FACILITATOR'S MANUAL
STRATEGIES FOR THE
DEVELOPMENT OF COGNITIVE
SKILLS AND STRESS MANAGEMENT
Acknowledgements

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TABLE OF CONTENTS

FOREWORD
General Objective
Specific Objectives

4. HOW TO USE THIS MANUAL
5. SUGGESTIONS TO THE FACILITATOR:
6. NOTES TO THE FACILITATOR
7. TIME TO DO THE EXERCISES
8. INTRODUCTION
9. NEUROSCIENCE AND LEARNING
  9.1. What is the enemy of learning at this stage?
  9.2. Intelligence
  9.3. Neuronal plasticity
  9.4. Creativity
  9.5. The gaze
  9.6. Why is the power of a gaze so important?
  9.7. Mirror neurons
  9.8. Motivation
  9.9. Tips to get motivated
  9.10. Learning and memory
  9.11. Attention
  9.12. In search of novelties

10. IMPORTANT HUMAN TRAITS FOR EDUCATION AND LEARNING
  10.1. Pleasure

11. RELAXATION TECHNIQUES
  11.1. What is relaxation?
  11.2. Physiological response
  11.3. Important
  11.4. Implications for practice

24. PRACTICING AND TEACHING OF RELAXATION ADDRESSED TO THE TEACHING AND LEARNING PROCESSES
  Technique 1. Progressive Relaxation

27. AUTOGENIC RELAXATION
  13.1. Background
  13.2. Advantages
  13.3. Applying the technique

33. CREATIVE POTENTIATION TECHNIQUES
  14.1. Background
  14.2. Advantages
  14.3. Suggested music

40. MANDALAS
  15.1. Advantages

42. CONSCIOUS BODY MOVEMENTS

58. BREATHING
  17.1. Anatomy of breathing
  17.2. Breathing and energy charging
  17.3. How do we breathe?

62. CONSCIOUS BREATHING TECHNIQUES

70. CONSCIOUS BREATHING TRAINING

78. COGNITIVE STIMULATION
  20.1. Brain Gym
  20.2. Principles
  20.3. Uses

93. INDEX OF TECHNIQUE CHARTS

95. ANNEXURE (MANDALAS)

BIBLIOGRAPHY
1. FOREWORD

Dear Facilitator:

We highly appreciate your participation in the Strengthening Program for the Security of Vulnerable Groups, which is a joint strategy between the Liaison and Partnership Office of the United Nations Office on Drugs and Crime and the National Security Commission, with the support from the US Embassy in Mexico through the Merida Initiative, which aims to have a positive impact on strengthening the respect for and the guarantee of the human rights of victims of gender-based violence.

The program aims to strengthen institutional capacities and improve the coordination of public institutions with Women’s Justice Centers, through the training of police officers, operators and emergency call operators in the field of comprehensive assistance for victims of gender-based violence.

To that effect, your presence here and the work you will perform are very important to facilitate this process of training police officers and operators and emergency call operators who provide assistance to women victims of gender-based violence in any of its modalities.

This facilitator’s manual was designed with you in mind, in order to enhance the learning-teaching-learning processes. This manual integrates the techniques, exercises and activities that you will conduct with detailed instructions, as well as the recommendations that you should follow to implement them.

The text that you are going to find is the result of bibliographical and cybernetic research, as well as of the experience gained after working with the proposed method for over seventeen years. This manual also includes bibliographical references of the exercises cited, for those who require or wish, for their personal and professional interests, to go deeper into these new pedagogies.

We believe that you will successfully achieve each of the objectives proposed in the Program. We reaffirm our gratitude and wish you attain success and personal fulfillment in the development of this project.

Sincerely,
Coordination Team of the Strengthening Program for the Security of Vulnerable Groups.
June, 2017

2. GENERAL OBJECTIVE:

To be aware of the theoretical and methodological aspects of the psychopedagogy for the promotion of meaningful learning of police officers, operators and emergency call operators that will be trained in the framework of the Strengthening Program for the Security of Vulnerable Groups.

3. SPECIFIC OBJECTIVES:

1. To promote, in the teaching and learning process of the course, socio-cognitive-affective skills to protect women against any form of violence.
2. To be aware of different individual and group techniques for cognitive stimulation and stress management.
3. To apply, in the teaching and learning process, strategies that facilitate the development of personal and operative skills for the protection against gender-based violence.
4. To promote understanding for the acquisition and transmission of operative procedures through brain gymnastics aiming to prevent gender-based violence.
5. To promote motivation for collaboration and commitment to eradicate violence, in all its modalities, against women.
6. To encourage interpersonal communication and group interaction to carry out effective police and emergency interventions.
7. To promote active interaction in every work group to make the most of the teaching and learning process.
8. To be aware of the techniques of creative potential to increase their efficiency throughout the training program.
9. To strategically apply the techniques of cognitive stimulation and stress management in the facilitator’s interventions.
4. HOW TO USE THIS MANUAL

The facilitators are provided with a variety of exercises for cognitive stimulation and stress management in a simple and orderly manner, so as to make the educational processes more dynamic, thus allowing meaningful learning among the participants, who are at the core of this program.

The techniques proposed in this Facilitator’s Manual are powerful tools for cognitive development and stress management. Like any work tool, its success depends on how it used, which is the facilitator’s responsibility.

The chapters are integrated in such a way that they can be identified in terms of their objective, advantage and time— whichever proves more favorable for their implementation. If you plan to do several of these exercises in a class session, you can choose from the different techniques and integrate them in order to encourage participants to perform them.

You will find exercises that last for a minute and have an effect lasting for more than an hour of work. As you get familiar with these exercises and apply them, you will develop more skills to use them.

Before applying any technique, read its theoretical basis, suggestions and warnings.

The process is designed to work with the techniques for 15 minutes and to have a 45-minute theoretical class.

Remember that each human being processes information differently. Each person uses their cognitive abilities differently. Accordingly, the participants are expected to integrate all their internal and external resources in favor of their integral personal development.

If possible, try the techniques yourself first. This will allow you to discover or reaffirm your work style, as well as to trust its application and result. When applied correctly, the technique impacts the participants, who— in general terms—want to practice it on their own. It can also allow help you teach and explain to participants how to perform it and the effects it produces. Benefit from the confidence your work has generated.

The techniques are designed for individual and group work.

5. SUGGESTIONS TO THE FACILITATOR:

A) Before applying any technique, read its theoretical basis, suggestions and warnings.

B) The process is designed to work with the techniques for 15 minutes and to have a 45-minute theoretical class.

C) Remember that each human being processes information differently. Each person uses their cognitive abilities differently. Accordingly, the participants are expected to integrate all their internal and external resources in favor of their integral personal development.

D) If possible, try the techniques yourself first. This will allow you to discover or reaffirm your work style, as well as to trust its application and result. When applied correctly, the technique impacts the participants, who— in general terms—want to practice it on their own. It can also allow help you teach and explain to participants how to perform it and the effects it produces. Benefit from the confidence your work has generated.

E) The techniques are designed for individual and group work.

F) The goal is to incorporate the techniques into the teaching-learning process throughout the implementation of the Strengthening Program for the Security of Vulnerable Groups.

G) The techniques are described in such a way that the facilitators can implement them easily and rely on the bibliographical references if needs be.

H) Facilitators have the opportunity of choosing the techniques that suit their style, their group’s needs or to the impact they want to make on the knowledge that they are going to share.

I) Facilitators should design their classes in advance, incorporating the techniques and sequences they have chosen. Use a class script to adhere to the description of the procedure until you learn and master it.

J) Facilitators provide feedback regarding the application and result of the procedure in order to allow participants to identify their style, the techniques they find most effective and their needs as a group in relation to the contents of the program.

K) It is very likely that the participants attend the course showing a certain degree of stress. Thus, the facilitator must be able to foster a quiet and safe environment for the teaching process; doing the exercises can contribute to create this environment. Remember that stress is the enemy of learning.

L) When applying and teaching the techniques, it is important to be patient, kind and careful with the participants. Guide and accompany them in the process of discovery of their creative potential. Foster a safe and quiet environment to perform these exercises, in order to allow a greater use of human and material resources to achieve the proposed objectives.
6. NOTES TO THE FACILITATOR

- **Purpose:** The techniques have an educational and non-therapeutic role, so it is important to follow the steps as described. Their aim is to facilitate and enhance the teaching and learning process.

- **Health of the participants:** It is very important to ask the participants about their health condition. Ask them if they have any medical condition that prevents them from carrying out any activity proposed in this manual. Although the techniques are harmless because they focus on cognitive stimulation and stress management, some may involve physical movements that, however gentle they may seem, some people will not be able to perform due to injuries, fractures, hernias or physical limitations. In these cases, no conscious bodily movement is promoted. Pregnancy also requires care and consideration. Pregnant women should express their needs, and facilitators can suggest some breathing and relaxation techniques, creative empowerment and mandalas, or whichever activities pregnant women choose.

- **Modifying the techniques:** The techniques have a theoretical and methodological basis, which can be corroborated against the original source to go deep into it.

7. TIME TO DO THE EXERCISES

A) To start a class.
B) To teach an important topic.
C) To awaken participants’ interest.
D) To boost participants’ energy.
E) To integrate work teams.
F) To face critical events.
G) To promote reflection and analysis.
H) To learn procedures.
I) To understand situations.
J) To promote group peace and collaboration.
K) And to do whatever you find useful.
8. INTRODUCTION

“Men ought to know that from nothing else but from the brain come joys, delights, laughter and sports, and sorrows, griefs, despondency and lamentations. And by this, we acquire wisdom and knowledge, and see, and hear and know what are bad and what are good, what are sweet and what are unsavory. And by the same organ, we become mad and delirious, and fears and terrors assail us. The brain exercises the greatest power in man. It is our interpreter of those things that are in the air.”

Hipocrates.

Neuroeducation emerges as a new line of thought and action. Neurosciences, psychology and education merge in it. It enables us to understand how the brain works regarding learning, memory, language, sensory and motor systems, attention, emotions, and behavior. It allows to identify risk factors for brain development, such as high levels of stress (Americanos-CEREBRUM, 2010).

Neuroeducation is a new ally for quality educational programs that promote human development. The success factor and effectiveness of a program are directly related to the facilitator’s profile, personal process and human resources. If facilitators master procedures allowing a teaching-learning process that fosters an integral personality and the development of human potential, they will be able to convey—through their presence alone—values, skills, attitudes, abilities, knowledge, expertise and, above all, humanity to the participants.

Nowadays, a minimum degree of training in neuroeducation is essential for training facilitators. Neuroscience leads us to the latest research on the brain and the functioning of the nerve circuits involved with mathematics, reading, music, and art, which enables educators (professionals or parents) to have a stronger foundation for innovating their educational approach (Americanos-CEREBRUM, 2010).

Research has shown that brain capacity allows the simultaneous elaboration of information from different codes due to the different functions performed by each brain hemisphere. Therefore, brain hemispheres should be stimulated through different codes so that learning is complete. These codes are (Dyson, 2008):

- **Logical-verbal code**: which processes information in a linear, logical and analytical manner using words. It can be processed deductively, inductively or analytically.
- **Visual-spatial code**: which processes information in a synthetic, intuitive and global manner.
- **Analog code**: knowledge and reason are achieved through comparisons by similarity or causal dependence.

Practicing certain abilities can modify the brain connections, and thus new synaptic connections are established or the existing ones are reinforced. This program aims to influence the following functions for the activation of the brain lobes according to their functions and responsibilities (Los lóbulos cerebrales [The Brain Lobes]. Neurofisiología [Neurophysiology], sf, 1983, 2012).

Developing and strengthening these functions is possible thanks to the plasticity of the brain. The program approach covers these windows of opportunity to enhance the capacities of the facilitators, who have the mission of promoting, strengthening and developing them among the police officers, operators and emergency call operators. All these functions are relevant for the police officers and the operators and emergency call operators. Addressing gender-based violence requires personnel with education based on a teaching and learning process of great human quality.
Neuroscience is the field that studies the human brain and how it works for learning to take place. When applied in education, neuroscience is a basic resource to know and understand learning mechanisms.

The goal of education is to help people grow in well-being and dignity. Well-being is the situation where life needs and dignity are met. It is also the characteristic of those who deserve respect and are worthy of esteem because of their qualities or behavior.

It is the moral quality that prompts us not to lower ourselves or tolerate being offended; it is also the quality of those who are honest, noble, respectable and honorable.

Neuroscience distinguishes mind from brain, as follows:

**Brain:** physical-biological support of the mind; it is an organ that has about a billion cells which are inside the skull and basically serve to regulate our behavior and adaptation to the environment. It begins to take shape three weeks after fertilization, through embryonic cells. Mind arises from the brain.

**Mind:** a person’s set of psychic faculties and functions. We see people’s minds when we interrelate with them, that is, we perceive what is beyond the tangible.

The adult brain is an organ in construction and reconstruction through the connections among neurons, which are made through interaction with the environment. There are connections at all times.

Learning is a connection of neurons, as they are activated and connected in a certain way so that when a memory is evoked they can reconnect and what we want to remember can be retrieved by our memory. That is why we can learn our whole life, because we can make neural connections as we are alive. It is during childhood and adolescence that the greatest number of neural connections is made. This capacity remains, though it decreases after the age of twenty-one.

The brain is shaped according to genetic programs that open a developmental window where the connection of certain areas of the brain is stimulated.

The first window opens shortly before birth. It has been proved that fetuses react to the external stimuli at the eighth month of pregnancy. From birth to age 3, connections are made between the areas of the brain cortex. Although until the end of the 19th century it was thought that its function was only to protect the brain, the most elaborate processes of our mental life take place in the brain cortex: reasoning, decision making, language, and empathy, which is known as executive control. The cortex is the part that has grown the most in comparison to primates. The cortex neural connections serve for the indiscriminate absorption of what is found in the outside, to adapt the future behavior of children to the environment. It is a form of adaptation that begins and takes place within the family, so that when children reach the school age, this work is already done. These connections are very difficult to undo.

