiness it's only within us. This awareness is a real act of courage.

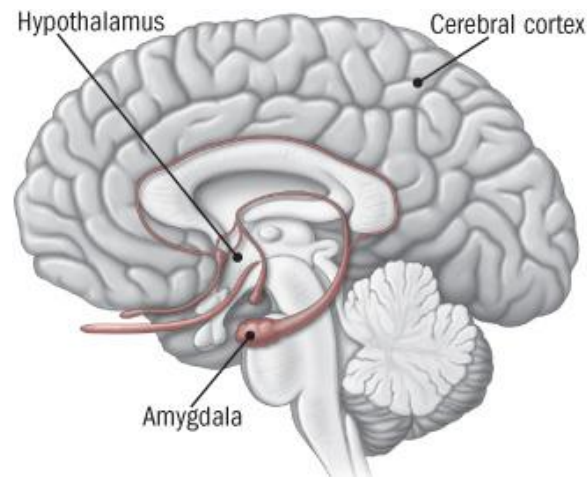
Currently, fear has acquired another dimension and another name – It's the stress! So, I'm going to start this journey trying to describe how the biological and emotional reactions we have to stress explain, scientifically, trying to build the foundation of a life beyond stress.

According to Paul Popescu Neveanu- Dictionary of Psychology (1978) stress is defined as a “*situation, stimulus, that puts the body in a state of tension*”

Therefore, from a scientific point of view, stress is any kind of change, causing physical, emotional or psychological pressure. It is the way we react when reality no longer meets the expectations and scenarios we have built, and even more, the changes that are emerging are irreversible and we are forced to accept them. Acute short-term stress occurs when an unforeseen event occurs, which takes us unprepared and forces us to react immediately, such as an accident, a break-up, the loss of a loved one, health, etc. The way we react when we receive the news and how we manage it in the short term is decisive, we can remain in a state of shock where we can no longer master the thoughts, feelings, physical reactions, and then we have to deal with stress term, of which it is much harder to get out, very likely only with the help of a specialist. When confronted with a devastating event, it is so deep that all physiological and emotional suffering remains alive in us; we close ourselves down, become depressed, isolated, nervous, and overwhelmed. In those moments we feel that we swim in place, desperately trying to stay on the surface, while the waves strike us unceasingly until we succumb, exhausted. From that moment on, our health is compromised.

The stress effects on the mind are disastrous. When we feel a physical or emotional threat, the biological reaction activates to stress, fight or flight. The “fight-or-flight” response evolved as a survival mechanism, enabling people and other mammals to react quickly to life-threatening situations.

The stress response begins in the brain. When someone confronts an oncoming car or other danger, the eyes or ears (or both) send the information to the amygdala, an area of the brain that contributes to emotional processing. The amygdala interprets the images and sounds. When it perceives danger, it instantly sends a distress signal to the hypothalamus. (Understanding the stress response-Chronic activation of this survival mechanism impairs health-Harvard Health publishing/Harvard Medical school).



Source: <https://www.health.harvard.edu/staying-healthy/understanding-the-stress-response>

Under pressure, our nervous vegetative system raises its engines, activates the egocentric reaction to stress, and either prepares to fight back in force or to run. The reactions that are triggered are of the most diverse and include obstructed and mechanical thinking, confusion and postponement, feelings of restlessness or depression, impatience, hostile attitude or self-closing, rejection or withdrawal. Along with these emotional manifestations that are triggered by the vegetative nervous system, physiological reactions of self-preservation occur, namely, breathing becomes faster and more superficial, blood pressure and pulse overload the heart, blood is pumped into the muscles of the arms and legs, start to digest, stop digestion stops because the digestive tract remains bloodless, increases secretion of stress hormones, namely, adrenaline, cortisol and glucagon, stops the secretion of growth hormone and sex hormones, the blood coagulates because of thrombocytes that thicken and become viscous, in other words, our immune system ceases to function.

