

**54 - POLICE SELF DEFENSE TRAINING AND STRESS AS A SHORT TERM DIDACTIC RESOURCE.**

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**Abstract**

Stress results to be the conditioning factor of our behavior. When faced to a situation of imminent risk, it activates unconscious systems that can cause automatic reactions, those reactions will be conditioned by learning and previous experience. That is why it is fundamental that, during the process of teaching-learning, experience that serves as unconscious response when needed to solve a violent situation that necessarily puts us in defensive stance, is created.

The "Cesar" System in self defense training suggests combining the techniques and own strategies of this activity and expose stress by the creation and representation of violent scenes, trying to "cheat" the nervous system and so creating the conditioned reflex necessary to trigger the expected reaction in front of a compromising situation, allowing to have control over the response protecting the lives of everyone involved.

Over the basis of an action investigation, many teaching resources were used for training as well as the observation that took place in flashing periods between 1993 and 2015. According to the information gathered during the years 2014/15, we can say ensure the efficiency of the "Cesar" System as long as it is given in the detailed conditions, especially with the participation of the physical education and martial arts professors and the participation of the specialist in psychology as part of the interdisciplinary team.

**INTRODUCTION**

In the last years, big and vertiginous changes have occurred at social level. Changes that have provoked inevitable turbulences, both internationally and nationally, causing mutations in internal security parameters, up to the extent to make drastic modifications in the system. According to the D.M. (Defense Ministry), the appearance of new challenges such as terrorism, drug dealing, organized crime, weapon smuggling, damage to the environment and migrations, have been promoted.

The development speed of the events influenced noticeably on police performance. A study from the CELS (Centro de Estudios Legales y Sociales, by its acronyms in Spanish) has revealed that the number of fallen police officers between the years 1996-2001 has increased 132%. In the same way, the UADE (Universidad Argentina de la Empresa, by its acronyms in Spanish) in an article published in 2012, shows that: between 2006-2011 there have been registered, in Buenos Aires City, an average of 225,000 denounced crimes, with an annual increment of 1.02%. This is how previously established paradigms have been changing radically, forcing security forces to adapt to the more complex circumstances, modifying both conduct and instruction. From the professor's role, this reality demanded investigation about the most effective strategies to be implemented during training, working in a mix of possibilities, remembering that the search of these effective results must include, during their development, an emotional and physical approach. Starting from the determining fact that the principal factor during a conflict is stress, self-confidence, reflexes, coordination and reaction speed were trained with the objective of preparing the professional to recognize, anticipate and solve a conflict using the necessary tools for their application in the boundaries of law.

This practice consists in the approach of reaction time and human interaction in all its dimension. The training system here presented, called "Cesar", has the objective of achieving the prevail of life and human integrity (physical and psychological) of people involved in a violent act, with or without criminal connotation.

**I – Stress**

Stress is the set of chemical and nervous reactions that make us more efficient when facing extreme situations or danger, preparing us for a fight or to flee. This mechanism is produced by the Nervous System and it exists since the beginning of life itself. In the past it was, probably, more useful than what it is today as it is the one that allowed outrunning from predators, evade imminent attacks or defend against other individual.

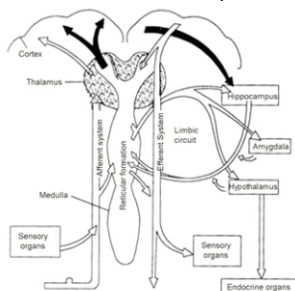
With the growing socialization and commodities to acquire food, it is evident that stress does not have the same use than before. However, the reactions follow their course and the organism works in the same way, in which sense, it has not evolved.

Hans Selye (1907-1982), first one to study this phenomenon, describes stress as a natural part of human experience; says that stress is not necessarily bad, it also gives life some taste. Any emotion causes stress (The Nature of Stress, 1985 (PM)). Nonetheless, some aspects of hormonal secretion such as cortisol and adrenaline might cause deterioration in our organism and acceleration of diseases. (Bruce McEwen Ph. D).

**Stress and emotions**

In the brain, the amygdale, which is the responsible for the prosecution and storage of emotional reactions, receives stimuli from different sensorial receptors and they all communicate with the central nucleus, which in turn communicates with the brainstem that activates the physiological responses. Likewise, it receives information directly from the Thalamus in a way of triggering responses so fast that it happens even when the cortex has not processed the information. (Fig. 1) (LeDoux, 2002).