There are some experiments that examine the brain of boys and girls born in an environment prone to family and social violence in countries living in war conditions. The type of connections that forms in the cortex of their brains is different from those of children that were raised in a more peaceful environment. Above all, the area of executive control is affected, which makes adults more impulsive and unable to control it. This can be redirected, but not reversed.

This phenomenon is merely adaptive: the brain helps us adapt. If we have been born in a violent environment, and it may be assumed that we will live most of our lives in it, there are two ways we can adapt: to die or struggle to live. All this emerges during the first three years of life.

We do not remember anything before three years of age, because at this age we do not make deep connections in the hippocampus. This is the area that manages memory and is in the deep parts of the brain. It is also important not to forget that every brain matures at its own pace.
From the age of three, the second window opens. From four to eleven years old, the brain is able to make connections between the areas of the cortex and those below it. The deepest areas of the brain are the hippocampus, the memory manager, and the amygdalae, which are the emotions managers. That is why it is not until these ages that we start to remember things and know our emotions.

From zero to three years of age, children laugh and cry, but crying basically aims to attract the attention of adults, as it is an instinctive mechanism performed by imitation. The rationalization of emotions begins after three years of age. The connections between these areas of the brain imply that this stage has the greatest influence on academic skills, because this is the first time that we start to remember our experiences. That stage is the beginning of learning to read and write, and to carry out logical-mathematical reasoning. It is the time when we learn to memorize.

9.1. WHAT IS THE ENEMY OF LEARNING AT THIS STAGE?

In this stage of child development, appears the great enemy of education: stress. This often comes inadvertently, when we are pressured to finish or fulfill some objective, or when we are subject to strict supervision regarding professional performance.

Child stress is a problem behind many cases of what is known as school failure, because when trying to favor academic skills, we may overlook the individual. Stress is a physiological response of the body where various defense mechanisms are at play to face a situation that is perceived as threatening or that demands increased attention.

Thus, stress is not bad but it is a survival tool. In stressful situations, the brain is activated to solve the problem and symptoms become manifest, namely: acceleration of heart rate and breathing, release of hormones, and hypersensitization of the brain amygdala.

The problem is chronic stress, since it chronically keeps these levels of activity, which does not allow the neuron connections to occur properly. Basically, as stress appears when danger is perceived, it hinders connections in the decision-making and executive control area, because the need to be impulsive appears when in danger.

This becomes relevant within a group, because each person has their own level of stress. This is a genetic trait, as we are born with the capacity to generate stress. You will find participants who, however extreme the pressure they may be experiencing, will react as if nothing will happen. Conversely, others may be stressed by a single stimulus.

The last window opens in adolescence. This is when the connections are made in the most remote areas of the brain. It is the stage of great learning. Great connections throughout the brain are comprised in memory, and the motivational areas of award and reward start to mature there. Hence, there is a contrast with the previous stages, as children cannot wait to receive their reward, since they are unable to manage the concept of “tomorrow” or “after”. For children, rewards must be immediate.

This zone begins to mature during adolescence and does not finish to do so until we reach the age of thirty-four. The areas of logic and emotional control also mature; the ability to focus attention coincides with the time of attending higher education. The neural connections are made and undone until the useful ones -- those that really control emotions-- stay fixed. However, there are many unsuccessful attempts along the way: the typical lack of emotional control during adolescence occurs, which means neural connections are maturing.

9.2. INTELLIGENCE

It is the action of understanding something through thinking; it is the ability to understand, learn and solve new issues. It is also the faculty of becoming aware of something. Multiple intelligences are part of a whole: intelligence; the other intelligences are the ways it manifests itself. Integrating them during the learning process can be of great advantage, as it allows for greater brain activation. If more areas of the brain are simultaneously activated, learning will be better implanted in the brain.

Intelligence has a key genetic component. We all have these genes, but each one of us can have variables for each gene. There are some genes that favor intelligence to a greater or a lesser extent. To understand how genetics plays a role in behavior, geneticists have created the concept of heritability, which is the percentage of a character whose variation depends on genetic factors.

In adults, the influence of genes amounts to 70%, but the aspects we can act upon through education amount to 30%. In children, heritability is 45%. The educational factor is much more important in children than in adults, as the latter make many more neural connections.

Intelligence involves the stimulation and integration of all these capacities throughout the educational process.
9.3. NEURONAL PLASTICITY

The neural connections are made and undone, the genetic programs impel them to look for other neurons to connect to. If the neuron is active, the connection is maintained. This means that a stimulated brain will eventually have more connections than a poorly stimulated brain.

Being stimulated is not the same as being overstimulated. The latter condition causes stress, the consequences of which at the neural level have already been discussed. Imagine that the neuron is active and they begin to test the connection, until they find the ones that are maintained.

Learning implies that the connection is useful. It is based on social recognition and on the fact that others admire what is being done due to its usefulness. This is the advantage of working in groups when a task is well done, and ideally everyone does it well as if we all were unique. If the connection is useful or very useful, it is maintained over time; a substance that attracts other neurons to connect there is produced, which reinforces learning. The more the connections are reinforced, the more we can apply them. On the other hand, the public disqualification of the person greatly damages the neural connection that is favorable to any learning process.

**Caution:** Because of the above reasons, it is essential to be very cautious with reprimands, and, if someone is berated, it should not be done publicly, or in front of the group or other people.

9.4. CREATIVITY

Creativity comes naturally, that is, we do not learn, but it shows. Creativity is promoted through dynamics that involve problem solving. Language is key to creativity, as ideas are generated due to the need to communicate. Sense of humor is always creative. As for resolution skills, each person has their very personal resources to tackle issues. Encourage and stimulate your creative resource for your own learning.
9.5. THE GAZE

The way we look at someone conveys acceptance or rejection, that is, by the way someone looks at us, we can know if they accept us or not. It is possible to say words that do not match the expression the look conveys. Indeed, not only words are important. Our presence in front of a single person or a group of people impacts through visual contact. We can feel and say one thing, but our eyes communicate something else, proving contradictory. The brain works in such a way that our gaze reflects what we feel. Showing different facial expressions is not a problem, but showing the same facial expression to a participant is.

The importance of emotional education lies in interpreting others’ emotions correctly and in knowing how to express our emotions appropriately. Our cover letter is our face. We are programmed to look at faces; faces are the first thing a small child notices. Three days after birth, the baby’s attention is already fixed on the faces of adults. If it is a smiling face, the baby smiles back. The baby imitates faces and learns to feel emotions by doing so.

9.6. WHY IS THE POWER OF A GAZE SO IMPORTANT?

Vision is the most important sense in our brain. Vision is at the front and the neurons that build and rebuild our images are at the back of our head. The distance between the front and the back is short, but it forces the nerve connections to go all the way across the brain, along the path between the eyes and the cortex; they pass through the hippocampus (the management center of memory). Any image that we see and are aware of is immediately associated with memories: when we see a face, we already know who it is and what that person represents.

All relevant memories are brought about by the face. It passes through the management center—the thalamus. Therefore, if we know that it is an image that we have seen several times before and know that it does not involves a risk, we hardly look at it and it goes virtually unnoticed. Seeing something new always demands our attention.

These nerve connections also pass through the amygdala, which is management center of emotions. That makes possible that an image is capable of catching our attention and generate emotions. We feel what we see reflected in people’s eyes. If their eyes show rejection, we feel rejection; if they show acceptance, we feel acceptance.
9.7. MIRROR NEURONS

Mirror neurons are activated in the same way when we do an action or notice an emotion, and when the action is done by someone else: we can feel the same, we can reflect on what we see outside; that is why they are called “mirror”. When we look at the face of an angry person, we do not need to ask them if they actually are because we can see it clearly. This is part of the great complex of empathy, which allows us to make social interactions smooth. Hence the importance of a gaze.

When applying it to a work group, express your intention to “learn together” to connect your brain with each of their brains, we will learn, unconsciously connect and activate so it is much easier to access their mind.

9.8. MOTIVATION

If you want to motivate your group, start by feeling motivated yourself.

Activating the brain and focusing it on a goal reduce tiredness. It is a biological variable that has tangible effects on behavior, in the sense that it energizes and selects it.

9.9. TIPS TO GET MOTIVATED

A) To motivate yourself or motivate others, you should have a specific goal (energy focalization).

B) The objective that you set must respond to a specific need or demand. In any learning or educational process, we must generate needs in order to motivate. Use questions and pose situations that require answers.

C) Be aware of the fact that there may be obstacles to overcome. Be optimistic and think that they can be overcome.

D) Motivation should also comprise emotional aspects, the search for novelties and creativity, as well as social aspects, such as those regarding rewards and collective appraisal.

E) The best reward we can offer to motivate or maintain motivation is social acceptance, smiling and saying kind, sincere and encouraging words.

F) Avoiding demotivation is as important as promoting motivation, we go back to our mirror neurons and to the power of our gaze.

9.10. LEARNING AND MEMORY

Any type of learning that involves emotions is more fixated in our brain. From the point of view of neurosciences, these are patterns of preconscious behavior that are activated without us realizing it. Basic emotions (fear, affection, sadness, anger, joy, surprise, disgust) are key to survival. Once we have done the first emotional action, the brain sends the signal to the cerebral cortex, the area of reasoning; then we are aware of that emotion and it is when we can redirect it. That is why it is so important to manage emotions through reasoning.

Any emotional learning is more fixated, because for the brain anything or situation that possesses emotional elements is key to survival. Therefore, it is necessary to learn not only through reasoning, but also through emotions.

Emotion is a predetermined and preconscious reaction pattern in response to an external change.

9.11. ATTENTION

How is attention maintained? Through new things. You should generate surprises to keep emotion up. It is suggested not to perform the same activity for two hours in a row because people’s attention cannot be maintained for so long. The changes are novelties, surprises that get attention back to the present time. You may generate surprises through something that may not be related to the class you are teaching. However, the aim is to recover trainee’s attention to continue studying the topic.

9.12. IN SEARCH OF NOVELTIES

It is very important the search for novelties, as it fosters motivation and attention. It is also related to optimism and happiness. For example, according to the experiments across the tests that have been applied, an individual looking for novelties is more optimistic and happier than an individual who does not pursue them, perhaps because his or her capacity may be diminished. It can also be reduced due to that person’s way of learning.
10. IMPORTANT HUMAN TRAITS FOR EDUCATION AND LEARNING

Neurotransmitters involved in creativity are linked to each other, to optimism and to the search for novelties. Learning must be pleasurable because this can guarantee that the person will be willing to learn more.

10.1. PLEASURE

- Physical pleasure is associated with survival (eating, sleeping, reproducing).
- Emotional pleasure is associated with social life and being with other members of the same species.
- Intellectual pleasure is the pleasure of creating, reflecting and learning in order to survive.
- “Educating with pleasure favors the desire to learn throughout our life”

11. RELAXATION TECHNIQUES

11.1. WHAT IS RELAXATION?

- Humenick proposed the following compound definition of “relaxation”: “it is a state of low arousal, the antithesis of the fight-flight response. It is so because the somatic and autonomic responses, such as muscle tension, heart rate, respiratory rate and metabolism, [decrease] to bring the body to balance” (Nichols, 2000).
- Stress or stress response is the natural response of our body to a situation of danger or alert. It comprises all physiological and psychological changes that make us competent to deal with dangerous situations.
- Stress can have a positive and stimulating effect, but if it is not neutralized regularly. Instead, it tires us and significantly decreases our quality of life.
- Rest and relaxation are sources of health—They prevent fatigue, ensure physical, emotional and spiritual well-being, and neutralize bodily tensions (Bonapace, 2009). Relaxing and staying calm is fundamental for performing teaching activities. When relaxed, the body revitalizes and provides an overall well-being.
- Teaching relaxation in educational programs for police officers, operators and emergency call operators is essential to face and counter situations that trigger stress in their jobs. It can help them modify their behavior and reduce individual symptoms of stress and anxiety.
- Relaxation has proved effective in reducing anxiety and pain perception, as well as certain medical conditions of hypertension, insomnia, tension headaches and migraine. In addition, it reduces the sugar levels in the blood.
- It is important to know that only daily practice can lead to developing the ability in order to relax. At first, it may seem that we are wasting our time; our thoughts become restless and we may become impatient. Once the body gets used to complete relaxation, which is different from a simply relaxed state, the body yearns for it. The simple fact of adopting a posture for relaxation may be enough to generate rapid bodily relaxation.
- Stress, tiredness, fatigue and exhaustion affect attention, concentration, presence, listening and engagement in the process. Stress can be a source of discomfort and delay in learning processes. A relaxed mind works best in the here and now. The proposed techniques are designed to release tension and promote relaxation in order to make the most of the knowledge acquired.
• Allow sufficient time during the lessons to learn and practice to relax. It is extremely important for the teacher and for teaching the police, the operators and the emergency call operators, in order to make their learning more effective in such a way they use it in their daily personal and professional life.

• This does not imply that we cannot focus on attendance, punctuality, participation and evaluation. To do so, it is essential to create the proper environmental conditions.

• Of course, we care about the emotional state and the tranquility of our facilitators; the relaxation and breathing techniques are also for you to practice. It is suggested to carry out some of the proposed techniques before and during the class, and at the end of each day of activities.

• When performing the exercises, try to be coherent, for example, when talking about relaxation, your attitude should match your proposal.

11.2. PHYSIOLOGICAL RESPONSE (FROM SHROCK).

✓ When a person is exposed to fear or threat, whether this is a real or an unreal situation, bodily changes occur in response to the stimulus. These changes are part of a defense response that signals danger and allows the person to fight or flee. This fight-flight mechanism is triggered by the activation of the autonomic nervous system, which is regarded as the link between mind and body. These answers are individualized; however, everyone experiences the same basic physiological changes.

✓ The protective responses to fear, threat, and resulting anxiety are innate and comprise involuntary physiological reactions. As grownups, the situations that cause our tension nowadays are less important to produce fear and anxiety than to influence the way in which people perceive and interpret them. Through maturity and understanding, threats can be reduced to endurable anxiety levels by relying on cognitive interventions.