Every day we struggle with some disappointments, we have expectations from us and especially from those around us, expectations that we often remain unfulfilled. In such situations, we react in different ways. If instead of thinking, choosing a more thoughtful reaction, we react from the instinct, entering the most primitive state, which includes the fight or flight response imprinted in our DNA, then we become the slaves of the chemicals and hormones, behaving after the same long term conditioned template.

However, recent research indicates that stress is not as bad as it may seem at first glance, and that there is also a beneficial side to it. This applies to the situation where we feel that the stress is not a threat but a positive challenge that demands our capabilities, such as overcoming physical limits, practicing a sport, possibly extreme, or fulfilling a dream you thought of a lifetime, but you have not found the courage to do it. So beneficial stress is an emotion we have when we feel enthusiastic, but not threatened, when we propose an objective beyond our limits at first glance, but we can aspire to succeed if we strive. It is true that we need time, energy and will, but also perseverance, courage, determination and strong motivation. The positive stress may even improve our lives. It has been shown to increase performance, concentrate and push us towards our goals with increased efficiency as well as great satisfaction. Also, the severe

stress left by a trauma can be at the origin of the moments of revelation in our lives. The death of a loved one who overwhelms us with sadness, despair, depression can also make us aware of our existence, to try to find answers to questions such as who I am?, why am I here? What can I do with my life?

The way we choose to react to such a strong stress factor can make the difference between life and death. The long-term implications of stress go from our perceptions. There was a study conducted by an American university for eight years on the perception of stress and its impact on mortality. This study was attended by more than 25,000 subjects who assessed their level of stress and the way they think it influences their health. After the eight years, the state archives were used and it was found that those who claimed that stress affected their health had an increase in the risk of death by 43 percent, and those who said that although they are stress-stricken but do not interpret its effects as negative had fewer deaths in the eight-year period.

According to a paper entitled “Rethinking Stress- The Role of Mindsets in Determining the Stress Response” published in 2012, the stressful experience causes the release of anabolic hormones that rebuild the cells, synthesize proteins and strengthen immunity, making the body stronger and healthier than it was before the stress-provoking experience. “These studies change our perception of stress and cause new discussions about the hard-to-understand and paradoxical impact that it has on our lives. And so the term PTD post-traumatic development appeared. Science now confirms the notion that what does not kill you makes you stronger, namely, the fact that we are facing the storm of extreme stress, we can cultivate our internal resistance, becoming more mentally stronger; establish deeper relationships and connections with the others. We come to see the world with other eyes; we get a deeper understanding of our existence and the purpose we have, while becoming deeply grateful”.

This does not mean that stress is always good and does not affect us negatively, does not hurt us, does not make us vulnerable, but we need to realize that there is a subtle difference of interpretation during and after the critical moment when we have the possibility to choose whether we perceive stress as a beneficial or harmful one. This paradox is the reason why stress release methods have proven to be so effective. These methods involve educating mentality, changing the lifestyle in depth, and not just managing effectively the maximum moment of stress, but radically changing how we receive, react and interpret what is happening to us, our ability to adapt easily with stressful situations without feeling the physical and emotional repercussions of stress. Recent studies have shown that those who perceive stress as a challenge, rather than as a threat, can manage major crises more easily, mature after experiencing stress and gain more clarity, strength and superiority. If we follow some stress release or relaxation techniques, we will get calmer in the face of changes and surprises.

Usually, relaxation and stress release techniques are simple, involve some lifestyle changes, changing perceptions in positive perceptions, and the use of day-to-day tools to gain control over awareness, emotion, purpose in life. Even if temperamentally we are more sensitive, more vulnerable to stress, practicing these techniques every day, we will surely be able to get away with it. This stress releasing process activates on several levels:

- Physically it is considered the state of health through diet, care, rest, practicing physical exercises that provide flexibility, strength, balance and;
- Emotionally we refer to our ability to manage emotions, control our extreme reactions, perfect our emotional intelligence, and protect our soul from anything that could hurt it;
- Mentally it is about our ability to find solutions to imminent problems, to increase the level of concentration and attention;
- Spiritually, we develop our intuition, we wake up, and becoming aware that divine perfection exists everywhere. Having managed to decipher the puzzle of our lives, we would be able to reach a deep peace of mind.

