



SURVIVAL STRESS MANAGEMENT THROUGH MENTAL SKILLS TRAINING IN LAW ENFORCEMENT



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Abstract: Survival stress is the extreme type of operational stress felt by law enforcement personnel in situations involving the risk of being killed or injured, which has outstanding negative effects on performance. The present study aims to emphasise the importance of using mental skills training to manage this type of stress. The study also argues the need to implement a research direction to identify the most effective methods of mental conditioning to address law enforcement critical incidents.

INTRODUCTORY ISSUES

LAW ENFORCEMENT CRITICAL INCIDENTS CHARACTERISTICS

Law enforcement personnel often encounter emergencies or crises. The most important risk to personnel in such situations is the threat to life in the context of frequent interaction with dangerous people. The degree of resistance of some people relative to the activities of law enforcement personnel can be very high, in some cases, assaults and even killings occur.

Law enforcement critical incidents often occur suddenly and unpredictably from a situation that initially seemed routine (Federal Law Enforcement Training Centre, 2004). Many situations routinely encountered by police personnel (investigation on domestic violence, traffic stops, undercover operations or arrests) have the potential to exhibit extreme risks (Pinizzotto, Davis and Miller III, 2006). An increasing number of shootings take place in poorly lit environments, at close range, and in the presence of many people, including

innocent witnesses, and often end in less than three seconds (Pinizzotto, Davis and Miller III, 2006).

Difficulty of action in law enforcement critical incidents is determined by several factors such as: the need for quick decision-making to save their own lives and/or of others or for preventing damage in complex and risky environments; the difficult transition from one calm routine period to a quick decisive reaction (Federal Law Enforcement Training Centre, 2004); the complex normative framework (procedures, institutional and legal regulations) which increases the difficulty of decision-making under time pressure.

In order to identify the reasons for fatalities and assaults on law enforcement staff despite technological advances, innovative equipment and proactive policing strategies, Pinizzotto, Davis and Miller III (2006) propose the concept of a deadly mix to describe an integrative process that combines in the aggression moment all specific features of the police personnel, offenders and circumstances.





Hyper-vigilance biological rollercoaster is a chronic state determined by long-term exposure to the law enforcement environment characteristics like those previously described with many negative effects on law enforcement officers and their families' quality of life. This is a concept proposed by Gilmartin (2002), based on his observation that on-duty, the police officer is 'alert, alive, engaged, quick-thinking' to approach possible threats (action phase), while off-duty they are 'detached, withdrawn, tired and apathetic' (an equal and opposite reaction phase to action).

SURVIVAL STRESS

Risks of personal injury or death present in law enforcement critical incidents causes survival stress. It has been defined as the perception (real or imagined) of serious personal injury or death threat, or the stress of being responsible for another's protection against an imminent serious injury or death, in the context of decreased reaction time (required) (Siddle, 1995). The Federal Law Enforcement Training Centre (2004) uses the concept of acute stress to describe a similar type of stress, characterised by the sudden occurrence, novelty, intensity and short duration.

Performance in extreme situations is influenced by the autonomic nervous system, composed of the sympathetic and parasympathetic nervous systems. Individual perception of the threat determines the automatic activation of the sympathetic nervous system, which causes narrowing and distortion of perceptions, inhibits rational decision-making and increases reaction time, reduces the quality of fine motor skills execution and massively decreases memory immediately after a critical incident (Siddle, 1999). The second component of the autonomic nervous system, dominant in no stress times, is the parasympathetic nervous system which is intended to try calming the body. Although in a combat situation the body needs the functions controlled by the parasympathetic nervous system (such as visual acuity, cognitive processing, fine and complex motor skills performance), this is inhibited and control is taken over by the sympathetic nervous system (Siddle, 1999).

Among the psychological responses to stress are anxiety (nervousness, apprehension, fear, or

worry) and anger (frustration, aggression, guilt, or revenge) (Wollert, Driskell, & Quail, 2011).

STRESS AND PERFORMANCE IN LAW ENFORCEMENT CRITICAL INCIDENTS

Several studies have shown that in law enforcement critical incidents work performance decreases with the increase of stress levels intensity (e.g. Federal Law Enforcement Training Centre, 2004; Nieuwenhuys, Caljouw, Leijssen, Schmeits, & Oudejans, 2009; Wollert et al., 2011).