✓ The autonomic nervous system is a complex system comprising two divisions: the sympathetic system and the parasympathetic system, which work in opposition—one balancing the other. The sympathetic (energy-consuming) system is the means to increase heart rate, elevate blood pressure and release epinephrine (adrenaline) into the bloodstream. These reactions prompt us to fight or flee from danger. Usually, the emotions produced by the stimulation of the sympathetic system are fear, anxiety and anger.
22

11.3. IMPORTANT

- Relaxation is a self-regulating skill that can only be learned through personal effort. The most important factor in its acquisition is the amount of time devoted to the practice of the learned techniques outside the teaching sessions. As in all acquisition of skills, diligent daily practice is necessary, not only for acquisition purposes, but also to maintain or improve the proficiency level. For this reason, the facilitator is encouraged to emphasize the importance of constant practice.

- We need to learn to control chronic stress with exercises that are based on deep relaxation and breathing techniques to increase our vital energy, allowing us to sleep less, to rest and to have an effective daily routine, as well as a state of mind that allows us to stay motivated and face events.

11.4. IMPLICATIONS FOR PRACTICE

- Besides the physical act of releasing muscular tensions, relaxation engages autonomous and somatic systems and the brain areas involved with cognition, affectivity, sensuality and psychomotor processes. People have different ways of learning new skills and responding to feedback.

- For some people, learning how to relax is enhanced by using music, rhythmical singsong, counting aloud or hearing the sighs produced when exhaling. The tactile person responds better to touch, friction, and the feeling of changes in the physical pressure (alteration of position or immersion in water).
12. PRACTICE AND TEACHING OF RELAXATION ADDRESSED TO
TEACHING AND LEARNING PROCESSES

Technique 1. Progressive Relaxation (Bonapace, 2009)

**Aims:**
1. To develop body awareness.
2. To differentiate between tension and relaxation.

**Description:**
It consists of tensing and systematically relaxing the muscles. Developed by Jacobson.

**Feedback:**

a. **Internal:** It is basically the awareness of the participant, who focuses on the feeling of tension and relaxation of each muscle.

b. **External:** The facilitator assesses whether the participant tenses and relaxes the various muscle groups in response to verbal cues.

**A. Progressive or Jacobson muscle relaxation:**
Progressive muscle relaxation is a very convenient method for people who have difficulty concentrating. It’s based upon the difference between tension and relaxation (Bonapace, 2009).

1. Adopt the relaxing posture of your choice.
2. Close your eyes and pay attention to your breathing for a few moments.
3. Perform some of the exercises included in the breathing chapter; spiral breathing is suggested.
4. Progressive muscle relaxation consists of three stages (Bonapace, 2009). Strongly contract a muscle and observe the tension experienced. Then release this contracted muscle and pay attention to the relaxed muscle.
5. Start contracting your feet. Tighten them by lifting your heels off the floor and bringing your toes to your knees. Notice the sensation that this movement provides: the muscles are tense and rigid, and the feet tremble a little. Feel the tension in your feet. Hold this contraction for a few seconds. As you tighten your feet, relax all other parts of your body.
6. Release the tension in your feet. Relax them. Tension disappears. Notice how heavy your feet seem when they were tense. They have lost tension.
7. Notice the difference of sensations between the tense feet and the relaxed feet. What do you feel? Did the tension you felt when your foot was tense disappear when you relaxed it?
8. Continue generating tension in each muscle group. Move from toe to head or from head to toe tensioning and relaxing the muscles of the legs, abdomen and pelvis, back, arms, hands and face. The basic technique remains the same: contract the muscle, release the tension and then realize the difference.
9. Another version implies contracting all parts at once.

Technique 2. Dissociative relaxation (neuromuscular dissociation) (Bonapace, 2009)

**Definition:**
It is a modification of progressive relaxation in which you tense a part of your body whereas the rest is relaxed.

**Aims:**
1. Decrease muscle synergy relationships.

**Description:**
The participant is asked to tense some muscles while relaxing others. It usually follows progressive relaxation.

**Feedback:**

a. **Internal:** the participant develops a center of "awareness of relaxation", by which he or she verifies the state of tension or relaxation of his or her muscles.

b. **External:** the facilitator can verify the relaxation reaction by response (noticing that the participant responds to the tension or relaxation requests) or physically (verifying that the tense parts are actually tense and assessing the degree of tension of the relaxed parts).
13. AUTOCOMIC RELAXATION

13.1. BACKGROUND

- It originates in the research on sleep and hypnosis conducted by the famous German neuropathologists and neurophysiologists Oscar Vogt and K. Brodmann, during the 1900s.

- Vogt observed that certain patients were able to reach a hypnoid state by themselves, by concentrating on feelings of weight and heat, which seem to be associated with this state.

- Regular practice of this type of mental exercises had a notable effect on reducing fatigue and nervous tension. Vogt called this technique prophylactic self-hypnotic rest.

- Shultz, a German neuropsychiatrist, based on Vogt’s work, attempts to develop a method of hypnotherapy that eliminates patient passivity and reliance on the therapist.

- Concentration on sensations of weight and heat in the limbs led to a profound state of relaxation in their patients. Repeated practice of the exercises increased the patient’s ability to induce themselves in this peculiar state. Relaxation was more and more profound, and the therapeutic benefits seemed to build up. Due to these factors, Schultz decided to call his method autogenous training, thus emphasizing its induced nature.

- The production of neuronal motor, sensory or psychic discharges was discovered during the autogenous state.

- The use of autogenic training has spread from the clinic field to the Japanese and Russian armies, where astronauts learn the method, aiming to reduce their metabolic needs and increase their resilience.

- The general affective sensation during the autogenous state would be the usual in an ideal human being, for whom no experience is traumatic or psychologically stressful.

- The teaching autogenic training is official at the Oskar Vogt Institute, Kyushu University, Japan, and at Wolfgang Luthe’s medical center in Montreal, Canada.

Suggestions for practice:

Instructions: Assume a comfortable bodily position, inhale deeply through your nose, hold your breath and slowly exhale. While doing so, relax your entire body.

Remember: By inhaling, you tense your body, and, by exhaling, you relax your body.

1. Stretch a limb:
   - Dissociate the synergy ratio, relaxing the rest of your body and breathing slowly and rhythmically.
   - Concentrate on relaxing the rest of your body.
   - Evaluate relaxation.
   - Repeat with other limbs, face, and back.

2. Stretch two limbs:
   - Both arms.
   - Both legs.
   - Right arm and leg.
   - Left arm and leg.

3. Stretch the opposite sides:
   - Left arm and right leg.
   - Right arm and left leg.

4. Stretch 3 limbs:
   - Both arms and one leg.
   - Both legs and one arm.
   - Combine the tension of extremities with face and back.
   - Relax the rest of your body, while breathing rhythmically.
13.2. ADVANTAGES

- **A)** First neuromuscular exercise. Muscle relaxation is not limited to the limbs, but, once the person acquires a greater practice of the method, it reaches the trunk musculature and becomes generalized.

- **B)** Second exercise of peripheral circulation and skin temperature. It has a functional organic basis. It consists of an increase in the peripheral circulation in the limbs, with a real increased temperature in the arm surface. On average, it apparently ranges from 1 ° to 2 ° C.

- **C)** Blood pressure. During the practice of the first three exercises, there is a decrease in systolic and diastolic pressure.

- **D)** Heart function. In the autogenous state, there is a significant reduction in heart rate. From the implementation of the third basic exercise, “the heart beats quietly and regularly”.

- **E)** Respiratory function. Decreased breathing rate (respiratory rate), increased duration of inhalation and exhalation, and increased inhalation (time) / exhalation (time) ratio.

- **F)** Electrical conductivity of the skin. In the autogenous state, the increase of the electrical resistance of the skin becomes evident. This is gradual from the beginning of the exercise. It reaches a steady state within 5 to 10 minutes after initiation and goes back quickly after completion.

- **G)** Most properly trained people experience satisfaction and well-being in the autogenic state. This sensation persists for an indefinite time, from a few seconds to several hours, after completing the exercises.

13.3. APPLYING THE TECHNIQUE

- **•** The autogenic state is defined as the particular state of consciousness that is self-induced through mental concentration exercises using verbal formulas with content carrying physiological meaning, as well as through mental contact with the body areas affected by the formula.

- **•** Preparation of environmental conditions. They are relatively important and require a decrease in stimuli that may interfere with the concentration process. It is recommended to be in a quiet place, with comfortable temperature and in dim light. When someone has been trained, these conditions take a second place, because, with due experience, the technique can be performed in the most extreme circumstances of external hyperstimulation.

- **•** Body posture. Body postures are intended to decrease the muscular tension in order to maintain passive concentration. In trained people, it is possible to reach the autogenous state in situations that require some muscular activity. Once the proper body posture has been attained, the visual stimulation should be eliminated. Thus, eyes should be closed before beginning the exercise. This requirement can be dispensable after long practice.

- **•** Emotional Attitude. State of affective reactivity motivated by external perceptions or by memories of unpleasant events or fantasies. It is important to know that, when the individual initiates these practices and is under the effects of a strong emotional tension, they may not perform the exercise. However, as they recover and start practicing, they will be able to do it even when strong emotions may arise.

- **•** Decrease of environmental stimulation, body posture with reduced muscular tension, closed eyes, and a relatively calm state of mind. The latter is indispensable for an optimal learning of the method.

- **•** Passive concentration. Attitude of passive acceptance of all manifestations and phenomena that can be perceived; mental opening of the formulas.

- **•** The practice of each exercise induces physiological and psychological changes, which is a characteristic of an altered state of consciousness (altered does not mean abnormal). The most important difference between autogenous relaxation and other methods of passive concentration lies in mental contact or concentration on proprioceptive sensations and mental repetition of the formula.
Technique 3: Schultz’s autogenic relaxation
(Bonapace, 2009) (JL González de Rivera, 1980)

Definition:
It is a self-suggestive form of relaxation and concentration; it produces a resting state similar to that generated when sleeping, by means of mental learning. Time: 10 minutes.

Aims:
- To self-regulate organic functions.
- To condition your body commanding it how it should feel.
- To get a relaxation response every time there is tension or stress.

Description:
The concentration on sensations of weight and heat in the limbs leads to induce states of deep relaxation in the individual. Repeated practice of these exercises increases the ability of self-inducing deeper relaxation states with enhanced advantages.

Suggestions for practice:
This technique suits people who concentrate easily. Their learning takes time and, above all, determination.

Directions:
a. A quiet space, pleasant temperature and dim light (reduction of artificial light) are required.
b. The position to perform the exercises is the following: sit in a chair, with your back straight without touching the back of the chair, your muscles should be relaxed, supporting the forearms on the thighs that are spread outwards.
c. The person is asked to close their eyes and allow themselves to feel all the sensations coming from each part of the body that is mentioned and mentally repeat them, as the facilitator calls them out.
d. Listen: Repeat “I am calm or I feel at peace”, sentence that serves as an introduction to the exercises.
e. Place your right arm parallel to the floor, start shaking your hand as fast as you can. Stop shaking; your hand and arm will be soft and muscles relaxed.

Autogenic relaxation consists of six stages of relaxation and concentration:
   - “My right arm is heavy” (Repeat the exercise internally 3 times)
   - “My right hand is heavy” (3 times)
   - “My left arm is heavy” (3 times)
   - “My right hand is heavy” (3 times)
   - “My arms and my hands are heavy” (3 times)
   - “My left leg is heavy” (3 times)
   - “My legs are heavy” (3 times)
   - “My arms and legs are heavy” (3 times)

   - “My right arm is very hot” (3 times)
   - “My left arm is very hot” (3 times)
   - “My right hand is very hot” (3 times)
   - “My left hand is very hot” (3 times)
   - “My arms and my hands are very hot” (3 times)

3. Heart Relaxation Exercises: Heart.
   - “My heart is beating quietly and regularly” (3 times)

   - “My arms, my hands and my legs are very heavy and very hot” (3 times)
   - “My heart is beating quietly and regularly” (3 times)
   - “My breathing is calm” (3 times, concentrate on the act of breathing)

5. Regulation exercises of the abdominal organs: Solar plexus.
   - “My arms, my hands and my legs are very heavy and very hot” (3 times)
   - “My heart is beating quietly and regularly” (3 times)
   - “My breathing is calm” (3 times)
   - “My abdomen is hot” (3 times)

At this point in the exercises, the individual is relaxed, feels their body is heavy and hot, perceives the beating of their heart and breathes as if they were floating in water.
The constant rhythm of the mother’s heartbeat gives the baby a musical background. This is the reference point of comparison with any other rhythm. The perception of rhythm causes a state of alertness. Harmony and rhythm organize the central nervous system. Musical frequencies are synchronized with brain waves and help organize them.

The creative potentiation was developed by the Chilean musician Egidio Levi Contreras Rodriguez (2008). This technique groups a series of methods of musical origin to be adapted to a pedagogical context. Promotes the development of individuals through a methodology based on listening to classical music (Mozart, Vivaldi, Tchaikovsky), in order to increase opportunities during the teaching-learning process.

This technique is part of the new art-based pedagogies, where art is put at the service of education through a simple and accessible methodology to work individually and in groups. The brain can use both hemispheres, opening the barrier that separates them, which allows to improve the quality of life in the teaching-learning processes.

### 14.1. BACKGROUND

It consists of consciously listening to a piece of classical music. As individuals listen to it, they reproduce the speed of the sounds of the song with the movement of their hands, relying on a score or image in motion. It is a creative way to foster attention and active listening, which are extremely necessary and important for human beings.

### 14.2. ADVANTAGES

- **A)** Developing concentration and attention.
- **B)** Increasing academic performance.
- **C)** Decreasing aggressive and violent behavior.
- **D)** Boosting auditory perception.
- **E)** Boosting the memory.
- **F)** Developing reading and writing skills.
- **G)** Increasing self-esteem.
- **H)** Increasing interest in participating and being part of the learning process.
- **I)** Decreasing stress and helping deal with stressful situations.