The stress itself does not really affect us if we resort to methods of relaxing right after the stressful moment. After the first impact with the element that causes the shock, we have to bring our body back to a state of homeostasis, or at least before we produce the disturbing event, in order to regain our balance. Unfortunately, although the shock itself may last only for a moment, we remain anchored and after that, wearing in our head an endless dialogue, marked by anxiety, frustration, pain, helplessness, which may last a few hours and reach a few years. We conscientiously rebuild that stressful moment in our minds, asking what we said, what we did, how things happened, we blame that we could have said or done otherwise, so the agitation continued indefinitely. Moreover, we are concerned about what others think about how we reacted, how we interpret our attitude, and torture our soul by making assumptions about how it would end. And although the event is already history, the state of agitation and pain caused by it is perpetuated by turning into chronic stress. For these reasons, in order to reduce the effects of chronic stress when it occurs, we must think beyond the momentary solution, namely, to think proactively. Therefore, relaxation techniques change the way we relate to stressful situations in life, change our perception and attitude during and after the event. It changes our perspectives substantially but acts upon our whole being until we reach a state of self-actualization where we consider that our needs are met; we capitalize on our potential, and become the embodiment of peace in the midst of the storm.

A stress release and relaxation technique is the meditation that assumes a holistic approach that will transform us, help us rise above stress and overcome it, changing our way of seeing, interpreting and reacting to everything that surrounds us, so we can go through fewer moments of crisis. This approach will help us to control our awareness, needs, emotions, potential, and the goal of life. Meditation guarantees the elimination of stress in the purest sense of the word. The transformation is as real as possible and guarantees for a moment that we do not perceive life situations as stressful, we become stronger, the feeling of fulfillment will last longer and our mind will calm down. An ancient wise said “We are what we think and create the world through our thoughts”. No matter how unbelievable it seems, we also create a state of stress by the way we interpret and carefully analyze every thought, physical sensation and emotion, trying to link them to our needs and aspirations. We apply and act in this way both on the way we perceive the stress and the way we relate to life.

Meditation is a technique that has passed the test of time and which has proved scientifically to heal emotional trauma, quiet the mind and restore the balance of the body. We begin every morning with our minds filled with obsessive thoughts and unceasing talk, turn the possibilities we have on all sides, dream with open eyes, remind us of moments of the past, imagine and build scenarios that we hope will become reality. We continue this way until we overcome our sleep at the end of the day. According to a study since we are born and until we give our last breath., every day we think of between 60000 and 80000 thoughts, that is, a thought every 1.2 seconds, a continuous process, day by day. If, on the other hand, we introduce some peace and quiet in the turmoil of our thoughts, we can interrupt this continuous mental activity by slowing it down. If we do this regularly, these short and constant interruptions of thought flow will change the way our brain works. If we exercise frequently, the pace at which our life is attained will be composed of thoughts-peace of mind-activity-peace of mind-thoughts-peace of mind, and so on. What follows afterwards is truly amazing, another source is formed from which our thoughts, words and deeds spring. Life enters a whirlwind altogether and totally different, though it seems to be the same, but some of the noise and talk in our minds has been quiet, and the turmoil of confused thoughts has subsided. We begin to change slowly, evolving daily and bringing into our world a touch of tranquility, a soul of peace, a moment of our self. Over time, we would begin to see the world with other eyes if we immerse ourselves on a daily basis repeatedly for a short time in a state of peace and silence, which is undoubtedly a radical rupture in relation to our templates and conditioned behaviors. Each leaking second brings with it a touch of tranquility in addition, so that life seems to be slow, we begin to regain the naturally native and unconditional balance that helps us connect to the core of our creativity and intuition, because of fact, true intelligence is that of intuition. This intuition that has its sap in the fruitful garden of peace of mind and peace opens us the door to absolute clarity and to infinite possibilities. From this garden we draw the moments of maximum inspiration, the most intuitive ideas and first of all the deep sense of connection with ourselves and the world around us.