Siddle's (1995) research revealed disruption of the motor skills (fine, complex and ultimately gross) and of the cognitive abilities as the heart rate frequency increases to over 115 beats per minute. Siddle's findings on the relationship between heart rate and performance had two important practical implications for law enforcement activities: the use of force training is based on gross movements, characterised by simplicity; the use of breath control techniques to adjust the heart rate (Vonk, 2007). But low arousal level, indicated by a small number of heart beats, is not favourable for performance as some research found that subjects have the fastest reaction time after they did sufficient physical exercises to achieve a heart rate of 115 beats per minute (Kosinski, 2013).

Hick's law, proposed in 1952, should also be considered in training personnel acting in high-stress situations: the increases in the available response options number of an individual to a stimulus will increase logarithmically their reaction time to that stimulus.

Disturbances in the sensory and perceptual processes are other factors that affect performance in life-threatening situations. The occurrence of the following phenomena was revealed in such situations: tunnel vision, lighthouse effect, weapon focus, auditory exclusion, sensory exclusion, distortion of distance and depth perception.

The decision-making process carried for determining a course of action in critical incidents is very important for performance, especially in terms of safety and ways of using force. In such incidents 'stressors increase the likelihood that decision-makers will choose the first option they consider' (Federal Law



Enforcement Training Centre, 2004). Among other factors, the decision-making process is influenced by informational inputs, delivered by sensorial and perceptive processes. Several models of decision-making have been used in law enforcement: the OODA model developed by John Boyd in the seventh decade of the previous century, the SOODA model proposed by Soltys (2008), the AAADA model proposed by Asken (2010) and the recognised-primed model of naturalistic decision-making developed by Klein, Calderwood, and Clinton-Cirocco (1986) (cited in Klein, 1993).

Exposure to high-stress critical incidents can cause a range of psychological responses with extreme intensity which severely affect performance, such as hyper vigilance and choke. Siddle (1995) considers hyper vigilance as a 'catastrophic failure of the cognitive processing capabilities, leading to fatal increase of reaction time (freezing in place, failure to remember training, failure to perceive important factors or irrational acts)'. Choke, a concept from sports psychology, was defined as 'a process whereby the individual perceives that his resources are insufficient to meet the demand of the situation, and concludes with a significant drop in performance' (Hill, Hanton, Fleming, and Matthews, 2009).

Driskell, Salas, Johnston, and Wollert (2008, cited in Wollert et al., 2011) have identified the following psychological mechanisms by which stress impacts performance: increases distraction and decreases focus; increases cognitive load and demands on cognitive resources; increases the intensity of negative emotions and frustration; increases fear and anxiety; increases social maladjustment.

MENTAL SKILLS TRAINING — A MODERN TOOL FOR SURVIVAL STRESS MANAGEMENT

MENTAL TOUGHNESS

A group of experts constituted in 2013 to develop a safety standard for law enforcement personnel from the US Michigan state revealed that officer safety is strongly influenced by elements like winning mindset, emotional control and situational awareness. According to

Siddle (1995), a survival mindset involves the ability to concentrate and reflex action, without hesitation, in conditions of death risk and requires self-discipline in training, the will to take the life of another if necessary, the belief in executed missions and holding of a solid values system. Grossman and Christensen (2007) list several attributes of the mindset necessary to deal with life-threatening situations: the feeling to be prepared for and even willingness to confront instances of interpersonal conflict, the avoidance of reality denial that 'bad things can happen' and clear thinking in relation to the actions to be carried out in such situations.

After studying numerous police officer-involved shootings, Blum and Blum (2004) believe that having a positive and dominant mental attitude, which implies the will to survive, is among the common factors that ensure successfully dealing with these incidents. Lindsey (1999, cited in Mayhew, 2001) claims that survival training should routinely include survival mindset development.

A winning or survival mindset and a positive or dominant mental attitude are similar concepts to mental toughness, a sports psychology concept. Miller (2012) argues that mental toughness is called warrior mindset or battle mind by other authors.

In sports psychology mental toughness involves holding a natural or developed psychological advantage that allows an athlete to cope better than his opponents with sports demands (in competition, training, lifestyle) and specifically allows him to be more consistent and better than his opponents in maintaining determination, concentration, confidence and control under pressure (Jones, Hanton, & Connaughton, 2002). Mental toughness is based on a series of mental skills (e.g. thoughts control, arousal control, attention control, motivation, self-confidence) that are interrelated although have not necessarily the same level of development (cited in Miller, 2008a).