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14.3. SUGGESTED MUSIC

A) Wolfgang Amadeus Mozart
   • Contradanza 1 by Mozart
   • Contradanza 4 by Mozart
   • Contradanza 2 by Mozart
   • Minueto 4 by Mozart
   • Concerto for clarinet
   • Turkish March

B) Antonio Vivaldi
   • Four seasons (Winter)
   • Four seasons (Summer)
   • La Stravaganza
   • Concert for two violins in A minor RV522

C) Vittorio Monti
   • Csárdás (piano)
   • Csárdás (violín)

D) Gerardo Tamez
   • Tierra mestiza (instrumental)
Technique 1. Conscious music listening (Educadora, 2008)

**Definition:**
It consists of listening carefully to the selected piece of music and identifying the different rhythms that compose it in order to mark them with body movements.

**Time:** 5 minutes

**Aims:**
1. To integrate the operation of the left hemisphere with the right hemisphere.
2. To develop the ability of listening actively.
3. To relax through music.

**Feedback:**
- **Internal:** the participant increases their level of auditory awareness and improves their ability to listen consciously.
- **External:** the facilitator directs the activity.

**Suggestions for practice:**
This technique should be applied at the beginning of a class.

**Directions:**
- a. Select the musical work from the suggested list.
- b. Listen to the complete musical piece.
- c. Ask participants to express what effect the music had on them.
- d. Ask them to raise their hands whenever they discover an important change in the melody.
- e. Encourage them to close their eyes and represent the rhythm and the melody by waving their arms in the air.

Technique 2. Image presentation with sound and movement

**Definition:**
It consists of listening, seeing and performing combined movements using the hands.

**Time:** 6 minutes

**Aims:**
1. To integrate the operation of the left hemisphere with the right hemisphere.
2. To develop the ability of active listening.
3. To develop skills to integrate sight, hearing and movement to interact with reality.
4. To develop attention and concentration.
5. To relax through exercise.

**Feedback:**
- **Internal:** the participant develops their ability to listen consciously while paying attention to the images in motion and makes movements with their hands according to the shapes presented by the video.
- **External:** the facilitator directs the activity.

**Suggestions for practice:**
This technique should be applied at the beginning of a class.

**Directions:**
- a. Prepare the space in such a way that it is clear of obstacles between the participants. Also, clear the floor of objects.
- b. If the space is small and the chairs are movable, form a horseshoe so that half of the group of participants sit and the rest work standing behind a sitting peer. Everyone should be able to see the projection. If the room is similar to an auditorium, no changes are required.
- c. Explanation: a video with images accompanied by music will be shown. The screen is split in two; when you are in front of the screen, you will see two hands: one on the right side and another one on the left side. These will light up; when so, the hand that will move in the time indicated by a white light will be highlighted. The exercise consists of listening, watching and performing movements while the video plays. The following video is recommended:
  - d. [https://www.youtube.com/watch?v=FnLzjT8mrYQ](https://www.youtube.com/watch?v=FnLzjT8mrYQ)
  - e. [https://www.youtube.com/watch?v=Z8PEeew5gak](https://www.youtube.com/watch?v=Z8PEeew5gak)
  - f. [https://www.youtube.com/watch?v=AvBCsKLjHPc](https://www.youtube.com/watch?v=AvBCsKLjHPc)
**Technique 3. Music and body movement.**

**Definition:**
Participants will listen to the music and make movements with their hands, feet, head and neck, pretending they are playing a piano keyboard.

**Time:** 6 minutes

**Aims:**
1. To integrate listening and conscious movements.
2. To integrate the functioning of both cerebral hemispheres.
3. To relax and enjoy the activity.

**Feedback:**
- **Internal:** Participants incorporate their resources to enhance their creative abilities.
- **External:** The facilitator coordinates and directs the activity.

**Suggestions for practice:**
This technique can be applied at the start, in the middle or at the end of the class.

**Directions:**
- a. Form a circle with the chairs and the participants, when the group is large and space allows it, two groups forming a horseshoe can be set up; one inwards and one outwards.
- b. Participants should keep distance to avoid rubbing their bodies as they move.
- c. Play the video of Lang Lang, Rondo Alla Turca (Mozart, 2015).
  - [https://www.youtube.com/watch?v=MF7U1QYSzE](https://www.youtube.com/watch?v=MF7U1QYSzE)
  - [https://www.youtube.com/watch?v=Gtg8Gi11nic](https://www.youtube.com/watch?v=Gtg8Gi11nic)
- d. The group will prepare their hands (or playing an imaginary piano to the rhythm of music, trying to reach the melody pace and speed).
- e. They can do it with their eyes open or closed.
- f. After the first 2 minutes, the melody starts again and now the participants should perform movements with the tip of their toes. The imaginary piano will remain on the floor.
- g. When the two minutes have elapsed and movements with the feet have been performed, music will start again. Now the participants should integrate movements with their hands, feet, neck and head. Participants should use their hands and feet to pretend they are playing a piano. Their head and neck should perform spontaneous movements accompanying the music.
- h. When the exercise is completed, the participants are asked to take three deep breaths by inhaling through the nose and exhaling through the mouth, uttering a sound.
- i. Encourage the participants to talk about their experience when performing the exercise.

**Technique 4. Drawing with music.**

**Definition:**
Participants will freely draw lines to the rhythm of music and may incorporate different movements of their body.

**Time:** 10 minutes

**Aims:**
1. To integrate listening and conscious movements: hands, legs and free and spontaneous movements.
2. To develop creativity and imagination.
3. To integrate the functioning of both cerebral hemispheres.
4. To relax and have fun with the activity.

**Feedback:**
- **Internal:** Participants will draw freely to the rhythm of music and movement.
- **External:** The facilitator coordinates and directs the activity.

**Material:**
A sheet of white A4 paper, a colored pencil or crayon per participant.

**Suggestions for practice:**
- **Music:** (you can choose the version).
  - Czárdás – Piano (Monti, 2013).
  - Czárdás – Violin (Monti, 2013).

This technique can be applied at the beginning, in the middle or at the end of the class.

**Directions:**
- a. The group can perform this activity while sitting. It is not necessary to place the chairs in any way.
- b. Hand out a sheet of white A4 paper to each participant.
- c. Referral: participants should use colored pencils or crayons; if they do not have any, they can do it with a pen or pencil.
- d. Tell participants that, when they listen to the music, they should draw different shapes or figures to the rhythm. Tell them to alternate drawings with hand movements. The facilitator can indicate when to shift the actions.
- e. Encourage the participants to start the activity using the hand they write with and, when they are told so, they should use the other hand.
- f. After about 2 minutes, ask participants to move their legs and feet to the rhythm of the music and continue to draw.
- g. Ask participants to continue to draw and move other parts of their body to the rhythm of music.
- h. At the end, ask them to share with the rest of the group the result of their drawings and their experience.
15. MANDALAS

✓ Mandala is a Sanskrit word meaning “wheel” or “circle”. It consists of the ritual realization of a circular drawing (in analogy with the course of life, movement, stars, cellular structures, etc.) aiming to, sometimes with therapeutic intentions, perceive and develop a foundation around which the whole existence revolves (Canevaro). There is a precise language of colors and forms, unknown to almost all people, through which our inner arguments can reach the threshold of consciousness.

✓ The mandala represents the connection with these deep arguments. Its intuitive design tells us about ourselves and the type of life we live. It allows us to stop to reflect on our inner situation and to find answers to important existential questions.

✓ The mandala comprises three elements: concrete forms (real objects), abstract ones (lines or imaginary figures) and colors (layout, intensity and dissemination). These three elements, as well as fingerprints, unequivocally show who the author is (Canevaro).

✓ To create a mandala, it is not necessary to be an artist or have any particular graphic skills; all we need is a letter-size paper sheet to draw a large circle, and varied material to design and color, depending on personal preference, such as tempera, charcoal, pastels, wax, etcetera. The spontaneous choice of color or shape is a way of increasing the possibilities of action of the unconscious.

✓ Its use in education, especially for young children, helps focus the attention and express feelings through the choice of colors. It allows them to concentrate and improve their fine motor skills. In adults, it provides the same effect.

15.1. ADVANTAGES:

A) Coloring a mandala can be a good exercise to unwind, to relax the mind and the senses, through the harmony of the mandala shapes and figures.

B) There are mandalas from minor to greater difficulty. Coloring a mandala can take you from minutes to hours or days, time you spend investing in being with yourself, with your thoughts, feelings and emotions, in the here and now.

C) This activity allows you to stop to recover from the pressures of the environment to return to your inner being and regain energy to move forward.

D) It allows the participant to identify their mood and recognize the emotions they are experiencing in order to acquire greater self-knowledge.

E) In the complexity of the mandala lies your choice of colors, which gives way to the activation of the right hemisphere and all its creative resources.

F) The annexed mandalas in this manual are annexed with different forms and degrees of complexity. Also, some mandalas can be downloaded for free from the internet (coloringcrew.com, 2017), (Pinterest, 2017), (Ausmalbilder Fur Kinder, 2017), (123RF, 2017).

15.2. NOTE TO FACILITATOR:

Throughout the lessons, participants may have the chance to color one or more mandalas, if activities allow it. This will help you get their attention even if they are coloring. This practice allows the integration of both the right and left hemispheres at the same time, and will maintain a relaxed state of alertness in order to benefit from the knowledge taught. Be sure that using mandalas in class will facilitate the teaching-learning process. (See Annexure, p. 94.)
The body movement exercises increase awareness about ourselves, making it possible to increase awareness of our own body, our limits and, consequently, we discover who we are.

As we become more and more aware of our existence through our body, the possibility of being in the “here and now” will increase: our senses perceive our inner and outer worlds better.

This impacts on a more effective performance in daily life. It allows us to develop our capacities to be able to think, feel and act.

Movement generates energy and, if the latter is absent, movement, thoughts and emotions may be absent, too. The living organism, on the other hand, is an independent fire, self-regulating and self-perpetuating. Sensations, feelings and emotions are the perceptions of internal movements in a relatively fluid body. The emotional life of the individual depends on the mobility of his body, which is the function or flow of stimulation through it (Lowen D. A., 2006).

Chronic muscular tensions and disruption in the breathing gesture generate blockages that reduce mobility and, consequently, a reduction in the energy flow, which is essential for life, occurs. They limit emotional expression and ability to act outwardly (Lowen D. A., 2006).

16.1. PROPOSED EXERCISES

- The following exercises allow the activation and regulation of energy in the body.
- They develop a capacity for developing the individuals’ active presence during the teaching-learning process.
- They allow to reduce the levels of tension accumulated due to stress.
- They increase the individuals’ confidence by being in touch with their internal energy processes to relate more favorably to your environment.
- They prevent energy overload during the teaching-learning process. It is their capacity for self-regulation that allows individuals to be aware of and satisfy their bodily needs.
- The step-by-step description of the exercises helps individuals perform them.
- The following exercises will be adapted as much as possible to the training space.
**Technique 1. Grounding, Rooting**  
(Lowen D. A., 2006), (Lowen A. L., 2003), (Jalieh Juliet Milani & Alessandra Shepard, 2005), (Cabral)

**Definition:**
The rooted position is the basis of conscious bodily movement. This posture aims to direct the energy of the body towards the earth. It is an easy and simple exercise. We will use it to mobilize energy in the body and promote energy regulation of the participants.

**Time:** 3 minutes

**Aims:**
1. To take energy to the lower body with the purpose of seeking and finding self-regulation. This allows us to be more in touch with ourselves.

**Feedback:**
a. Internal: Participants personally experience each of the exercises in order to identify and satisfy their needs.
b. External: The facilitator coordinates and directs the activity.

**Suggestions for practice:**
This exercise can be applied at the beginning, in the middle or at the end of the class.

**Directions:**
- a. Stand with legs about 25 cm apart, toes slightly turned inwardly, in order to stretch some of the muscles of the pelvis.
- b. Lightly bend your knees.
- c. Start to lean forward to touch the ground with the fingers of both hands.
- d. No weight should fall on the hands; all the weight goes down to the feet. Your heels may be slightly raised.
- e. Let your hands on the floor and start to stretch your knees gently and very slowly. Until the hamstrings, behind the legs, are stretched.
- f. The knees are a little bent.
- g. Keep this posture for about one minute.

The facilitator asks the following questions:

- How is your breathing? Vibration on the legs requires breathing.
- Do you feel any vibration in your legs? If not, try to bend your knees slowly a little more and stretch them again, slowly and gently. Perform these movements several times so that the muscles relax.
- How are the vibrations like? Are they gentle or strong? Soft or spasmodic? Try to hold up the energy movement that might be produced in your body by means of deep and soft breathing.

**Technique 2. Initial posture: “grounding”**  
(Lowen A. L., 2003), (Cabral), (Lowen D. A., 2006), (Jalieh Juliet Milani & Alessandra Shepard, 2005)

**Definition:**
This energy movement encourages us to become aware of our posture and the way we distribute our weight on our feet. It helps us guide our body into a more harmonious posture, putting our consciousness in a standing position. We realize the strength of our legs, and the firmness and security to keep our feet on the ground and support the rest of our body. Our breathing will also be more steady. This movement fills our entire body with energy.

**Time:** 3 minutes

**Aims:**
1. To learn how to physically uphold psychological pressures.
2. To develop the ability to have a full presence.

**Feedback:**
a. Internal: participants generate the resources to bring energy to the floor to relieve stress.
b. External: participants personally experience each of the exercises in order to identify and satisfy their needs.

**Suggestions for practice:**
To start an activity that requires your full presence.

This technique can be applied to start the class, as it activates energy. In the middle of the class, it revitalizes and helps the body rest after being sitting for a few hours. Finally, at the end of the class, it allows to release accumulated energy and produces new energy the individual can benefit from.