The daily practice of meditation helps us integrate the feeling of peace and peace into the mind and body, acquiring more compassion and feeling more fulfilled.

If stress is our reaction when our needs are not met, then meditation can be considered an antidote to stress. It is not so easy to accept, and it has not been easy to reach this conclusion, there has been much speculation and the world has been skeptical, but it has now been scientifically proven that meditation reduces heart rate, stops the secretion of cortisol, glucagon and adrenaline, slows down the rate of breathing and causes it to be deeper, which leads to better oxygenation of cells, stimulates the secretion of growth and sexual hormones, strengthens the immune system, helps us to react better to pain and suffering, stimulates concentration, wellness, quenches the endless joy of thoughts.

Numerous studies have demonstrated, with the help of MRI investigations, that meditation leads to changes in the physical structure of the brain. Also, after a period of 60 days when the subjects meditated every 30 minutes daily, focusing on breathing, there was an increase in the size of the hippocampus, the brain region responsible for learning, memorizing and orienting in space, by such a reduction in the size of the amygdala, the region in the brain responsible for

stress, and the sensation of fear and anger. Fortunately, today, by improving imaging techniques, it can penetrate into the mysteries of the brain and see what happens during meditation. Although meditation is associated with a state of peace and relaxation, the followers of this practice also claim beneficial effects at the cognitive and psychological level, effects that last over time. These encouraging results emphasize the way conscious meditation works that not only reducing the stress, but also relates to structural changes in the amygdala. This method of reducing stress through awareness can be used to prevent stress-related disorders such as posttraumatic stress syndrome.

But what does awareness mean? Obviously, be aware. Unfortunately, we are not aware of the wonderful things that happen to us, we react negatively if the light or heat of the sun is disturbing us, but we do not enjoy it when it only warms us with its warm rays, or at most we do it unconsciously, we get bothered about too much music, but we do not consciously live the happiness caused by the musical arrangements that we like, passionately blaming the chemicals in the food, but we do not enjoy the incredible benefits of eating a simple apple. Conscious and constant meditation raise our awareness, and then we would know how to enjoy and be aware of the privileges of sunlight, we would feel how all our cells feed and lighten us, we can see and feel how musical arrangements invade us actually the organs, healing them, waking them, we would also be able to enjoy all the benefits from just eating a single apple. Food contains some totally magical elements that are capable of preserving or restoring mental and physical health, but it is imperative to know under what conditions we can extract these elements, and the answer is that we can do all this through awareness through the power of thought.

The practice of meditation is like a journey that we've been waiting for all our life. It's a pleasant and relaxed journey to the center of our being, whose destination is the emotional freedom and self-awakening. If we meditate every day, we would feel that the way we interpret stressful situations is changing, we would get a constant state of tranquility that would not change, we would become more productive in all aspects of our lives, and relationships with others will flourish. We would embody the silence in the midst of the storm ... the order in the midst of chaos ... the imperturbable calm ... the happiness ... the gratitude.

Bibliography

- Goleman, D. (2018). *Emotional intelligence*. Bucharest: Curtea Veche Publishing.
- Popescu Neveanu, P. (1978). *Dictionary of Psychology*. Bucharest: Albatros Publishing House.
- Ricard, M. (2018). *The art of meditation*. Cluj Napoca: Scoala Ardeleana Publishing.
- Selvarajan, Y. & Heich, E. (2011). *Yoga and Health*. Brasov: Mix Publishing.
- Kokabaşoglu, N. (2013). *Mood Disorders*. Rijeka, Croatia: InTech Publishing.
- Greenberg, M. (2016). *The Stress- Proof Brain*. Oakland, CA.: New Harbinger Publications.
- Bertalan, D. (2013). *The Human Hypothalamus*. New York, USA: Nova Science Publisher Inc.



