Typical manners and psychological reactions of university students in model self-defence situation

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Introduction.
It is undoubted right to defend oneself and it should be a duty to defend the other when he or she is under physical attack. There are many possibilities, how to overtake sexual harassment without violence, and without behaving in a bad way.
It seems be surely enough that self-defence depends not only on tactical and technical skills of defender. Psychological traits of every person are important for safety, to escape from physical conflict.
This application of combatives needs, above all, a very good psychological grounding. We use fighting activities, eliminating fear of contact, to raise self-confidence, to make the people trust in their own abilities and believe they are able to defend themselves.
Youth and young adults are able to learn different techniques and to use it in simple model situation. As Harding’s (2004) results showed, students increased the number of different techniques they performed when reinforcement and extinction procedures were conducted during the drill condition, and that this increase in response variability generalized to the sparring condition. Variety of physical techniques is not useful without proper tactics. Of course, the best tactics is to avoid physical contact and to solve conflict before physical contact starts.
Self-defence should be linked with good communication skills. Verbal as good as non-verbal self-defence is essential precondition of physical self-defence. In the society, it is most important to know, how to avoid violence parallel with ways, how to use physical contact when in danger.

Self defence in Masaryk University, Brno
Among others, there is also self-defence as specialty in facultative physical education for students of Masaryk University in Brno. This specialty can join anybody of the students except students of Faculty of sport studies. In the fall 2007 term n=28 students attended subject (specialty) self-defence. They practiced 10 lessons per 1.5 hour. Lessons were divided
to introduction to self-defence, low and ethical norms, strategy and tactics, defence againstasic attacks such punching, kicking, strangulation a close quarter fighting. Students practiced
self-defence techniques in controlled physical contact. They were examined by specific model
situation test in the ninth lesson. After that, in tenth lesson, they discussed with teacher, and
get feedback for ensure that they can understand real conditions for solving self-defence
situation.

**Material and methods**

Pilot study is aimed to describe typical manners and psychological reactions of university
students in model self-defence situation.

University students (n=17), 9 girls and 8 boys, were exposed to verbal and physical stress in
controlled specific model situation. Their task was to solve prepared situation, when unknown
attacker attack them from the front and from behind. Attacker was well-trained martial artist
in aikibudo and taekwondo with horrifying musculature (weight 107 Kg). He had a mask to
hide his face. He used also verbal attack and bad language to frighten defender.

Experiment was recorded and used for post analyse of patterns for solving model situation.
Subjective data were obtained from specific questionnaire filled in immediately after
experiment. Semi objective data were obtained in vivo from expert observation. Graduated
psychologist and self-defence expert gave evaluation of every model situation.

**Model self-defence situation (MSS)**

The lesson before the last one was prepared for testing students in model self-defence
situation (MSS). Conditions for testing were given and consulted with experts in self-defence
and sport psychology. Testing took place in combative gym on tatami with students’ teacher
and sport psychologist in presence. All events were recorded on digital video camera.
Students were acquainted with testing, way of attack, its intensity as well as defence manners.
They know that attacker will be aggressive; he will physically and verbally attack them.
Situation can by potentially dangerous and they must agree with testing before doing it.
Students were instructed that defence could be intensive and aggressive. All hits, kicks,
chokes, etc. were allowed. Except that extreme dangerous techniques as attacks on eyes and
ears are. Attacker was instructed to attack in aggressive manner to make attack persuasive. He
had to control attack and should stop it when needed.
Stress, trepidation and anxiety

Stress, trepidation and anxiety come along with mankind from its beginning. Those symptoms are exposed when inner homeostasis is threatened. They belong to basis processes, that are necessary to have successful reproductive cycle and they are typical of live organism. Stress is one of most important factor damaged mans health and it is regarded as trigger of many complicated life situations. It can cause stress situation or worse, serious disease. I. P. Pavlov, creator of stress theory did many experiments on animals (Křivohlavý, 2001, p. 55). American physiologist W. Cannon (1932) described so called sympatoadrenalin system when in stress. One can fight or flights when in stress situation. H. Selye (1976) represents corticoid conceiving of stress. According to this theory hypothalamus - hypophysys system is activated. It causes to abandon any attempt to solve situation. R. Lazaurus (1966) set on theory of cognitive coping problems. We differentiate solution strategy aimed on problem (eg. constructive solution of situation) and solution strategy aimed on emotional regulation. Inconvenient affect on personality (outer and inner) can cause hard life situation and are called stressors (Křivohlavý, 2001). Demands, which are inadequate (real or supposed) in compare to individual resistance surely makes stress. Stress is usually connected with distress. Some inner tension put together with experience of danger can in specific situations induce intensive satisfaction as it is in risk sports (Paulík, 2002). Stress is first of all consequence in many other negative reactions of organism, which triggers are negative emotions. Results can be seeing as change of hormones level in the blood (adrenalin and noradrenalin particularly) and behaviour expression (mood change and movements reaction). Stress is well described in both of psychological (Křivohlavý, 2001), and physiological fields (Cohen, 1978). One can fight with stress situation only when good health and when he is adequately strong. In defence are produced coping strategies (Lazaurus, 1966). Individual resistance is given by positive attitude cope stress and stress situations. Many today’s people have diathesis for diseases as bipolar disorder, schizophrenia etc. Psychology and medicine can stress and distress objective diagnose and cure.