**Directions:**
- a. Adopt the rooting posture (Technique 1), feet separated and parallel to each other.
- b. Knees are slightly bent. Pelvis is comfortably supported by the thighs, legs and feet.
- c. Abdomen is relaxed, like the rest of the upper body.
- d. Face naturally tilts forward.
- e. Put your hands on your hips for greater balance and stability.
- f. Slowly raise both heels and keep your knees slightly bent.
- g. As your heels rise, breathe through your nose and exhale through your mouth uttering a sound when you put them down on the floor again.
- h. Little by little, increase the speed of the same movement. As you perform this exercise, release your heels gradually.
- i. Perform this exercise six times.
Technique 3. Flexing the knees

(Loewen A. L., 2003)

Definition:
Your knees are the shock absorbers of your body. When pressure is exerted, the knees flex, allowing the force to be transmitted through the body and into the ground. Try to let the energy flow through the knees, if they are blocked, the force gets trapped in the lower back, producing a stress condition that can affect that area. Psychological pressures are the equivalent of physical weight on our body. If you try to stand with your knees stiff or overstretched, you will receive the impact on your back.

Time: 3 minutes

Aims:
1. To learn how to physically uphold psychological pressures.

Feedback:

a. Internal: participants generate the resources to bring energy down to the floor to relieve stress.
b. External: the facilitator coordinates and directs the activity.

Suggestions for practice:
To reactivate the vital energy in the participants.

This technique can be applied to start the class, as it activates energy; in the middle of the class, it revitalizes and helps the body rest after being sitting for a few hours. At the end of the class, it allows to release the accumulated energy and produces new energy the individual can benefit from.

Directions:
a. Standing with feet about 20 cm apart, see if your knees are stiff or bendable; if your feet are parallel or turned outwards; if your weight is leaning forwards on your toes or back on your heels.
b. Bend your knees slightly. Turn your feet so that they are parallel to each other.
c. Take your weight forward without raising your heels, so that you rest on your toes.
d. Slowly bend and straighten the knee about six times, and hold the position for about thirty seconds, breathing easily.

The facilitator will ask the following questions:

Æ How do you feel about this posture? If you feel that it is not natural, perhaps you are not standing correctly.
Æ Do you feel anything in your legs? Do you feel secure standing on your legs?
Æ Do you experience any sensation of having your feet on the ground?
Æ Can you feel the flexibility your knees provide when they are not stiff?

Technique 4. The Arc (Jalieh Juliet Milani & Alessandra Shepard, 2005)

Definition:
We can feel some tension while adopting an unknown posture. At first, you might feel tension.

Time: 5 minutes

Aims:
1. To learn how to physically uphold psychological pressures.
2. To identify the processes of tension, charge, discharge and relaxation.

Feedback:

a. Internal: participants personally experience each of the exercises in order to identify and satisfy their needs.
b. External: the facilitator coordinates and directs the activity.

Suggestions for practice:
To reanimate the energy after the body is in a relaxed state.

Directions:
a. Adopt the initial or rooting position (Technique 1).
b. Keep your chin parallel to the ground and your eyes looking forward.
c. Clench your hands into fists and take your arms backwards. Put your knuckles on your waist.
d. Slowly bend your torso backwards.
e. Inhale through your nose softly and slowly, hold the air for two seconds and exhale through your mouth uttering a sound.
f. Try to maintain this posture as long as possible without going beyond your personal limits. Notice if there is any tremor or vibration, sweating or resistance.
g. Perform the arch position moving the upper body forwards and taking your arms forwards; relax your head directing it to the floor. As your hands reach the floor, your knees bent. Put your chin pointing to your chest and, from that position, start to stretch your legs gently until you feel a spontaneous tremor.
h. Breathe deeply and allow the muscles in your back and legs to elongate.
i. Return upwards slowly, moving each vertebra, such that the head is the last part of your body that you raise.
j. Move slowly upwards, moving each vertebra, and return to the initial standing position.

Note: Over time, as we continue to do these exercises, our consciousness expands; as we let our resistance go, we can relax and allow greater sweetness in our lives.
Technique 5. Ankle circles
(Jalieh Juliet Milani & Alessandra Shepard, 2005)

Definition:
Release of the tension of the ankles for better mobility and rooting.

Time: 3 minutes

Aims:
1. To learn how to physically uphold psychological pressures.
2. To feel the joint flexibility and movement for rooting.

Feedback:

a. Internal: participants personally experience each of the exercises in order to identify and satisfy their needs.
b. External: the facilitator coordinates and directs the activity.

Suggestions for practice:
To reactivate blood circulation after being more than two hours sitting.

Directions:

a. Adopt the starting or rooting position (Technique 1).
b. Gently raise your right heel so that only the ball of your foot and the toes are in contact with the ground.
c. Keep your weight on the toes of your right foot, slowly turning your right ankle clockwise.
d. Repeat this movement 6 times.
e. Now turn your ankle in the opposite direction and repeat this movement 6 times.
f. Repeat with the left foot, turning it clockwise 6 times. Then do it counterclockwise.
g. Return to the standing position.
h. Breathe deeply and focus your attention on the distribution of your weight on your feet.

The facilitator will ask the following questions:

► How do you feel standing with your feet on the ground now?
► You will probably experience a greater sense of stability.
► Are you more balanced? Keep in mind that your feet are upholding you.
► How do you feel when activating the ankle joints with this movement? This allows energy to flow more easily through the joints.

Technique 6. Weight distribution on both legs
(Jalieh Juliet Milani & Alessandra Shepard, 2005)

Definition:
Identify the distribution of your weight on your legs until you find balance.

Time: 3 minutes

Aims:
1. To learn to distribute weight on both legs.
2. To develop the ability to identify tensions in the ankles and release them through movement.

Feedback:

a. Internal: participants generate the resources to bring energy down to the floor to relieve stress.
b. External: the facilitator coordinates and directs the activity.

Suggestions for practice:
After the group has been sitting for two hours.

Directions:

a. Initial or rooting position (Technique 1).
b. Slightly bent knees.
c. Start with the left foot, try to carry all your weight on that foot. As you do so, inhale slowly, hold your breath for two seconds, exhale air and release body tension. You are literally on your left foot with all your weight.
d. Return to the initial posture, with both feet on the floor. Notice any difference in that position.
e. Now change the weight to the right foot. As you do so, inhale slowly, hold your breath for two seconds, exhale both air and body tension. You are literally on your right foot with all your weight.
f. Return to the initial posture, with both feet on the floor. Notice any difference in that position.
g. Repeat 6 times, distributing your weight on each foot.
Technique 7. Waist Warm Up
(Jalieh Juliet Milani & Alessandra Shepard, 2005)

Definition:
Movement of the waist and incorporation of the pelvis for release of tension and recovery of movement.

Time: 5 minutes

Aims:
1. Release of tension and activation of vital energy in the middle of the body.

Feedback:

a. Internal: participants will experience each of the exercises individually in order to identify their needs and satisfy them.
b. External: the facilitator coordinates and directs the activity.

Suggestions for practice:
It allows to relax and activate the middle part of the body.

Directions:

a. Adopt the initial position or rooting (Technique 1).
b. Put your hands on both sides of the waist.
c. Slowly fold the upper body forward. Your head and neck should be relaxed and should move in the direction of the movement of the torso.
d. In the tilted forward position, slowly begin to move your upper body to the left side. Try to move only the waist. Continue to move the upper body to the left side. Try to move only the waist.
e. Keep on moving the upper body in a circular way, now to the right.
f. Change direction freely.
g. Start slowly, feeling and noticing any tension in every movement.
h. Keep on breathing while doing these movements.

Technique 8. Exercise for body vibration

Definition:
The function of vibration is to relieve tension and increase blood flow and temperature in a gentle and safe way, to reanimate the state of alert. In addition, it consists of moving all the joints so that they become more flexible and prevent some type of injury at the time of doing some type of stretching.

Time: 5 minutes

Aims:
1. To learn how to physically endure psychological pressures.
2. To develop alertness.

Feedback:

a. Internal: participants personally experience each of the exercises in order to identify and satisfy their needs.
b. External: the facilitator coordinates and directs the activity.

Suggestions for practice:
This exercise has great benefits if it is practiced daily at least 5 minutes three times a day.

Directions:

a. In the initial rooting position (Technique 1), start shaking your whole body very gently.
b. Particularly, shake your joints: ankles, knees, pelvis, wrists, elbows, shoulders and neck, try to perform uncontrolled movements.
c. Release and allow the movements to come naturally.
d. Keep your feet on the floor at all times.
e. Inhale through your nose and exhale through your mouth while you utter a sound. Do this for at least 5 minutes.
Technique 9. Stretching Exercise: shrugging the shoulders
(Jalieh Juliet Milani & Alessandra Shepard, 2005) (Cabral).

Definition:
The primary goal of stretching is to start having contact with your body in order to identify any tensions you may have.

Time: 3 minutes

Aims:
1. To become aware of the tensions in your body and recognize your own limits.

Feedback:

a. Internal: participants personally experience each of the exercises in order to identify their needs and satisfy them.
b. External: the facilitator coordinates and directs the activity.

Suggestions for practice:
At any point in the teaching process.

Directions:

a. Adopt the rooting posture (Technique 1).
b. While doing the exercise, inhale through your nose when lifting your shoulders. Exhale through your mouth, uttering a sound when relaxing.
c. Raise your shoulders toward your ears until you feel a gentle tension in your neck and shoulders;
d. Bend your knees a little more.
e. Keep the posture for five seconds.
f. As you do that, repeat internally: “persist-resist-release”. When you say “release,” relax your shoulders and go back to the rooting posture.
g. Repeat the exercise 6 times, hold the posture and tension until you reach your own limit.

Technique 10. Stretching Exercise: Arm Stretching
(Cabral)

Definition:
The primary goal of stretching is to start having contact with your body in order to identify if you have tensions.
The vibration plus the stretching serve as preparation to work.

Time: 3 minutes

Aims:

1. Become aware of the tensions in your body and recognize your own limits.

Feedback:

a. Internal: participants personally experience each of the exercises in order to identify and satisfy their needs.
b. External: the facilitator coordinates and directs the activity.

Suggestions for practice:
At any point in the teaching-learning process.

Directions:

a. In a standing posture, legs slightly bent, hands above his head, fingers intertwined hand palms facing up.
b. While doing the exercise, inhale through your nose by extending arms; exhale through your mouth, emitting a sound when relaxing.
c. Stretch your arms up and back, bending your knees slightly.
d. Feel your arms, shoulders and upper back stretching.
e. Keep the tension for five seconds. As you do that, repeat internally: “persist-resist-release”. When you say “release” relax the shoulders and return to the initial posture.
f. Repeat six times; in the sixth time, hold the posture and tension until you reach your own limit.
**Technique 11. Stretching Exercise: stretching arms forwards**

*(Cabral)*

**Definition:**
The primary goal of stretching is to start having contact with your body in order to identify if you have tensions.

**Time:** 5 minutes

**Aims:**
1. To become aware of the tensions in your body and recognize your own limits.

**Feedback:**

a. **Internal:** participants bodily experience each of the exercises in order to identify and satisfy their needs.

b. **External:** the facilitator coordinates and directs the activity.

**Suggestions for practice:**
At any point in the teaching-learning process.

**Directions:**

a. In a standing position, legs slightly bent, arms stretched across chest, fingers entwined; hand palms facing out.

b. While doing the exercise, inhale through the nose as you extend your arms. Exhale through the mouth, uttering a sound when relaxing.

c. Extend your arms forward with the palms facing outward, until you feel a slight tension in your arms and shoulders.

d. Bend your knees a little more.

e. Feel your arms, shoulders and upper back stretching.

f. Keep the tension for five seconds. As you do that, repeat internally: "persist-resist-release". When you say "Release", relax the arms and return to the initial position.

g. Repeat six times; in the sixth time, hold the posture and tension until you reach your own limit.

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**Technique 12. Stretching Exercise: Fluttering of a Butterfly**

*(Cabral)*

**Definition:**
The primary goal of stretching is to start having contact with your body in order to identify if you have tensions.

**Time:** 5 minutes

**Aims:**
1. To become aware of the tensions in your body and recognize your own limits.

**Feedback:**

a. **Internal:** participants personally experience each of the exercises in order to identify and satisfy their needs.

b. **External:** the facilitator coordinates and directs the activity.

**Suggestions for practice:**
At any point in the teaching-learning process.

**Directions:**

a. In a standing posture, with slightly bent legs, fingers entwined behind head, arms stretched in front of the chest; hand palms resting on the nape of the neck, elbows extended on both sides. Back should be straight.

b. While doing the exercise, inhale through your nose when stretching your arms; exhale through the mouth, uttering a sound when relaxing.

c. Move your elbows back as you keep your hands on your neck, creating a strain on the back.

b. Bend your knees a little more.

e. Siente el estiramiento en los brazos, los hombros, y la parte superior de la espalda.

f. Feel your arms, shoulders, and upper back stretching.

g. Repeat six times; in the sixth time, hold the posture and tension until you reach your own limit.
Definition:
The primary goal of stretching is to start having contact with your body in order to identify any tensions you may have. The vibration plus the stretching serve as preparation to work.

Time: 5 minutes

Aims:
1. To become aware of the tensions in your body and recognize your own limits.

Feedback:
a. Internal: participants bodily experience each of the exercises in order to identify and satisfy their needs.
b. External: the facilitator coordinates and directs the activity.

Suggestions for practice:
Relaxing neck and head.

Directions:

a. In a standing position, slightly bend legs, fingers intertwined behind head, arms stretched across the chest, fingers intertwined; hand palms resting on the nape of the neck, with elbows stretched both sides. Back is straight.
b. While doing the exercise, inhale through the nose as you extend your arms. Exhale through the mouth, uttering a sound when relaxing.
c. Move the right shoulder down while you tilt your head to the left shoulder until you feel a slight tension in the neck and shoulder;
d. Bend your knees a little more.
e. Feel your neck and shoulders stretching.
f. Keep tension for five seconds. As you do that, repeat internally: “persist-resist-release”. When you say “release”, relax the arms and return to the initial posture.
g. Repeat six times; in the sixth time, hold the posture and tension until you reach your own limit.
17. BREATHING

17.1. ANATOMY OF BREATHING (CALAIS-GERMAIN, 2007)

The breathing gesture is the gesture we make when breathing. Its purpose is hematosis, which is performed inside the lungs and consists of the transformation of venous blood into arterial blood.