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REALITIES AND PERSPECTIVES

Psychological Expertise – A New Occurance

Lacramioara Mocanu¹, Codrin Rebeleanu²

Abstract: The Romanian forensic legislation is currently one of the most coherent within the European Union. There are, however, issues where regulations have changed and Law 271/2004 no longer responds to all challenges: new RCA law no. 132/2017, provides some unsuspecting issues in forensic legislation. Thus, there are no general criteria for the unitary evaluation of physical injury, and the major problems of mental/psychological injury assessment lie primarily in the lack of ways to confirm on its forensic criteria or to quantify its gravity. Changing the current legislation, introducing a specialized criterion which combine the principles of forensic activity and psychological assessment, is a priority in the field of compensation for victims of aggression and road traffic accidents. Of particular interest would be a scientific evaluation of the psychological damage caused by medical malpractice, even if the courts have customary assumed the role of fixing the amounts in question.

Keywords: psychological expertise; psychological injury assessment; civil liability for psychic trauma

Introduction

WHO defines health as being?

Health is a fully favored state both physically, mentally and socially, and not just the absence of illness or infirmities (1946) and also “the capacity to lead a productive social and economic life.”³

The Romanian forensic legislation is currently one of the most coherent within the European Union. There are, however, issues where the regulations have changed and Law 271/2004, which regulates the forensic activity, no longer satisfies all the requests: the new law on compulsory motor third party liability insurance (RCA), no. 132/2017, provides some unanswerable issues in forensic legislation:

„Art. 22 – Determination of damage [...]

(5) Amicable compensation is established on the basis of the following general assessment criteria:[...]

e) the score for suffering caused by injury to bodily integrity or human health includes only physical injury; for injuries related to psychological trauma, the injured person can bring documents to prove them.

(6) Establishment of legal remedy is based on medical, forensic, psychological and statistical evidence.”

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³ <https://ro.wikipedia.org/wiki/S%C4%83n%C4%83tate>.

It is noted that in order to allow the courts to value the damages they will grant, in order to prove the gravity of the damage, “the injured person may bring documents in their proof”¹, but the provisions of the law in question do not specify the state of the respective documents.

In general, the forensic activity in Romania is the one that responds to the court's demands regarding all aspects related to the state of health of the persons, especially when the damage was caused by a circumstance with criminal implications. From the practice of the courts we have faced in the last 3 years, there have been two tendencies: the traditionalist, in which the psychological evaluation was sent to the forensic physician for the purpose of being introduced and taken into account in forensic expertise, and the modern one, in which the court was asked directly by the psychologist to draw up a forensic expertise. In addition to this situation, the psychologist is also asked to draw up an out-of-court expertise, meaning that the expertise is not requested by the court but by the injured party, which then presents the document either to the forensic doctor or to the court.

Regarding the legal framework for the development of psychological expertise, it is incompletely defined. Thus, a general legislative framework is given by Articles 330-340 of the Code of Civil Procedure, which generally define the way in which civil law expertise is developed. More specifically, there has been in Romania since 2016, the Institute of Judicial Psychology, which periodically publishes the on-line “Board of Psychological Experts” and organizes courses in the field of judicial psychological expertise.² However, this Institute and its decisions appear not to be recognized by the College of Psychologists, which states that “judicial psychological expertise is not legally regulated. There are some legislative provisions in Art. 330, within the Code of Civil Procedure”.³

According to the Decision of the College of Psychologists in Romania regarding the regulation of the psychological expertise of judiciary and extrajudicial - no. 4 of November 24, 2017, “a Psychological Expert Registry will be set up, which will include psychologists competent to conduct judicial and extrajudicial expertise”.⁴ Until the date of its completion, judicial and extrajudicial expertise may be performed by specialist and principal psychologists, in compliance with the other professional regulations in force, in accordance with the same judgment. Such a judgment, even if provisionally, gives the right of psychologists and principals to conduct judicial and extrajudicial psychological expertise, recognizes that “in order to acquire the status of judicial expert, the practitioner with a right to free practice” must meet certain minimum conditions (Romanian citizenship, practice capacity, professional degree, etc.), but also certain specific conditions, such as having the “professional competence necessary for the activity of psychological expertise”. The same decision stipulates that, in order to acquire the status of psychologist expert, the criteria of competence and the way of their verification will be determined by the specialized commissions, which within 6 months from 24.11.2017 should have elaborated “guidelines for good practice in the field of judicial and extrajudicial psychological expertise”. At present, these guides still do not exist, and the courts are still addressing free practice psychologists from the list posted on the internet for the purpose of drawing up psychological expertise.