Development and practical expression of mental skills involves the use of techniques such as self-talk, tactical breathing and visualisation. Mental skills development is made through mental skills training, a custom-designed programme which implies the systematic and consistent training, practice and application of the aforementioned techniques to attain the desired mental skills



levels. Modern training programmes for dealing with critical incidents include, like most mental skills training programmes, the following key stages: providing information, skills acquisition, application and practice. The application and practice stage, the 'practice of (mental) skills under conditions that increasingly approximate the real-world environment' (Wollert et al., 2011), is essential for mental skills achievement.

Research has shown that, depending on the individual, the stress response may be more gradual and nuanced. This finding represents the psychophysiological basis for the differences in coping and resilience (Miller, 2008b). Dienstbier (1989) used the concept of toughness to denote distinct psychophysiological reaction pattern typical for animals and people who cope effectively with stress, characterised by smoothness and efficiency of physiological arousal, such a retained reaction preventing catecholamine's depletion, important neurotransmitters that affect mood and motivation (cited in Miller, 2008b). Miller (2008b) considers that the psychophysiological argument for most mental conditioning programmes from law enforcement, emergency services and military fields consists of the fact that the (physiological) response indicating toughness or its absence interact with the individual's psychological appraisal of his ability to cope with challenge, as stated by Dienstbier.

LAW ENFORCEMENT MENTAL SKILLS TRAINING SPECIFIC ELEMENTS

The survival stress effects at physiological, psychological and performance levels are inevitable, but with the proper training they can be mitigated. Therefore, law enforcement personnel training for critical incidents designed to prepare the instant response capability in critical situations, life-threatening, with fast and appropriate actions (Federal Law Enforcement Training Centre, 2004) should be one of the important objectives of personnel training.

Mental skills training is a form of primary prevention in law enforcement operational stress management. It is an important condition for supporting effective operational performance in extreme situations, due to the survival stress performance effects.

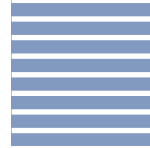
Miller (2008a) believes that the functions of mental toughness training in law enforcement

are the optimisation of policing during progress and reduction of the chances that personnel be affected by operational stress, including by post-traumatic stress syndrome. The mental toughness skills and their training for controlling tactical stress are essential to ensure conditions for the effective management of the numerous decision-making process cycles carried out during tactical operations or even during incidents that take place in a short time (Asken, 2005, cited in Asken, 2010).

Mental toughness training of police personnel was traditionally performed implicitly or indirectly, mental toughness being a side effect of rigorous physical expectations, demanding discipline and performance standards and of reality-based (scenario) training (Manning, Laufer, Asken, & Hamd, 2011). The use of this type of training has been argued, criticised, for example, by Thompson and McCreary (2006). In such a context, Manning et al. (2011) consider that explicit mental toughness training is more useful and mention the example of the US Military Academy West Point performance enhancement programme.

Csikszentmihalyi's flow concept, regarded by many sports psychologists as the optimal mental state for performance, has been specifically applied in the law enforcement and emergency services fields by Asken (1993), Le Scanff and Taugis (2002) and Doss (2007) (cited in Miller, 2008a).

Sweet and Gannon (2011) presented a series of proposals for the mental skills training programmes designed for the development of survival and winning mindsets: embedding of the lessons learned from the survivors of fatal disasters and society's crises; use of preparatory exercises which, by virtue of their content and repetition, will form aggressiveness, determination, confidence and craftsmanship; visualisation of the dominant and aggressive response in life-threatening situations. Among the recommendations from the mental skills training field made by Grossman and Christensen (2007) to train personnel for performance in high-stress situations are the following: training in conditions similar to those in reality, repeating suitable words to prevent blockage in critical situations, preparing for recognising and acting on the psychological and physiological responses to extreme stress and violence, acceptance of



the possibility of tragic event occurrence, stress inoculation and tactical breathing.

A number of researches demonstrated the efficiency of mental skills training techniques in law enforcement and related fields, a number of which are presented by Sweet and Gannon (2011).

An important condition for the effectiveness of mental skills training to address law enforcement critical incidents is to implement integrated training, which brings together all types of training (psychological, physical, tactical) (Wollert et al., 2011; Manning et al., 2011).