Internal breathing is what occurs in the tissues of the body. Cells need oxygen to function, which is supplied by arterial blood (from the lungs to the heart). This operation produces waste: carbon dioxide, which is transported by the venous blood to the heart and lungs.

In external breathing, air enters from the outside of the body into the lungs and is expelled about 12 to 17 times per minute. It is produced in the lungs. The proposed exercises aim to influence this rhythm and ventilation movements.

Breathing is an organic rhythm that runs through our body at the visceral, muscular, skeletal regions and joints level. Our body does not have the capacity to store oxygen; therefore, we breathe during the whole day.

Breathing is almost always unconscious, automatic and very influential in and influenced by our actions and emotions. Breathing is an action in which we can widely intervene in a conscious and voluntary way, varying in many ways, with repercussions at many levels.

The breathing gesture can be performed to make movements, modify emotions, modify body tone, relax, modify pleasure or pain, move the viscera, open and close the ribs. These goals are not related to oxygenation.

17.2. BREATHING AND ENERGY CHARGING

Action needs energy in order to be performed. The more intense the action is, the more energy is required to perform it. When the action must be sustained for a long period, the energy should also be maintained for the same period of time. The body process that is more directly related to the normal regulation of organismic energy is breathing (James I. Kepner, 2000).

17.3. HOW DO WE BREATHE?

- It is suggested that the facilitator record how each breath is performed by his or her own body in order to be able to convey that information to the participants.
- The suggested exercise is lying down on a rug on the floor, with a light notebook on the belly, so that one can become aware of how one breathes. It will be necessary to observe how the notebook goes up and down on the belly. The difficulty lies in that we take breath for granted and do it automatically.
- Conscious breathing helps regulate stress, balancing the nervous system; it also stimulates the parasympathetic system and deactivates the sympathetic, stress-related system.
- Experience allows a greater understanding of this proposal.
Deep and slow breathing allows us to feel alive and gives us the possibility of feeling relaxed and at ease, without thinking of anything else past or anything that worries us for the future. It helps us to be in the here and now. At any time in life, breathing properly also provides more oxygen to all body organs and directly affects the nervous system and, therefore, our mood (DEI, 2017).

Very analytical and abstract people tend to be influenced by the left hemisphere. Dreaming, imaginative, intuitive people tend to be influenced by the right hemisphere (DEI, 2017).

**Technique 1. Conscious breathing. (DEI, 2017)**

**Description:**
To breathe this way, you need to reverse the usual movement, relax your shoulders and chest and inflate your belly. This movement maximizes oxygen in the lungs.

**Time:** 3 minutes

**Aims:**
1. Learn to breath consciously.

**Directions:**
   a. Observe your body.
   b. Feel how the air you breathe comes through your nose, keeping your mouth shut.
   c. If possible, close your eyes as well, and try to breathe more slowly, without hurry, without forcing it. Imagine that you have a balloon in the lower stomach.
   d. The first thing that is filled up is the stomach when inhaling, and from there to the chest, from the bottom up, as if filling a jug of water, feeling as it widens from the waist to the shoulders, making sure that no part of the body is tense or contracted.
   e. When you finish inhaling, it is advisable to hold your breathing for a second and to begin to exhale also through the nose, with the mouth slowly closed.

**Technique 2. Cross-breathing. (DEI, 2017)**

**Description:**
Breathing alternating the nostrils has an effect at the brain level, since it stimulates the interconnection of both brain hemispheres. It also promotes calm alertness, so you can make the best decisions after doing this exercise a few minutes.

**Time:** 5 minutes

**Aims:**
1. To learn to perform a cross-breathing.
2. To live the benefits of practicing cross-breathing.

**Directions:**
   a. With the thumb of your right hand, cover the air inlet on the right side of the nose, above the nostril just below the nose bridge; inhale slowly and deeply through the left nostril. Now cover the left nostril with your ring finger and exhale through the right nostril; inhale through the right nostril. Now cover the right nostril and exhale through the left; inhale through the left nostril again and cover it in order to exhale through the right one.

**Technique 3. Breathing to activate the brain hemispheres. (DEI, 2017)**

**Description:**
Breathing through the nostrils independently has an effect at the brain level, since it stimulates the interconnection of both brain hemispheres.

**Time:** 6 minutes

**Aims:**
1. To learn to perform breathing for the activation of the cerebral hemispheres.
2. To live the benefits of practicing cross-breathing.

**Directions:**
   a. Activation of the right hemisphere. Cover your left nostril.
   b. Inhale and exhale deeply for three minutes without stopping.
   c. Activation of the left hemisphere. Cover your right nostril.
   d. Inhale and exhale deeply for three minutes without stopping.

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5 - Deep and slow breathing allows us to feel alive and gives us the possibility of feeling relaxed and at ease, without thinking of anything else past or anything that worries us for the future. It helps us to be in the here and now. At any time in life, breathing properly also provides more oxygen to all body organs and directly affects the nervous system and, therefore, our mood (DEI, 2017).

6 - Very analytical and abstract people tend to be influenced by the left hemisphere. Dreaming, imaginative, intuitive people tend to be influenced by the right hemisphere (DEI, 2017).
Conscious breathing is a physical, mental, and spiritual experience. It allows rational thought to be left aside in order to allow bodily sensations and greater awareness of emotions.

It consists of connecting inhalations with exhalations. This means linking them so that they feel like a circle.

A relaxed breathing consists of complete inhalations and exhalations effortlessly.

When breathing is conscious, it is performed in the chest—attention lies in the movement of the lungs.

Practicing it mobilizes energy. If done for a few minutes, dynamic flows of energy throughout the body or part of it you can be experienced. These energy flows are the processes required to fill the body with pure vital energy, and which free the mind from tensions.

Conscious breathing is a potential ability that humans have had at all times. This ability is activated by meditating on the rhythm of breathing.

The basic purpose of conscious breathing is energy cleansing and balance. The benefits of this type of breathing are greater when the person is awake.

Practicing it daily provides a deep sense of spiritual and physical well-being. It also increases self-esteem and personal intelligence.

It has the capacity to allow the body a greater recovery to physical exhaustion. Likewise, it keeps the mind calm, activates the circulatory system and provides energy to the body.

If you have difficulty breathing, take twenty deep breaths each day, before getting out of bed or while you are taking a bath.

Breathing is totally harmless; the mind is not. Any sensation that appears while breathing, disappears completely if you continue doing it.

Breathing brings relaxation, releases tension. Tension causes sensations. Neither breathing nor relaxation causes sensations, but the accumulated tensions and the pollution of the mind do.

Each inhalation and exhalation involuntarily induces relaxation. Breathing is totally safe and life-giving.

**Warning:** Take only twenty connected breaths per day, for the first seven days. Breathing is very simple and powerful.

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**Description:**
It is a simple exercise that only takes 30 seconds per cycle (inhalation and exhalation), and is ideal for the hectic life of the public servants. It can be done at the beginning or at the end of the day. These seconds are able to reflect the energy of mind and body.

**Time:** 30 seconds, approximately

**Aims:**
1. Learn to perform a connected breathing.

**Directions:**
- **a.** Consciously inhale, slowly if necessary.
- **b.** Release the air when exhaling. Perform the exhalation and release it, don’t hold it, release it. Gravity and muscle contraction will exhale for you; you must not retain or try to keep control.
- **c.** Then, immediately inhale again.
- **d.** Connect the inhalation with the exhalation and the exhalation with the inhalation. Make a continuous circle. The mind is unable to catch the unity of breath. Breathing is the encounter of the intangible with matter. It is the bridge between them.
- **e.** When inhaling, air must climb the chest, the throat should go through and get to the head.
- **f.** Perform four short breaths, joining the inhalation with the exhalation, imagining a continuous circle through the breath.
- **g.** Short breaths allow to exaggerate the connection and union of the inhalation with the exhalation in a full uninterrupted circle.
- **h.** At the end of each group of short breaths, take a long one. Push all the air out at the end of each long breath.
- **i.** The long breath aims to fill the space with air when inhaling and to release it completely when exhaling.
- **j.** Inhalation and exhalation should be done through the nose.
- **k.** Perform four short breaths and one long five times, non-stop, until you take twenty connected breaths. The five connected breaths are like a single breath.
- **l.** Breathing should be natural, without trying to force or control it. Breathing rhythm must be fluid.
- **m.** When breathing follows this procedure, you will feel the energy and the air moving through your body. It is the energy of Conscious Breathing (CB).
- **n.** In the first cycle, you will notice that your fourth breath is fuller and deeper than the first one.
If you have difficulty with the rhythm, just remember to take twenty deep breaths every day. You can do it while in bed to wake up or while you are taking a bath.

Breathing is a great friend and keeps you alive and healthy.

Tip: perform these thirty-second exercises with intervals, to integrate the sensations.

Technique 5. Twenty connected breaths (Orr, 1991)

Description:
Take twenty connected breaths. Take them in groups of five. In the fifth breath, fill all your body with air—the chest, the navel, the head and the toes. Release the exhalation as soon as your body is full of air.

Time: 5 minutes

Aims:
1. Learn to perform a complete cycle of 20 connected breaths.

Suggestions for practice: do not hesitate to try this breath; you can start at your own pace until you reach 20 continuous breaths.

Directions:

a. Consciously draw in the inhalations, slowly if necessary.
b. It releases the air in the exhalation. Perform the exhalation and release it—don’t hold it, release it. Gravity and muscle contraction will exhale for you; you must not retain or control exhalations.
c. Then, immediately perform the next inhalation.
d. Connect the inhalation with the exhalation and the exhalation with the inhalation. Make a continuous circle. The mind is unable to grasp the oneness of breathing. Breathing is the encounter of the intangible with matter. It is the bridge between them.
e. In the inhalations, the air must rise through the chest, go through the throat and reach the head.
f. Take four short breaths, connecting the inhalation with the exhalation; imagine a continuous circle through breathing.
g. Short breaths allow you to exaggerate both the connection and the link of the inhalation with the exhalation in an uninterrupted complete circle.
h. At the end of each group of short breaths, take a long one. Push all the air out at the end of each long breath.
i. The long breath aims to fill the space with air when inhaling and release it completely when exhaling.

j. Inhalation and exhalation should be done through the nose.
k. Take four short breaths and one long five times, non-stop, until you take twenty connected breaths. The five connected breaths altogether are like a single breath.
l. Breathing should be natural, without trying to force or control it. The breath rhythm must be fluid.
m. If you follow this procedure when breathing, you will feel the energy and air moving in your body. It is the energy of Conscious Breathing (CB).

**Description:**
Take twenty connected breaths for anger management.

**Time:** 5 minutes

**Aims:**
1. To manage anger through connected breathing.

**Directions:**
a. Take twenty connected breaths with the following variables.

b. Put your tongue between your teeth.

c. Throughout the exercise, keep your lips closed and put your tongue between your teeth, upwards, behind the upper lip or downwards, over the teeth and behind the lower lip.

d. Take twenty breaths keeping the tongue in any of these positions.

e. Breath through your nose.

**Note:** this exercise is especially useful for people who grind their teeth (bruxism) or experience extreme anger. It is advisable to carry it out in the bed before going to sleep.

Technique 7. Nasal breathing with open mouth (Orr, 1991)

**Description:**
Take twenty breaths with the mouth fully open and breathe through the mouth. It is one of the most effective ways to detoxify the body.

**Time:** 5 minutes

**Aims:**
1. To get the benefit of both types of breathing.

**Suggestion for practice:** skill is required to perform the activity.

**Directions:**
- Take twenty continuous breaths through the nose, with the mouth fully open.
- You can thus discharge the accumulated energy that is no longer functional for your organism.
- Practice and help are needed for the development of intuition.
Technique 8. Breathing with open mouth (Orr, 1991)

Description:
Take twenty breaths with the mouth fully open and breathe through the mouth.

Time: 5 minutes

Aims:
1. To release blocked energy and accumulated emotions.

Directions:
- Take twenty breaths with mouth wide open and breathe through your mouth.
- Your mouth should be as open as possible during the exercise, provided it is not uncomfortable.
- Pay attention to the sensations you experience.
- Your tongue should be relaxed.
- With conscious attention, inhale and release the exhalations.
- Breathing through the mouth releases blocked energy and accumulated feelings.
- If you notice unpleasant feelings, breathe through your nose to release them.

Note: The purpose of the nose is to breathe. The path in the frontal sinuses that carries the energy directly to the nervous system. Breathing through the nose is much healthier than breathing through your mouth.²


Description:
This exercise is considered by Leonard Orr as the most exciting of all. It is also done on the basis of twenty breaths connected. It is advisable to end it with three noisy nasal breaths.

Time: 5 minutes

Aims:
1. Experience silent energy breathing.

Directions:
- Take twenty connected breaths. Finally, take three deep nasal breaths uttering a breathing sound.
- Inhale and exhale so gently that the air is breathed in and released silently.
- If you close your eyes you will be able to feel the flow of energy that goes from heart to forehead and comes back. You can make the energy circulate as you like.
- The purpose of this exercise is to realize that you are breathing energy.
- This exercise allows the integration of mind, body, emotions and spirit.
- It is a very soft breath that teaches about breathing.
- Practicing it has allowed healing of respiratory problems such as: cold and blocked nose.
- People who could not breathe through their nose and did it through their mouth, can breathe again through their nose.
- It is a gentle way to meditate through breathing.
- Try with small breaths first, and then take breaths as deep as possible.
Breathing exercises and training can be induced for reducing stress and high levels of anxiety.

They favor relaxation and peace of mind through training in certain breathing patterns.

Physiologically correct nasal inhalation heats up and moistens the air, filters and eliminates impurities and germs. Thus, it is the type of breathing that we should use in all breathing exercises.

Breathing is a universal process. All vertebrates breathe essentially in the same way.

There are more benefits of practicing conscious breathing to increase your ability to realize the moment you are living, the bodily sensations you are experiencing, the thoughts that come and go through your mind and the emotions associated with these thoughts and feelings.

The suggested time to start this conscious practice is 20 minutes per day, which will increase as the exercises continue to be performed. It will influence your time availability, the posture you choose and, especially, your will to be in the best health conditions.