There are several situations in which psychologists can receive requests to perform specialized expertise:

¹ <https://lege5.ro/Gratuit/ge3dgmrvha2q/legea-nr-132-2017-privind-asigurarea-obligatorie-de-raspundere-civila-auto-pentru-prejudicii-produse-tertilor-prin-accidente-de-vehicule-si-tramvaie>.

² <https://psihologiejudiciara.ro/tablou-expertilor-psihologi/>.

³ <https://www.alegericpr.ro/index.php?view=article&id=3898:hotarare-privind-reglementarea-activitatii-de-expertiza-psihologica-judiciara-si-extrajudiciara-nr-4-din-24-noiembrie-2017&catid=163>.

⁴ <https://www.alegericpr.ro/index.php?view=article&id=3898:hotarare-privind-reglementarea-activitatii-de-expertiza-psihologica-judiciara-si-extrajudiciara-nr-4-din-24-noiembrie-2017&catid=163>.

1. Extrajudicial expertise - is conducted at the direct request of the party involved. The person who considers himself/herself to be prejudiced presents himself/herself to the psychologist for evaluation and obtains a document called "Psychological Expertise", which will be presented directly to the court, or will be presented to the forensic physician, together with the medical documents attesting to the trauma suffered and its consequences. The forensic physician may include this document in the text of the expertise he may do or not, if interpreting "stricto sensu" the Law 459/2001, which states that when drawing up the forensic papers it has the obligation to take into account "the certificates, medical reports and clinical observation sheets issued by the health units of the Ministry of Health and Family or accredited by it".¹
2. Judicial expertise, conducted at the request of the court, which is sent directly to the court and will be interpreted by the judge.

In both situations, the injured person has the right to choose his or her psychologist to whom he or she will address, and this may be from the private or the state system.

The problems encountered in judicial and forensic practice lie in the fact that there are no indicative scales for assessing the injury resulting from the psychiatric trauma.

In legal medicine there are objective criteria that measure the severity of traumatic injuries, among them the criterion of days of health care, life-threatening, post-traumatic abortion, infirmity, or serious and permanent esthetic damage. Based on these criteria, the severity of the lesions is evaluated according to certain tables and standard definitions. The purpose of assessing the severity of these injuries on the basis of these criteria lies in the correct legal classification, the individualization of penalties and the assessment of the amount of civil damages. Between criminal terminology and forensic terminology there is a harmonization in the sense that the above-mentioned terms are common to both the Penal Code articles and to the theory and forensic practice. Indeed, there is no real quantification of the amounts awarded as damages, although Law 342/2017 of the RCA has tried this, in Article 22, which speaks of "traumatic points" that should be assessed on the basis of on a scale elaborated by the National Mina Minovici Institute of Forensic Medicine in Bucharest, and "the value of a traumatic point is equal to twice the minimum gross basic salary in the country", according to the same law. This scale, on 15.04.2019, had not yet been requested or elaborated by anyone.

Moreover, the psychological expert evaluation, beyond its quasi-exhaustive character, does not have a scale of quantitative appreciation of the damage generated by the physical trauma suffered or by the psychic trauma that is emerging as an event with lesion consequences.

