

METHODS FOR SUPPORTING INTERVENTIONS TO PROMOTE MENTAL HEALTH AT THE WORKPLACE

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Keywords: mental health, workplace, evaluation, occupational psychology

Abstract: Mental demands in occupational environments increased in the current socioeconomic context, this trend imposing stress management policies to promote health at work, in a particular mental health. There are many methods and assessment tools belonging mainly to psychology, and can be used successfully in the support of mental health promotion as requirements argument among workers. This paper outlines some of the methods currently used in the U.S. and Europe, and also proposes the using of stress control card at work, as a very accessible instrument for Romania

Cuvinte cheie: sănătate mentală, loc de muncă, evaluare, psihologie ocupațională

Rezumat: În contextul socio-economic actual au crescut solicitările psihice în mediul ocupațional, această tendință impunând gestionarea stresului prin politici de promovare a sănătății la locul de muncă, în particular a sănătății mentale. Există o multitudine de metode și instrumente de evaluare care aparțin preponderent psihologiei și care pot fi utilizate cu succes în sprijinul argumentării necesității promovării sănătății mentale în rândul lucrătorilor. Lucrarea de față subliniază câteva dintre metodele folosite în mod curent în SUA și Europa, iar ca metodă extrem de accesibilă și pentru România este propusă utilizarea cardului de control al stresului la locul de muncă.

INTRODUCTION

In the wake of the worrying statistics about the trends in psychiatric pathology, promotion of mental health has become an increasingly important part in the mental health promotion programs. Stress has currently become part of our daily vocabulary. The initial definition given by Hans Selye has undergone changes, from the unspecific response of the individual to demands, up to the special relation of the individual with the environment that might affect her/his wellbeing and, more concretely, the ability of workers to have control over the demands at work. (1, 2).

Work analysis is a complex information-collection activity that brings to surface all the variables determining the work of the individual, with specific methods and techniques. The purpose of this analysis is to design preventive measures, both for the employee and in the organization, which are meant to help develop the organization and implement integrated management. The environment, the psycho-social and organizational aspects, all this makes up the work conditions, and in order to perform a most ergonomic job analysis one should also add the level of physical and psychical stress at work. Both technical (work instructions) and psycho-medical (skills, demands) indicators are used for a proper evaluation to be made.

The methodology used by psychology is extremely complex as it includes objective and subjective techniques, test batteries, functional tests, cards, various measuring devices, evaluation systems. The psychological test process includes an assessment based on indicators that pursue sensory processes, motive, cognitive and integrative-behavioral processes at the level of the CNS. The tests indicate: the attention capacity, memory, concentration, the psycho-motor abilities, the artistic skills, the managerial, medical, and technical skills, the speed of response, manual or postural (static, dynamic) coordination,

dissociation of moves, sensory thresholds, the characteristics of one's personality (emotional, of character, motivation and pathological), the ante- and post- stress exposure effects, the excitation-inhibition processes of the central nervous system, the working capacity. The importance of these indicators resides in the fact that there is no single profession which should not to require sensory abilities, sensory-motor abilities or practical intelligence.

The psychologist's approach on effects and the inventory of stress, by using prevalently subjective methods, should contribute to an overall evaluation of the risks carried out by the multi-professional team; however, this only happens in the big organizations that implement social management as part of the overall risk management. In Romania, risk management is currently approached exclusively in a technical, engineering way. (3-5).

The continuous modification of the work process envisages primarily the job demand (which is increasing) and the operator (from whom the best performance is expected). In the beginning, the behaviouristic theory referred only to the quantitative side of the process, while the mental process evaluation was added subsequently. It has currently been admitted that the psycho-social risk factors in some jobs are on the increase, the first on the list being the instability of the labour market and the vulnerability of the workers against the background of globalization. This trend required an evaluation of the occupational stress risks and also measures to prevent risks and mental disturbances and to promote wellbeing, and treatments, recovery and employability. Romania joined the European policy in the field and included mental health in its current legislative framework – Law no. 487/2002. Health interventions alone cannot manage properly mental health, hence, there is need for other social determinants: decision-makers, associations of patients, the civil society etc.

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Article received on 07.06.2011 and accepted for publication on 17.10. 2011
ACTA MEDICA TRANSILVANICA December 2011; 2(4)178-180

PROPOSED METHODS

The evaluation of the effects of exposure to neuropsychosensory stimuli and of stress has three major goals: the proper content of the job (I), the ability of the operator (II) and the consequences on adjustment and health condition (III).

I. The psychological test for the job is aimed not only at improving ergonomics (traditional ergonomics) but also the alternative to decision-making and to potential feedback – that is, aspects pertaining to job organization. Therefore, the subjective complaints might get weaker as professional satisfaction gets higher (6, 7). The main tools used in such cases are the check lists and the questionnaires.

II. The ability of the individual to cope with stress is being evaluated in the psychological tests carried out right upon employment, according to the job demands (selection by ability) as well as during the health checks that are done periodically in order to determine the optimum individual activator – tables 1-3.