Fig. 1 - Stimulus and response

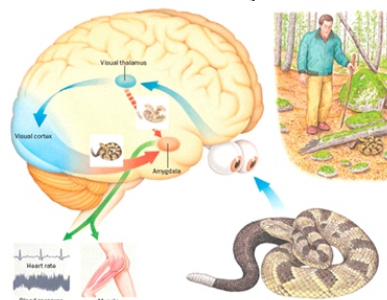


For example: If an excursionist who is on a stroll in the woods sees a package on the ground. "The visual stimuli are

processed by the thalamus, which transmits a rough pattern of the form directly to the amygdale” (P 129, 2000). The brain responds immediately, increasing the cardiac frequency and the arterial pressure triggering a muscular contraction in precaution before the imminent fight or escape. When this information reaches the visual cortex, the brain clearly determinates the detail of the object allowing that the response elicited by fear, that generates stress, follows its course or gets repressed (LeDoux, 2002) (Fig. 2).

Therefore, we can say that stress results to be the conditioning of our behavior and, in front of a risky situation unconscious system are activated. These can cause automatic reactions which will be conditioned by learning and previous experiences. For that reason, it is fundamental that during the process of teaching, experience that serves as unconscious response is created when there is need to resolve a violent situation that necessarily makes us defensive.

Fig. 2 (Illustration Robert Osti)



### II – The object and method of investigation

Well, most of physical activities and sports can be practiced over and over again until the automation of movement is achieved and, in consequence, the adequate motor response with a determinate end. Instead, it is relative in self defense because the practice is not done with the optimum distance and intensity to fulfill the expected results, as the physical integrity of the practitioner would be put in danger.

So, How to achieve training that allows recognizing the best response even when the conflict is not present?

In this context, it is necessary to consider that the insufficient or deficient practice of self defense may have severe consequences, such as the life risk of who is exercising it or of outsiders which are potentially involved in the violent scene. This motive moves us to think new strategies that also compromise that risk.

To correct this not minor detail, due to the fact that we need training to be completed in a short period of time, is that the possibility of creating experience is proposed, searching in some way to trick our own system.

The observation and evolution of this type of training has been given in short intermittent periods between the years 1993-2015, in groups of men and women aging 18-27, all of them members of security forces that come from different places and social levels.

Benjamin Franklin (1706-1790) said: “Tell me and I forget, teach me and I remember, involve me and I learn”. Hoping to answer to this pedagogy and on the basis of investigation in action, different teaching resources for training were used, where a dynamic work was planned, which included moments of calisthenics, action and reaction exercises, team games and lateral thinking mental challenges.

For each tested group, since 2013, surveys were made and opinions were drawn out. There were a total of 1,280 individuals. Likewise, the observations were evaluated during the course and the redaction of a “Logbook” was done.

To establish necessary complementary scientific support during the development of the training system, bibliographic referential material was also appealed.

### III – Strategies of intervention

“Learning is experience, everything else is information”. Albert Einstein (1879-1955)

In the years 1993/95, it was observed that the system used by the armed forces in self defense was callisthenic, based on repetition with squad formations, without too much pedagogic compromise. That is why it was searched to modify the model and the establishment of a first hypothesis which links the result to quality of capacitating and not necessarily quantity was achieved.

Self defense is a physical activity that requires mental training, simultaneously, so practice parameters were proposed which could meet the objectives. Therefore, between the years 2002 and 2005, “Role Play” was added in the training of police’s self defense with simple situations that evidenced the own skills of the activity, recreating in a played way actions that required the commitment of the practitioner and exposed his reaction speed, concrete response and resolution of the given conflict.

In the way in which the system was accepted, it was made more complex and variables were modified. In 2012, stress was added as a fundamental component, looking for the instinctive reaction of the players. In a first stage despair answers and adverse reactions were obtained, which had to be consulted from the psychology, appearing the need of a specialist professional who could clarify potential pathologies that are presented in the person, apparently healthy, being exposed to such stimuli.

So a second hypothesis was made which considers that role playing, combined with proper techniques of self defense and negotiation, sets the ideal environment for the practice of urban situations, obtaining the best results for immediate resolution with short term trainings, always including in it all the components that might be part of a violent situation.

The psychological accompaniment in front of the influence of emotions.