In order to evaluate the phenomenon, we took into account 12 forensic examinations carried out within the Bristrita-Nasaud County Forensic Service during 2018, which had also among other objectives the assessment of the injury related to the psychological trauma generated by the vulnerable event. The 12 experiments were carried out by three legislators, each expert having as author only one forensic doctor. In all the selected expertise there was a psychological evaluation, the amplitude of which is of at least 2 pages, and maximum 8 pages. Out of the total psychological expertise performed, 10 were drawn up in private psychological offices - 4 being out-of-court, and 6 - judicial, and 2 in the state health system, one of them being judiciary, the other being extrajudicial. In 4 out of the total of 12 forensic expertise, the psychological evaluation was quoted, in the remaining 8 it was not even quoted, not taken into account, based on the Order for the Approval of the Procedural Norms on the Examination, the Findings and Other medical-legal works no. 1.134/C/25 05.2000 of the Ministry of Justice and no. 255/04.04.2000

¹ <https://www.medlegtm.ro/organizare.pdf>.

of the Ministry of Health and Family, which, at art. 10 provides for documents that forensic physicians can take into account when drawing up forensic papers: “certificates, medical reports and observation sheets”.¹ Of the 12 sets of conclusions of the 12 forensic expertise reports, all were based on medical and forensic data, and no set of conclusions were based on any examination report or psychological expertise.

The courts also asked questions that referred to the possibility of an injury, the forensic conclusions stating that it may exist, but that there are no scientific ways to assess its gravity.

Research boundaries: The batch of doctors evaluated was far too small to allow a pertinent statistical analysis.

Conclusions

1. Psychological expertise is currently under-regulated, and there are even contradictory practices in the field of accreditation of psychological experts that may be requested by the courts or whose out-of-court expertise directly requested by the parties could be considered by the courts of judgment. The practice of courts resides in the request to the College of Psychologists in Romania;
2. The way of conducting psychological experiments, respectively the procedure for their realization and the components of such an expertise, are not specified either in the existing legislation or in the recommendations of a professional control body - in particular, the College of Psychologists in Romania;
3. Psychological assessments are not currently integrated into forensic expertise whose purpose is to evaluate the resulting injury of a traumatic event in contrast to the assessments resulting from the examinations corresponding to the various medical and surgical specialties that have a common language forensic medicine and are integrated into these expertises;
4. Judicial psychological expertise, unlike forensic expertise, is not articulated on Romanian criminal or civil legislation, despite the fact that it offers extensive evaluations, sometimes by cutting the exhaustiveness;
5. The courts have difficulty in assessing the significance of psychological expertise, given that they do not have quantitative evaluation criteria for injury caused by physical trauma.

Proposals:

1. In order for the psychological expertise to acquire the value it deserves in the criminal or civil judicial process it is necessary that the validation of the psychological experts be made on specific criteria formulated by the College of Psychologists from Romania;
2. The way psychological expertise is conducted and the circumstances in which it may be required should be regulated by the professional control body;
3. When the psychological expertise on damages caused by imputable acts is requested by the court, its integration into the judicial assessment of the damage is very difficult due to the lack of a correlation between the psychological and legal notions. To remedy this situation, the notion of psychological expertise should be reorganized on pre-existing legal bases - the Penal Code,

¹ <https://www.medlegtm.ro/organizare.pdf>.

the Penal Procedure Code, Law no. 132/2017 on compulsory motor third party liability insurance, as well as on other normative acts.

Bibliography

<https://ro.wikipedia.org/wiki/S%C4%83n%C4%83tate>.

<https://lege5.ro/Gratuit/ge3dgmrva2q/legea-nr-132-2017-privind-asigurarea-obligatorie-de-raspundere-civila-auto-pentru-prejudicii-produse-tertilor-prin-accidente-de-vehicule-si-tramvaie>.

<https://psihologiejudiciara.ro/tabloul-expertilor-psihologi/>.

<https://www.alegericpr.ro/index.php?view=article&id=3898:hotarare-privind-reglementarea-activitatii-de-expertiza-psihologica-judiciara-si-extrajudiciara-nr-4-din-24-noiembrie-2017&catid=163>.

<https://www.medlegtm.ro/organizare.pdf>.