The positions to breathe are varied, in whatever position you are, you are breathing.

To do the exercises, it is advisable to wear comfortable clothing that does not press any part of your body, especially the chest and abdomen.

You will find a wide variety of breathing exercises you can choose from according to their benefits or your own needs.

Let’s start this proposed exercise:

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**Technique 10. One-minute practical breathing (Jon, 1994) (Chelis, 2016) (Guratana, 2012)**

**Description:**

The conscious attention of the breathing gesture allows you to consciously identify the way you breathe and its effect on your body.

**Time:** 1 minute

**Aims:**

1. To practice conscious breathing for one minute.

**Directions:**

a. Wherever you are, find a position where you feel comfortable. Close or lower your eyes without focusing on any object.

b. Pay full attention to your breathing, realizing how the air comes in and out of your body.

c. Stay in touch with the different sensations that your body will begin to feel in each inhalation and exhalation.

d. Just hold your breath as it is at the moment, without changing or modifying it.

e. If thoughts, images or any situation that distracts you comes to your mind while you breathe, return smoothly to your breathing and continue to pay attention. Be kind to yourself.

f. Perhaps your mind is completely calm, or thoughts may continue to come. Whatever it is, keep your eye on your breathing.

f. If there is some kind of sensation that is causing you some emotion, notice that sensation and gently take your attention back to breathing.

h. Whatever happens, let yourself feel your breath as it is occurring. Let yourself flow along your breath.

i. After a minute, slowly open your eyes and notice where you are.

Description:
Through breathing and conscious body care, muscle tensions can be identified and released through exhalation in each breath.

Time: 5 minutes

Aims:
1. To release body tension through breathing.

Directions:
a. Search for a place where you can spend a moment alone.
b. Adopt a relaxed, but attentive body posture; straighten your back gently.
c. You can keep your eyes open or closed, whichever is best for you.
d. Take a couple of breaths, realizing the sensations of your body in the posture that you find and verify if any part of your body is tense. Start from your head, go down your face, neck, shoulders, chest, back, arms, hands, abdomen, belly, pelvis, glutae, thighs, knees, legs, ankles, feet.
e. If you experience some tension, concentrate on that place and, taking advantage of your breathing, release any discomfort when you exhale, releasing the air and everything which is no longer necessary for your body.
f. Go back to your breathing and notice how you breathe, without changing anything, so it is perfect.
g. Your attention is focused on your breathing as it is, you do not need to change it; just feel the air coming in and out your nose and go through your body; feel the parts of your body that are more sensitive while you breathe...
h. As you continue to breathe, identify the parts of your body with some sensation caused by breathing. You may not experience any sensation, just keep paying attention to your breathing.
i. Locate the part of your body with which you are breathing and focus your attention on that place; accompany your sensation with movement; breathe from that place.
j. If thoughts, images or any situation that distracts you from your breathing come to your mind, return smoothly to feel your inhaling and exhaling. Go back as many times as you require, with gentleness and kindness to yourself.

Technique 12. Spiral Breathing (Bonapace, 2009)

Description:
There is a simple method of helping concentrate during breathing: counting the respiratory cycles with the fingers, drawing a spiral on the phalanges.

This spiral breathing is a simple and beautiful way to focus the mind just by counting the number of breaths.

When breathing to invoke the mind, we can focus our attention on the breathing flow, and sound, the place where the effort of breathing occurs, or the number of times we have breathed.

Time: 3 minutes

Aims:
1. To keep attention and concentration during breathing.
2. To slow down the mental rhythm.
3. To deepen your breathing.

Directions:
a. The participants need to understand what the position of the fingers is, so that when they start their practice, their doubts are solved in order to perform it according to the following description.
b. Put your left thumb in the proximal phalanx of your left index finger.
c. Count to one for a respiratory cycle comprising inhalation and exhalation.
d. Move your thumb to the middle phalanx of the index finger to perform the next cycle.
e. Continue in the same way for a series of twelve cycles, drawing a spiral ending on the intermediate phalanx of the ring finger.
f. The facilitator can perform a paced demonstration and tell the participant to place their thumb on the correct position, following the example. When the facilitator describes and performs the spiral shape, the participant should be able to visualize and remember it.
Technique 13. Basic Breathing (Bonapace, 2009)

Description:
Basic breathing is a simple and useful breathing to practice. It develops lung capacity and helps relax and clear the mind. It also maintains tranquility and reduces stress.

Time: 5 minutes

Aims:
1. To develop lung capacity.
2. To reduce stress and increase peace of mind.

Directions:

a. Before starting the exercise, consciously watch your breath without changing it.

b. Exhale slowly through your nose.

c. Inhale with your whole body. Imagine that the air gets in your body through your feet. Make it pass through your legs and pelvis. Fill your chest with air, make it expand to the sides, in thickness and height.

d. Notice the opening movement.

e. Notice the closing movement.

f. When inhaling, your diaphragm descends to allow the lungs to be filled. When you exhale, the lungs rise and empty.

Technique 14. Basic breathing singing (Bonapace, 2009)

Description:
Basic breathing is a simple and useful exercise to practice. Now we will add our voice. It helps to develop your lung capacity, relax, fill you up and clear your mind. It keeps peace of mind and reduces stress.

Time: 5 minutes

Aims:
1. To develop your lung capacity, relax and clear your mind.
2. To reduce stress through breathing with uttering of sounds.

Direction:

a. Before starting the exercise, consciously watch your breath without changing it.

b. Exhale slowly through your mouth and sing the sound U or the sound BOA, which move the respiratory diaphragm effortlessly.

c. Inhale with your whole body. Imagine that the air enters your body through your feet. Make it pass through your legs and pelvis. Fill your chest with air, which should expand to the sides, in thickness and height.

d. Notice the opening movement.

e. Notice the closing movement.

f. When inhaling, your diaphragm descends to allow the lungs to be filled up. When exhaling, the lungs rise and empty.
Technique 15. Slow Breathing (Penny Simkin, 2006)

Time: 5 minutes

Aims:
1. To release the tension through exhalation, relaxing the muscles from head to toe.

Directions:

a. Focus your visual attention on some point or object.

b. Inhale slowly through your nose (or mouth if you have a stuffy nose) and exhale through your mouth.

c. Pause until the air seems to re-enter.

d. Breathe from six to ten times a minute (about half of the number of breaths than the normal rhythm).

e. Exhale silently, keeping your mouth slightly open and relaxed. The exhalation should sound like a relaxing sigh.

f. Keep your shoulders down and relaxed. Relax your chest and belly so that they can swell when you inhale and return to your normal shape when exhaling.

g. Sometimes a yawn is a way to end your breathing.

Technique 16. Breathing and meditation (Brennan, 2007)

Time: 5 minutes

Aims:
1. To focus and reassure the mind.

Directions:

a. Sit down with straight back, in a comfortable position.

b. Close your eyes and focus on your breathing.

c. Count to one when inhaling, to two when exhaling, to three when inhaling, to four when exhaling, and so on until you reach number 10.

d. If your mind is distracted when counting, start again from number 1, whenever your mind is distracted and invaded by other thoughts.

e. This type of exercise allows us to realize the ease with which to distract the mind and stop being in the here and now.

f. As you practice it, you will be able to complete the count from 1 to 10 from the first time.

g. It is suggested to perform the exercise two or three times.
According to Rodriguez (2002):

- Cognitive stimulation activities improve intellectual capacity, autonomy, and well-being. They prevent the deterioration of our brain caused by the passing of time and lack of stimulation.

- Its application encompasses the whole aspects of a person: cognitive, functional, motor, behavioral and psychosocial areas.

- Provide stimulation and enrichment and mobilize the participant’s cognitive resources.

- The basic objective of implementing psychostimulation exercises is to promote neuroplasticity by presenting stimuli that enhance intellectual, emotional, relational and physical capacities in an integral manner. Neuroplasticity is defined as “the response given by the brain to adapt to new situations and restore the altered balance, after an injury.”

The following are different models for cognitive stimulation that can be implemented in the teaching-learning processes:

**I.** Brain Gym

**II.** Gimnasia Cerebral [Brain Gym] (Ibarra, 2007).

**III.** Brain activation.

### 20.1. BRAIN GYM

Dr. Paul Dennison, an American educator, developed a method called Education Kinesiology (Edu-K), which aims to train the brain function associated with certain stages of development or improve people’s learning ability, improving the flow of energy (vitality) to the brain.

Brain Gym refers to the 26 original exercises. These activities, similar to the movements naturally performed during the first years of life to learn to coordinate the eyes, ears, hands and the whole body, were developed by the educator and reading specialist Paul Dennison and his wife and colleague, Gail E. Dennison, who said that the interdependence of movement, cognition and applied learning is the basis of their work.

These exercises bring important improvements in areas such as:

- Concentration and focus
- Memory
- Academic: reading-writing
- Physical coordination
- Relationships
- Organizational skills
1.20.1. PRINCIPLES

- Brain gymnastics helps set the brain in motion and improves functions such as language, attention, memory, and creativity.
- It consists of movements and exercises that stimulate the functioning of both cerebral hemispheres.
- Learning, creativity, and intelligence are processes related not only to thinking, but also to the whole body.
- It is based on kinesiology, a science that studies muscle movement, together with psychology and neurology.

1.20.1. USES

- Promoting play and joy of learning.
- Extracting and honoring innate intelligence.
- Creating awareness about the value of movement in everyday life.
- Letting each participant feel appreciated and valued.
- Capacity for each participant to be in charge of their own learning.
- Encourage creativity and personal expression.

The movement that takes place during the practice of Brain Gym stimulates the nerves, and provides a stimulating and relaxing effect during its growth and development, integrating the left and right hemispheres of the brain. It also increases and improves concentration, endurance and confidence; it relieves stress and develops the ability to control emotions as well as singing, musical and logical skills.

TECHNIQUE 1: BRAIN GYMNASTICS: COUNT TO TEN (Ibarra, 2007)

**Time:** 3 minutes

**Aims:**
1. To keep a relaxed state of alertness.

**Procedure:**

a. Try to adopt a comfortable position—you can sit in a chair, keeping your back straight and resting your feet on the floor, or sitting at the tip of your heels, as in the Island of Bali.
b. Put the palms of your hands up facing front, at waist level, putting them on your lap, or like in the Island of Bali, putting them together in front of your face holding some flower.
c. Close your eyes for a moment, while paying attention to your breathing.
d. Breathe in and count to ten: keep the air in and count to ten again.
e. Exhale counting to ten and run out of air while you count to ten slowly and smoothly.
f. Repeat the exercise several times.
g. Complement the exercise using a short word like: “Peace”, “I feel fine”; you can repeat it while you inhale and then exhale.
h. Use the suggested musical works (14.3, p. 34).

**Benefits:**

- When the brain focuses attention on breathing, the whole nervous system is immediately alert.
- Keeping a rhythm makes the nervous system acquire harmony.
- The calm returns; in some cultures, as in Bali, this exercise is called "meditation".
- It helps the brain have clarity in reasoning and openness to creativity.
**TECHNIQUE 2: BRAIN GYMNASTICS: THE ASTONISHED (Ibarra, 2007)**

**Time:** 3 minutes

**Aims:**
1. To manage stress and relax the whole body.

**Procedure:**

a. Legs are slightly spread.

b. Totally spread the fingers and toes until you reach your limit.

c. Stand on the tip of your toes, stretch your arms up as high as you can.

d. When you are completely stretched, breathe in and keep the air in for 10 seconds, stretching more and throwing your head back.

e. After 10 seconds, blow out the air uttering with a little yell and loosen up your arms and your body as if dropping them.

**Benefits:**
- The nerve endings of the hands and feet open up alerting the nervous system.
- It allows a new electric current to flow into the nervous system.
- It prepares the body for a better learning response.
- It manages stress and relaxes the entire body.

---

**TECHNIQUE 3: CEREBRAL GYMNASTICS: CROSSED CRAWLING (Ibarra, 2007)**

**Time:** 3 minutes

**Aims:**
1. To activate and connect both cerebral hemispheres.

**Procedure:**

a. The "cross-crawling" movements should be performed as in slow motion.

b. In a firm position, touch the right knee (bending your arm) to the left knee (lifting and bending your leg).

c. Return to the initial posture.

d. Slowly touch your right knee with your left elbow.

e. Return to the starting position.

**F. Suggested musical works (14.3, p.34).**

**Benefits:**
- Both brain hemispheres are activated and connected.
- It facilitates the balance of nerve activation.
- More nerve networks are created.
- It prepares the brain for a higher level of reasoning.
- It is excellent for activating mind / body functioning before carrying out physical activities such as sports or dancing.
TECHNIQUE 4: CEREBRAL GYMNASTICS: THE ENERGY YAWN (Ibarra, 2007)

Time: 3 minutes
Procedure:
  a. Touch the joints of your jaw with both hands.
  b. Yawn deeply.
  c. Return to the initial posture.
  d. Use the suggested musical works (14.3, p.34).

Benefits:
  ➤ It oxygenates the brain in a deep way.
  ➤ It relaxes the entire facial area and enables it to receive sensory information more efficiently.
  ➤ It stimulates and activates the large cranial nerves located at the joints of the jaw.
  ➤ It activates verbalization and communication.
  ➤ It helps reading skills.
  ➤ It improves nerve functions to and from the eyes, facial muscles and mouth.

TECHNIQUE 5: BRAIN GYMNASTICS: KNOTS (Ibarra, 2007)

Time: 3 minutes
Procedure:
  a. Cross your feet, keeping balance.
  b. Stretch your arms forward, separated from each other.
  c. Place the palm of your hands outwardly. Your thumbs should be pointing down.
  d. While you hold that position, place your tongue up in the middle of your palate.
  e. Use suggested musical works (14.3, p.34).

Benefits:
  ➤ It has an integrative effect on the brain.
  ➤ It consciously activates the sensory and motor cortex of each cerebral hemisphere.
  ➤ Placing the tongue on the palate causes the brain to be alert.
  ➤ It connects the emotions in the cerebral limbic system.
  ➤ It gives an integrative perspective to learn and respond more effectively.