The tone of voice, menacing look, contemptuous attitude, verbiage, insulting, devaluation, threatening, intimidating approach, possible possession of a sharp element, the fight, the discussion, and consequently, stress generated as an acting tool, require the appropriate psychological accompaniment during the practice for the containment and detection of potential pathologies or unexpected conducts for the objective that must be reached due to, as Theodore Dreiser said: “Our civilization is still at an intermediate stage, hardly animal in the sense that it is no longer guided by instinct, hardly human in the sense that it is not yet entirely guided by reason”. As the amygdale has a very superior capacity to influence in the cortex than the other way around, a debate between reason and passion might develop. In this way, when a person is emotionally excited, whether it is for fear or sexual attraction, for example, their emotions dominate their thoughts. Plato said that, an authentic philosopher was the one who could control his emotions by the means of reason, considering that this was a lifetime process. (LeDoux, 2002). Given that we cannot infer in the adverse reactions that could trigger the extreme training is that, as a strategy, the presence of a specialist in psychology was proposed.

### Interdisciplinary work

In order to obtain objective results and based on observations, it could be inferred that more effectiveness would be achieved if a multidisciplinary work where every part had the same participation level in the different areas was considered, always

respecting the guidance of the specialist in charge where corresponded and putting in common the manifest of what was collected at the end of the activity. A program in modules that strategically combined the contents was designed. The work team was initially made up by two police self defense instructors y physical education professors (one specialized in hand to hand combat and the other one with techniques of canes and weapons), two assistants or monitor martial artists with wide knowledge in criminal slang and urban fight, and a Counselor (psychological consultant) in charge of the observation of cases, trying to highlight both virtues and disadvantages that the officers might present when the time comes to act under pressure and exposed to stress.

#### IV – Conclusions

Action and reaction exercises, team games and lateral thinking mental challenges in the practice of movement contribute to participative work, good disposition and training of resolving abilities, as well as posteriori distention of stressing works. On the other hand, interdisciplinary work, specially the psychological accompaniment during the practices of police self defense, results necessary as containment and detector of potential pathologies or unwanted behaviors for the function that must be carried on, at least, in evaluative instances.

The acceptance grade among the participants surveyed was 92%.

From those who participated in a violent act in the public road the last year and that were trained with the “Cesar” System, 80% could resolve and/or decide immediately to reduce the course of action, 2% did not reach the objective and the rest were armed combats. In the same way, 100% of the trained who participated in anti-riots guards reflected a higher control over their impulses than those who were not trained with stress exposition.

For that we can conclude that the “Cesar” System is pedagogically effective, in short trainings, suitable in its contents y allows individual psychological evaluation, faced to stress for what it is much more productive when done having acquired the practice of the basic contents and as a way of closure. It was also observed that favors integration, participation and motivates the group, committing it form the different areas and responsibilities, evidencing their abilities and skills. Accomplishing the integration of every variable that conform a conflictive situation. It is advised to have two application instances as a minimum and in different days, distant one at the beginning and at the end of the curriculum.

Key Words: Self defense, Training, Police.

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## POLICE SELF DEFENSE TRAINING AND STRESS AS A SHORT TERM DIDACTIC RESOURCE.

## Abstract

Stress results to be the conditioning factor of our behavior. When faced to a situation of imminent risk, it activates unconscious systems that can cause automatic reactions, those reactions will be conditioned by learning and previous experience. That is why it is fundamental that, during the process of teaching-learning, experience that serves as unconscious response when needed to solve a violent situation that necessarily puts us in defensive stance, is created.

The "Cesar" System in self defense training suggests combining the techniques and own strategies of this activity and expose stress by the creation and representation of violent scenes, trying to "cheat" the nervous system and so creating the conditioned reflex necessary to trigger the expected reaction in front of a compromising situation, allowing to have control over the response protecting the lives of everyone involved.

Over the basis of an action investigation, many teaching resources were used for training as well as the observation that took place in flashing periods between 1993 and 2015. According to the information gathered during the years 2014/15, we can say ensure the efficiency of the "Cesar" System as long as it is given in the detailed conditions, especially with the participation of the physical education and martial arts professors and the participation of the specialist in psychology as part of the interdisciplinary team.

Key Words: Self defense, Training, Police.

## ENTRAÎNEMENT EN DÉFENSE PERSONNELLE POLICIÈRE ET LE STRESS COMME RECOURS DIDACTIQUE À COURT TERME.

## Résumé:

Le stress devient le conditionnement de notre comportement. Face à une situation de risque imminent, il fait activer des systèmes inconscients qui peuvent provoquer des réactions automatiques, ces réactions-ci seront conditionnées par l'apprentissage et l'expérience préalables. Pour cela, c'est fondamental que, pendant le processus d'enseignement - apprentissage, on crée l'expérience qui serve de réponse inconsciente face au besoin de résoudre une situation violente, qui nécessairement, nous met à la défensive.