ELEMENTS FOR ARGUING THE EXISTENCE OF A NEW PARADIGM IN LAW ENFORCEMENT PERSONNEL MENTAL CONDITIONING

The mental skills training techniques used in sports psychology to improve performance can be transferred to other high stress performance situations, such as those from law enforcement or military fields. Miller (2008a) notes that, in agreement with the fact that sports were always a ritualised types of fighting, most of the research and practical elements of the public safety and emergency services mental toughness training come from sports psychology.

The aforementioned author presents some characteristics of commonly used stress management techniques, which distinguish them from mental skills training techniques: tend to focus almost exclusively on physical and mental calm for preparation in relation to or for subsequent approach of stressful events; are not specifically designed for stress management during life or death critical incidents by emergency services personnel; do not use the whole range of cognitive, behavioural and physiological self-management techniques for effectively approaching life or death crisis occurring in law enforcement.

Manning et al. (2011) present a series of arguments for the practical implementation of direct mental toughness training in law enforcement: 'the current development of conceptualising and training of law enforcement and the military personnel as tactical athletes has been seen as potentially benefitting from the result of integrating psychological skills

and mental toughness training (with) physical conditioning'; 'growing body of knowledge about the interactions between the psychological and physical elements and (about) the function during high-stress police encounters'; 'description and coordination of approaches to minimise the potentially performance degrading effects of stress'; 'empirical demonstration that mental toughness and psychological skill training does indeed impact the quality of tactical performance'.

MENTAL SKILLS TRAINING THROUGH EXPOSURE TO FIGHTS IN HIGH-INTENSITY COMBAT SPORTS IN THE APPLICATION AND PRACTICE STAGE OF MENTAL SKILLS TRAINING PROGRAMMES

There are several similarities between the fights in high-intensity combat sports (which push heart rate up to 75 % of its maximum or more in fights and workouts) and law enforcement critical incidents. The main common features of high-intensity combat sports and close combat are the objective of adversary domination, deliberate injury as a means of obtaining victory, intense physical exertion and certain common fighting techniques. Regarding the last aspect mentioned, it is worth adding that the use of force continuum, applied by US law enforcement institutions, involves inclusively the use of empty hand control techniques that are taken and adapted from combat sports.

The majority of assaults on police officers are unarmed attacks, for their reduction being useful the greatest prowess in defensive tactics (Mayhew, 2001). This situation is one of the major arguments to demonstrate why mental skills training through exposure to fights in high intensity combat sports in the application and practice stage of mental skills training programmes can be a very good method for the formation, maintenance and development of mental skills. Improvements in controlling heart rate and other physiological systems have been obtained following the implementation of a standard sports psychology programme for self-regulation of arousal in combat sports in conjunction with daily training of a group of cadets from the US Air Force in modern military hand-to-hand combat by the Danskin Centre for Performance Enhancement, a part of US Kansas State University Counselling Services in 2008.





Considering the above issues, it can be anticipated that mental skills training through exposure to high-intensity combat sports fights, can be a viable alternative to, or may complete, stress exposure training through participation in event-based scenarios in the application stage. To verify this idea, empirical research is useful, first to determine whether different types of fights from high-intensity combat sports cause stress rates higher than the rates produced by different types of law enforcement event-based scenarios. This testing is particularly useful if one takes into account that, according to Wollert et al. (2011), a condition of effectiveness of training with participation in event-based scenarios is 'suspension of disbelief' in their realism. The confirmation of the previous hypothesis category requires the testing of other hypotheses: mental skill levels developed by mental skills training through exposure to high-intensity combat sports fights in application and practice stage are higher than those developed by mental skills training through exposure to event-based scenarios in application and practice stage.

CONCLUSION

Research has found that mental skills training supports optimal performance in sports competitions, and lately, increasingly more evidence is appearing of its efficiency in fields in which critical incidents occur which trigger survival stress. In such fields, this type of training is or must be specifically designed to support the efficient performance of operational activities, including during their carrying out, and has a comprehensive character as it uses the full range of cognitive, behavioural and physiological self-management available techniques. There are several reasons for considering determining the effectiveness of the mental skills training through exposure to the high-intensity combat sports fights in the application and practice stage as a useful research direction for achieving an effective operational stress management. The most important is represented by the fact that these fights are more probable to cause high stress than event-based scenarios.

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