TECHNIQUE 6: CEREBRAL GYMNASTICS: EIGHT ON ITS SIDE (Ibarra, 2007)

Time: 3 minutes
Procedure:
  a. Use a large sheet of paper and a pencil; tape the sheet on the wall at the level of your eyes.
  b. Draw the number eight on its side (∞) starting from the center (where lines intersect) and then upwards to the right.
  c. Every time you move your hand, your eye should follow this movement; if your eye tends to go faster than your hand, increase your hand’s speed. What matters is that your eye follows your hand and does not lose sight of it.
  d. Repeat three times this movement over the number eight that you had drawn initially.
  e. Using the initial number eight, change to the opposite direction (bottom left).
  f. Repeat this movement three times.
  g. Use the suggested musical works (14.3, p.34).

Benefits:
  ➤ It improves written communication.
  ➤ It sets the rhythm and fluency needed for good hand / eye coordination.
  ➤ It stimulates the longer muscles of the eyes and the tactile alert.
  ➤ It relaxes the muscles of hands, arms and shoulders, and facilitates the vision process. It contributes to the collateral integration of thought (connection of both cerebral hemispheres).
  ➤ It helps ideas flow easily.
TECHNIQUE 7: CEREBRAL GYMNASTICS: DRAWING THE NUMBER EIGHT WITH THE FINGER (Ibarra, 2007)

**Time:** 3 minutes

**Procedure:**

a. Use your right (or left) thumb. Your arm should be slightly stretched.

b. Keep your head motionless and move your eyes only.

c. Follow your thumb with your eyes while drawing the number eight on its side (∞), start from the top right.

d. The center of the number eight (∞) should be in front of your face.

e. Repeat the exercise three times.

f. Now draw the number eight to the left side and repeat three times.

g. Change arm and repeat exactly the same.

h. Use the suggested musical works (14.3, p. 34).

**Benefits:**

- It improves hand / eye coordination.
- It achieves maximum muscle activation.
- It strengthens the outer muscles of the eyes.
- It fosters the development of neural networks and myelination of the frontal area of the eye.
- It helps the eye have a fine motor image tracking.
- It arranges the patterns for an alignment of eye / hand coordination.
- In case your eyes hurt, imagine it is as if you had done many squats with your eyes and the muscles that support them were still somehow weak.
- It helps manage stress after performing a heavy task.

---

TECHNIQUE 8: CEREBRAL GYMNSTISC: ENERGY YELL (Ibarra, 2007)

**Time:** 3 minutes

**Procedure:**

a. Opening your mouth as much as you can, scream "AAAHHHH" very loudly.

b. Scream for one minute with all your might. 8

c. Repeat three times this movement on the same number eight that he drew initially.

**Benefits:**

- It activates the whole nervous system, especially the auditory system.
- It allows emotions to flow.
- It increases respiratory capacity.
- It causes total alert in the body.
- It significantly reduces stress.

---

8 - In Bali, people show a certain serenity, which they acquire by uttering a loud cry, enough to keep themselves calm all day. Sometimes they meet in rituals that consist of shouting, with high voices, in high volume.
**TECHNIQUE 9: BRAIN GYMNASTICS: ATTENTION EXERCISE 1; “A, B, C” (Ibarra, 2007)**

**Time:** 3 minutes

**Procedure:**

a. Draw the alphabet in upper case letters and paste your sheet to your eye level.

b. Below each letter, place the letters r, l, t, at random. The letters mean: r = right, right arm; l = left arm, left, and t = together, both arms together.

c. Write these three letters in lowercase letters, making sure that the letter “r” is not below the letter “R”; the letter “l” is not below “I” and “t” below “T”.

d. Paste your sheet on the wall, exactly at the level of your eyes.

e. While you read the letter “A” aloud, notice there is “r” below it; then raise your right arm in front of you and put it down. If there is an “l”, raise your left arm forward and lower it, and if there is a “t”, raise both arms and put them down. Repeat the procedure from “B” to “Z”.

f. When you have reached “Z”, again, start the exercise again, now from “Z” to “A”.

g. If on the path from “A” to “Z” you make a mistake, shake and start again, choosing your own pace until you get to “Z”.

h. Use the suggested musical works (14.3, p.34).

**Benefits:**

- It achieves the integration between the conscious and the conscious.
- It allows multiple attention between movement, vision and hearing.
- It favors concentration through rhythm.
- It helps maintain alertness in the brain.
- It integrates both cerebral hemispheres.
- It is recommended before starting a difficult learning task or solving a problem, so the nervous system will be prepared for any eventualty.

```
A B C D E F G
  d i j i d d j

H I J K L M N
  i d i j i j d

Ñ O P Q R S T
  j d i d i j i

U V W X Y Z
  d i j d d i
```
**TECHNIQUE 12: FIST-PALM**
(Payán MC, Brain Gymnastics 'VARIANT OF FIST AND PALM' Educational Congress 'THE MASTER OF S. XXI', 2011)

**Time:** 3 minutes

**Procedure:**

a. Sitting in your place, prepare a blank sheet of paper and a pen.
b. If you are right-handed (you write with the right hand), you will begin to make a "fist and palm" movement (clench your hands and then stretch your fingers), repeat nonstop, until the exercise finishes.
c. If you are left-handed (you write with the left hand), you are going to start making a "fist and palm" movement (clench your hands and then stretch your fingers).
d. Attention. Write the words you hear while you keep the fist and palm moving:
   - Dad
   - Mom
   - Daughter
   - Foods.
   - House
   - Car
   - Dress

e. Now put the sheet upside down and, without seeing what you wrote, repeat the words you wrote and answer this question: what is the concept? what idea do they make up all together?
   - Answer: a family

---

**TECHNIQUE 13: SIMULTANEOUS MOVEMENTS**
(Payán M. C., Brain Gymnastics 'SALUDO, SI, NO, ADIOS Y MARCHA' Congreso educativo 'EL MAESTRO DEL S. XXI', 2011)

**Description:**
Greeting, yes, no, goodbye and fixed march.

**Time:** 5 minutes

**Procedure:**

a. Stretch your right arm forward and use your right hand to move it as if to say yes.
b. Continue and now shake your head saying no.
c. Meanwhile, say goodbye with the fingers of your left hand.
d. Use your feet to march in place.
e. All the previous exercises are done at the same time.
f. Change, now stretch your left arm forward and move it with your left hand as if to say no.
g. Now nod your head as if to say yes.
h. Wave good bye with your right hand.
i. March in place.
j. All the previous exercises are done at the same time.

---

**TECHNIQUE 14: SIMULTANEOUS GREETING MOVEMENTS**
(Payán MC, Cerebral Gymnastics # 2 (video 1 of 2) Educational Congress EL MASTER OF S. XXI, Puebla, Pue, 2011)

**Description:**
Greetings

**Time:** 5 minutes

**Procedure:**

a. Stand on your feet.
b. Slap your thighs twice, at the same time (1,2,1,2).
c. Clap twice.
d. Raise your right hand and wave your hand to greet.
e. Finish marching in place (1,1).
f. Repeat the exercise, but now wave hello with the left hand.
g. Now look for a partner and, when you have one, stand face to face.
h. Do the exercises and practice the royal greeting, alternating the right hand and then the left.

---

**TECHNIQUE 15: BRAIN ACTIVATION**
(Mexico, 2014)

**Description:**
Preferably, do this exercise in teams.

**Time:** 5 minutes

**Procedure:**

a. The group is standing in teams (the number of members will depend on the number of people in the group).
b. Attention. Move your body as indicated:
   - Go ahead.
   - Go back.
   - To the right.
   - To the left.
c. Now do the opposite of what you are told:
   - To the right (move to the left).
   - To the left (move to the right).
   - Move forward (Move backwards).
   - Move backwards (move forwards).
d. Make a few operations in your mind: if the result is even, take a step to the right. Otherwise, take a step to the left.
1+1=2 (step to the right, even number).
2+3=5 (step to the left, odd number).
5+1=6
4+1=5
10+1=11
6+2=8

e. Now say the result aloud and continue to carry out the movements according to the previous exercise:
3+3=6 (shout six and move one step to the right).
5+2=7 (shout seven and move two steps to the left).
7+4=11
8+1=9
3+6=9
1+7=8

f. Now complete sequences with movement:
2+1=3
3+1=4
4+1=5
5+2=7
6+2=8
7+4=11
8+1=9
3+6=9
1+7=8

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21. INDEX OF TECHNIQUE CHARTS

**RELAXATION TECHNIQUES**

<table>
<thead>
<tr>
<th>Technique 1. Progressive Relaxation.</th>
<th>pág. 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technique 2. Dissociative relaxation (neuromuscular dissociation).</td>
<td>pág. 25-26</td>
</tr>
<tr>
<td>Technique 3. Schultz’s Autogenic relaxation.</td>
<td>pág. 30-31-32</td>
</tr>
</tbody>
</table>

**CREATIVE POTENCIATION TECHNIQUES**

<table>
<thead>
<tr>
<th>Technique 1. Conscious music listening.</th>
<th>pág. 36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technique 2. Image presentation with sound and movement.</td>
<td>pág. 37</td>
</tr>
<tr>
<td>Technique 3. Music and body movement.</td>
<td>pág. 38</td>
</tr>
<tr>
<td>Technique 4. Drawing with music.</td>
<td>pág. 39</td>
</tr>
</tbody>
</table>

**CONSCIOUS BODY MOVEMENT TECHNIQUES**

<table>
<thead>
<tr>
<th>Technique 1. Grounding. Rooting.</th>
<th>pág. 44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technique 2. Initial posture “grounding”</td>
<td>pág. 45</td>
</tr>
<tr>
<td>Technique 3. Flexing the knees</td>
<td>pág. 46</td>
</tr>
<tr>
<td>Technique 4. The arc.</td>
<td>pág. 47</td>
</tr>
<tr>
<td>Technique 5. Ankle circles.</td>
<td>pág. 48</td>
</tr>
<tr>
<td>Technique 6. Weight distribution on both legs.</td>
<td>pág. 49</td>
</tr>
<tr>
<td>Technique 7. Waist warm up.</td>
<td>pág. 50</td>
</tr>
<tr>
<td>Technique 8. Exercise for body vibration.</td>
<td>pág. 51</td>
</tr>
<tr>
<td>Technique 9. Shoulder stretching.</td>
<td>pág. 52</td>
</tr>
<tr>
<td>Technique 10. Arm stretching.</td>
<td>pág. 53</td>
</tr>
<tr>
<td>Technique 11. Stretching arms forwards.</td>
<td>pág. 54</td>
</tr>
<tr>
<td>Technique 12. Fluttering of a butterfly.</td>
<td>pág. 55</td>
</tr>
<tr>
<td>Technique 13. Neck stretching.</td>
<td>pág. 56</td>
</tr>
</tbody>
</table>

---
## Breathing Techniques

<table>
<thead>
<tr>
<th>Technique</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Conscious breathing</td>
<td>60</td>
</tr>
<tr>
<td>2.</td>
<td>Cross-breathing</td>
<td>61</td>
</tr>
<tr>
<td>3.</td>
<td>Breathing to activate the brain hemispheres</td>
<td>61</td>
</tr>
<tr>
<td>4.</td>
<td>Connected breathing</td>
<td>63-64</td>
</tr>
<tr>
<td>5.</td>
<td>Twenty breaths connected</td>
<td>65-66</td>
</tr>
<tr>
<td>6.</td>
<td>Breathing for anger management</td>
<td>66</td>
</tr>
<tr>
<td>7.</td>
<td>Nasal breathing with open mouth</td>
<td>67</td>
</tr>
<tr>
<td>8.</td>
<td>Breathing with open mouth</td>
<td>68</td>
</tr>
<tr>
<td>9.</td>
<td>Silent energy breathing</td>
<td>69</td>
</tr>
<tr>
<td>10.</td>
<td>One-minute practical breathing</td>
<td>71</td>
</tr>
<tr>
<td>11.</td>
<td>Body scanner breathing</td>
<td>72</td>
</tr>
<tr>
<td>12.</td>
<td>Spiral breathing</td>
<td>73</td>
</tr>
<tr>
<td>13.</td>
<td>Basic breathing</td>
<td>74</td>
</tr>
<tr>
<td>14.</td>
<td>Basic breathing singing</td>
<td>75</td>
</tr>
<tr>
<td>15.</td>
<td>Slow breathing</td>
<td>76</td>
</tr>
<tr>
<td>16.</td>
<td>Breathing and meditation</td>
<td>77</td>
</tr>
</tbody>
</table>

## Cognitive Stimulation Techniques

<table>
<thead>
<tr>
<th>Technique</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Count to 10</td>
<td>81</td>
</tr>
<tr>
<td>2.</td>
<td>The astonished</td>
<td>82</td>
</tr>
<tr>
<td>3.</td>
<td>Crossed Crawling</td>
<td>83</td>
</tr>
<tr>
<td>4.</td>
<td>Energy yawn</td>
<td>84</td>
</tr>
<tr>
<td>5.</td>
<td>Knots</td>
<td>84</td>
</tr>
<tr>
<td>6.</td>
<td>Eight on its side</td>
<td>85</td>
</tr>
<tr>
<td>7.</td>
<td>Drawing the number eight with the finger</td>
<td>86</td>
</tr>
<tr>
<td>8.</td>
<td>Energy yell</td>
<td>87</td>
</tr>
<tr>
<td>10.</td>
<td>Brain buttons</td>
<td>89</td>
</tr>
<tr>
<td>11.</td>
<td>“La cucaracha.”</td>
<td>89</td>
</tr>
<tr>
<td>12.</td>
<td>Fist-palm</td>
<td>90</td>
</tr>
<tr>
<td>13.</td>
<td>Simultaneous movements</td>
<td>90</td>
</tr>
<tr>
<td>14.</td>
<td>Simultaneous greeting movements</td>
<td>91</td>
</tr>
<tr>
<td>15.</td>
<td>Brain activation</td>
<td>91-92</td>
</tr>
</tbody>
</table>

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22. ANNEXURE


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