Le Système « César » d'entraînement de défense personnelle propose de combiner les techniques et les stratégies propres à cette activité et les faire exposer au stress au moyen de la création de scènes violentes, en essayant de « tromper » le système nerveux et en créant ainsi le réflexe conditionné nécessaire pour déclencher la réaction attendue vis-à-vis d'un fait accompli, pouvant, de cette façon, avoir le contrôle sur la réponse et ainsi sauvegarder la vie de tous les impliqués.

Sur les bases d'une recherche action, on utilise divers recours d'enseignement pour l'entraînement et l'observation qui ont été faits par des périodes intermittentes entre les années 1993 et 2015. Selon l'information prélevée pendant les années 2014\15, on peut affirmer que l'efficacité du Système « César » a été tout à fait démontrée, pourvu que les conditions détaillées existent, en particulier avec la participation du de le professeur d'éducation physique et défense personnelle ainsi que le la spécialiste en psychologie comme équipe interdisciplinaire.

Mots clés: Défense personnelle, Entraînement, Police.

## ENTRENAMIENTO EN DEFENSA PERSONAL POLICIAL Y EL ESTRÉS COMO RECURSO DIDACTICO A CORTO PLAZO.

## Resumen

El estrés resulta ser el condicionante de nuestro comportamiento. Ante una situación de riesgo inminente, activa sistemas inconscientes que pueden provocar reacciones automáticas, esas reacciones estarán condicionadas por el aprendizaje y la experiencia previos. Por eso es fundamental que, durante el proceso de enseñanza-aprendizaje, se cree la experiencia que sirva de respuesta inconsciente ante la necesidad de resolución de una situación violenta que, necesariamente, nos pone a la defensiva.

El Sistema "Cesar" de entrenamiento en defensa personal propone combinar las técnicas y estrategias propias de esta actividad y dar exposición al estrés mediante la creación y representación de escenas violentas, procurando "engañar" al sistema nervioso y creando así el reflejo condicionado necesario para desencadenar la reacción esperada ante un hecho comprometido, pudiendo, de este modo, tener control sobre la respuesta salvaguardando la vida de todos los implicados.

Sobre las bases de una investigación acción, se utilizaron diversos recursos docentes para el entrenamiento y la observación que se ha dado por periodos intermitentes entre los años 1993 y 2015. Según la información relevada durante los años 2014/15, podemos afirmar que queda comprobada la eficacia del Sistema "Cesar" siempre que se dé en las condiciones detalladas, especialmente con la participación del/la Profesor/a de educación física y defensa personal y el/la especialista en psicología como equipo interdisciplinario.

Palabras clave: Defensa personal, Entrenamiento, Policía.

## TREINAMENTO EM DEFESA PESSOAL POLÍCIA E O ESTRESSE COMO RECURSO DIDÁTICO PARA CURTO PRAZO.

## Resumo

O estresse prova ser o fator determinante de nosso comportamento. Em uma situação de risco iminente, ativam-se sistemas inconscientes que podem desencadear reações automáticas, estas reações serão condicionadas pela aprendizagem e experiência prévia. Portanto, é essencial que durante o processo de ensino e aprendizagem, acredita-se experiência servindo da resposta inconsciente para a necessidade de resolução de uma situação de violência que, necessariamente, nos coloca na defensiva.

O Sistema "Cesar" do treinamento em defesa pessoal policia propõe combinar as técnicas e estratégias próprias para essa atividade e dar a exposição ao estresse através da criação e representação de cenas violentas, buscando "enganar" o sistema nervoso e procurando o reflexo condicionado necessário para acionar à reação esperada para uma situação comprometida, podendo assim, ter o controle sobre a resposta e salvaguarda a vida de todos os envolvidos.

Com base uma investigação-ação, vários recursos didáticos foram usados para o treinamento e a observação de que tem sido dada por periodos intermitentes entre os anos 1993 e 2015. De acordo com as informações recolhidas durante os anos 2014/15, podemos dizer que é comprovada a eficiência do Sistema "Cesar" sempre que sejam dadas as condições detalhadas, especialmente com a participação do professor de educação física e defesa pessoal e um especialista em psicologia como uma equipe interdisciplinar.

Palavras-chave: Treinamento, Defesa pessoal, Polícia.