Results

Evaluation of mental reaction

In our speech we focused on self-defending reactions in stress situation, witch was known from teacher instruction. We used standardised psycho diagnostic methods – Stress test (Selye, 1993) and subjective evaluation of the observer. At the end of stress situation all
students answer how high was amount of stress they get and continuously they were evaluated by an independent observer. This observer registered their amount of stress and also how they react during self-defending action.

Prepared self-defending action cased different reaction by every person. Different reactions are evoked with respect to arisen situation and with respect to former experiences of participants.

Our pilot study takes in males and females with their gender-specific reactions. These gender-specific reactions are affected by many personal traits, which can influence current performance and activity. Somebody at the time of assault reacts completely inadequately in spite of their natural reactions and custom practices, other are using learned patterns and some can not manage so situation at all and are frustrated, apathetic or panic.

Study sample get on level of moderate stress (11 points) in stress test after stress reaction. 16 of 17 participants manage situation in interval no stress – middle stress. Only one participant managed the situation hardly and showed high stress up to a level of a serious harm. This participant did not report any level of anxiety and was evaluated by independent observer as person capable to use learned experiences in case of need to defence his/herself. The highest level of stress was in domain “behaviour” (behavioural signs of stress), middle level of stress was in domain “physiological signs” and the lowest level of stress was in emotional signs.

In relation to temperament we explored individual types of temperament and their relation to perception of anxiety in stress situation. Phlegmatic types of persons get the lowest level of stress; the highest level of stress gets phlegmatic-melancholic types. In relation to stability was stress more displayed in emotionally labile participants, with boundary middle level of stress, while in emotionally stable participants reached level of stress moderate values.

Anxiety leads to higher level of defence mechanism. It is more significant in males. Female participants witch are not anxious get higher level of stress measured by standardised questionnaire. Male participants witch are not anxious get lower level of stress. We have found out gender differences. Anxiety is related significantly to self-defence skills in the same extent in both of females and males. We have found the same number of females and males witch were not anxious and were able to defend themselves (4 males, 4 females). Only two anxious females were able to defend themselves for a short time. Three anxious males were defeated and three females as well.

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Technical evaluation

Ten participants were passive or almost passive from the total number of 17 people. Seven participants were evaluated as active. According to psychological results four males and four females were probably able to defend themselves in real. Remaining nine participants would probably fail in real self-defence situation.

While participants were stressed and anxious in self-defence model situation, we can differentiate several movement patterns: stepping back, raising hands, avoiding grip, avoiding hug. Participants rarely used punches and kicks. Females used them more frequently. Participants were able to use only few from known self-defence techniques like blocks, punches, head protecting, and partially counterattack. No one tried to use arm lock or to throw opponent.

Discussion

As model self-defence situation solving shows, to train self-defence is not possible only by practising self-defence techniques itself. When the participants are exposed to unknown attacker, they react totally different then in regular self-defence training. The main factor is stress situation. Unusual situation, strange attacker with hidden face and by verbal attack and its intensity cause it. We can suppose that self-defense training should by aimed on simple defenses as blocking, proper distance and counter attack from the defensive stance. Most of model self-defense situations ended by throws of defender. We should pay more attention to close quarter defense. The most important profit of model self-defense situations is the fact of experience close to real situation of attack. Person can feel his or her own physical, mental, and technical abilities of self-defense. For defender is also important to work with his and attacker aggression. He can also feel his emotions in safe environment in the presence of teacher.

Conclusion

Stress coping should be the main factor in self-defence training. Typical manners of defenders include irrational escalation of aggression, or turning back movements. Different physiological changes were observed.

References