Table no 1. The major types of psychological tests

Test name	Abbreviation	Test type
Raven Standard Progressive Matrix	SPM	Cognitive capabilities
Raven Advanced Progressive Matrix	APM	
Raven Color Progressive Matrix	CPM	
Tree test		Personality
Drawing by the person		Personality
Rorschach Test		Personality
ABCDM Big Five Minulescu Questionnaire	ABCD-M	Personality
<u>A Shortened Stress Evaluation Tool</u>	ASSET	Stress
<u>Achievement Motivation Inventory</u>	AMI	Motivation
<u>Big Five Adjectives</u>	BFA	Personality
Big Five Questionnaire	BFQ	Personality
California Psychological Inventory™	CPI	Personality
Emotional Quotient Inventory	EQ-i	Emotional intelligence
Eysenck Personality Questionnaire	EPQ-R, EPQ-RS, IVE	Personality
<u>Five-Factor Nonverbal Personality Questionnaire</u>	FFNPQ	Personality
<u>Fleishman Job Analysis Survey</u>	FJAS	Job analysis system
<u>Freiburger Persönlichkeitsinventar</u>	FPI-R, FPI-G	Personality
<u>General Ability Measure for Adults</u>	GAMA	Cognitive abilities
Holland / Self-Directed Search	SDS	Motivation
Multifactor Leadership Questionnaire	JVIS	Vocational and professional orientation

Multifactor Leadership Questionnaire	MLQ	Leadership
NEO Personality Inventory, Revised	NEO PI-R	Personality
Nonverbal Personality Questionnaire	NPQ	Personality
Survey of Work Styles	SWS	Stress
Test di Orientamento Motivazionale	TOM	Motivation
Torrance Tests of Creative Thinking	TTCT	Creativity
Pièron Test		External focused attention
Kraepelin Test		Internal focused attention
Prague Test		Distributive attention
Multifactor Leadership Questionnaire	MLQ	Leadership

Table no. 2. „Vienna Test” System

Test Name	Abbreviation	Test Type
Adaptative Matrix Test	AMT	Nonverbal for general intelligence
Cognitrone	COG	Attention, focusing
Determination Test	DT	Measuring the reactive resistance to demand
Reaction Test	RT	Attention, reaction
Adaptatibe Tahistosopic Test of Traffic Perception	ATATV	Ability of observation and gain of perspective

Table no. 3. „PSITEST Cabinet” System”

Name	Description	Included tests
PSITEST Cabinet	Software for evaluation in the work and transports psychology	<u>9 tests (PVM, ACRM, TR, CMR, RO, RS, RCR, CA II, MA)</u>

The most important methods and indicators pertaining to experimental psychology with applicability in work psychology are those which determine the sensory thresholds – with focus on kinesthetic, visual and auditive senses.

- *Kinesthetic sense*: the test is performed with a device called electromagnetic flowmeter which registers the duration, amplitude and deviation of the individual from vertical position;
- *Visual sense* – the following indicators are used:
 - illumination level (discrimination ability) fotoesthesiometry
 - glare (reflected glare in flash light) – the time interval for the visual sense retrieval is registered by the chronoscope
 - the chromatic sense test with the Ishihara and Stilling tables
 - evaluation of the visual field with the campimetry method. The visual performance is currently evaluated with screening tests of Visiotest-Campitest-Ergovision type in the occupational health practices
- *The auditory sense* – by means of the tonal liminal

audiometry.

In addition to these psychophysiological indicators some other indicators can be used: endocrine indicators (catecholamine, urine vanilmandelic acid, chortizol, ACTH); biochemical indicators (triglicerides, cholesterol); physiological indicators (EEG, EKG, EMG, pulse, TA); questionnaire for investigation of subjective simptomatology.

Other evaluation instruments are: integrative-behavioural methods and techniques, the use of the stress control card.

The main integrativ-behavioural methods used are the following:

1. measuring the time of response to stimuli by using the chronoscope;
2. measuring the psycho-galvanic reflex (neuromuscular excitability) before and after carrying out the work tasks;
3. psychomotor coordination tests of the type: pencil-paper, tapping, plotting;
4. the stroboscope which detrrmines the critical frequency of the optic fusion. This indicator represents the frequency at which flashes of illumination are perceived as continuous luminous sensation;
5. the tachistoscope which identifies as many elements as possible of the perceptual field, at rapid displays.

The Stress Control Card was designed by psychologist Alfred Barrios, SPC Center (Self Programmed Center) of California, USA. (8). We obtained the Romanian product with copyright 2010 Infobox Ploiești. The Stress Control Card has a bio-feedback device which gauges the strain which is closely linked to the temperature of fingers and toes. The card is based on the fiziological principle according to which the excess of stress caused the blood to be pumped mainly to the internal organs, which will lower the temperature at the body extremities.

Interpretation of the colour code (Figure 1):

- BLUE: relaxed
- GREEN: moderately relaxed (normal)
- RED: critical (nervous)
- BLACK: highly stressed.

Figure no. 1. Stress Control Card (and reverse)



III. The aim of this test is to identify the modifications of behaviour, the psychological, physiological, immunological, endocrine, biochemical, psychopathological modifications, as well as the socio-economic indicators (performance, absenteeism, errors, morbidity with ITM). Based on the principle that work has a sanogenic effect, the psychic strain at work should not produce significant psychopathological disturbances. (9). They emerge in the context of a multi-factor etiology, related to psychosomatics and psychic disorder. (10, 11). Lifestyle and defensive behaviour make it difficult to put a diagnose on the multi-factor diseases related to mental strain at work, hence, there is need for closer cooperation of the occupational health doctor with the psychologist and this cooperation is indispensable for activities promoting mental health at work..

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