

ПРИКЛАДНЫЕ ИССЛЕДОВАНИЯ И ПРАКТИКА
APPLIED RESEARCH AND PRACTICE

**The Use of Restoring Resources of the Survival Roles and Reflex
Patterns in MNRI® (Reflex Integration) Interactive Training
of Personality Growth and Interpersonal Relations**

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Personality growth as a socio-psychological problem is a multi-complex phenomenon that targets Self-identity, Self-actualization, and other areas. During the last decade scientists started studying other factors limiting the personality growth, such as stress and post-trauma. However, the Survival Roles, the socio-individual patterns based on neurophysiological and psychological defense mechanisms blocking the personality Self-actualization, social interaction and professional business qualities, are rarely discussed. Thus this study based on Survival Roles may extend the personality growth oriented concepts and therapy modality tools. This study showed a correlation

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between Survival Role patterns, stress resilience, and survival reflexes (integrative units of the nervous system functions). Comparative data on 464 business professionals from high management jobs (Study Group – n=340, and Control Group – n=124) participated in this research which found 70.9 % (n=329) of the total group was in stress. This stress activated socio-individual Survival Roles and protective reflex patterns which responded with reactivity, over-protection, non-constructive interactions with others and limited business strategies. The MNRI® reflex integrative training used in this study demonstrated improvement of functions of the protective reflex patterns effected positively the survival mechanisms including increased stress resilience, and decreased negative effect of Survival Roles. MNRI® proposes a new paradigm in the realm of personality growth and socio-interpersonal activity, and supports the neurophysiological aspects to optimize the overall quality of life of business professionals from a variety of high management business areas.

Keywords: *socio-psychological development, Self-actualization, personality growth, stress resilience, Survival Roles, protective reflexes, the MNRI® – Masgutova NeuroReflex Integration Assessment and Training.*

Introduction

Scientific research is being conducted in many countries investigating the growth of social consciousness concerning the importance of socio-psychological care of ecological personality development, the uniqueness of a person and the orientation for success on the level of personality and identity as the creator of social life (R. Sylvester, 2007; B. Lipton, 2005). E. Goldberg (2009) describes personality as largely determined by the individual's neurobiology with personality disorders being caused by changes in the brain-not an extracranial phenomenon. Even with this current research, there is still a lack of attention is given to neurodevelopmental resources and the aspects of psychophysiology of survival limitations. The development of personality and the psychophysiology of this development is ever expanding (P. Blantt, 2008). Personality being "the enduring characteristics of the person that are significant for interpersonal behavior" (L. Goodstein, 1975), depends on nervous system differences that

are inherent. The character of balance between excitation and inhibition processes in the central nervous system (CNS) is crucial, specifically functioning of the Reticular Activating System (RAS) (H. Eysenk, 1980; E. Goldberg, 2001; E. Jensen, 1995). The RAS located in the brainstem is mainly aimed at maintaining an optimum level of alertness or 'arousal'. This part of the brainstem serves as the filter to sort out the sensory data as safe or "threatening". When the data is safe it activates the brain for bringing the data to cortex through excitation of neural impulses, and when the data is "dangerous" RAS "damp them down" though inhibition (R. Gross, 1987), and activates survival mechanisms (S. Masgutova, P. Curlee, 2006; S. Masgutova, D. Masgutov, 2015; P. Shackeford, 2015).

Socio-Personal Identity and Factors for its Formation

Identity formation is "the problem solving behavior aimed at eliciting infor-

mation about oneself or environment in order to make a decision about an important life choice” (H. Bosma & E. Kunnen, 2001, p. 52). Personal Identity is truly a human feature and is used to determine life’s meaning, direction, and purpose. S. Mequio (2009), T. Luckmann, (1979), E. Erikson (1950) were the first to establish identity formation as the major task for adolescence. S. Mequio (2009) also suggests that it is only by going through an identity crisis characterized by a period of distress where young people explore their souls and experiment with options are they able to determine and develop their beliefs and values. The outcome, according to E. Erikson (1950) and J. Marcia (1965), can be positive (formation of a personal identity) or negative (confusion about adult roles). E. Goldberg (2009) finds that frontal lobes of the brain are what makes individuals who they are and gives them their identity. H. Plessner (1981/1928), G. Mead (1967/1934) and J. Cooley (1967/1902) describe the process of inter-subjective mirroring as the social construct of ‘socio-personal identity’ and can be explained by the joint, interdependent evolution of the body and mind (T. Luckmann, 1979; D. Goleman, 1995; K. Cahana, 2011). Some current research purports that the formation of one’s identity begins during emerging adulthood (S. Schwartz & M. Montgomery, 2002). Emerging adulthood is the period of life after adolescence before young adulthood (J. Arnett, 2000). Researchers argue society and culture have changed, allowing individuals to delay adult tasks (such as, employment, marriage, and parenthood) until later in life (J. Arnett, 2000; H. Bosma & E. Kunnen, 2001; Schwartz & Montgomery, 2002). Therefore, some people tend to postpone the exploration and commit-

ment related to identity development until emerging adulthood. Other researchers offer the notion that the support and opportunities offered by an individual’s environment have a large influence on identity formation (K. Luyckx, L. Goossens, B. Soenens, 2006; K. Cahana, 2011).

Maslow’s concept of “Self-actualization and hierarchy of needs” is one of most appropriate topics to address when looking at how new concepts of personality have emerged (A. Maslow, 1954). According to Maslow people are subject to two quite different sets of motivational forces: those ensuring survival by satisfying basic physical and psychological needs (physiological, safety, belongingness, love and esteem need), and those promoting the person’s self-actualization to realize their full potential; “becoming everything that one is capable of becoming”, especially in the intellectual and cognitive domains (R. Gross, 1987). Behaviors relating to survival or deficiency needs are engaged in because they satisfy the need relating to self-actualization and the importance of the care at the most basic level – “safety needs”. The needs lower down the hierarchy must be satisfied before one can fully attend to need at the next higher level. The higher up the hierarchy one goes, the greater the need is linked to life experience and the less to the biological character of the need. The higher up one moves on the hierarchy, the more difficult the need is to achieve.

Maslow based his studies of the characteristics of achievers of self-actualization, (Einstein, William James, Eleanor Roosevelt, Abraham Lincoln, Thomas Jefferson, Spinoza and others) and proposed characteristics of self-actualization that could be treated as the personality factors for success (see Table 1).

Table 1: Characteristics of Self-actualization and behavior leading to Self-actualization (after A. Maslow, 1962/1970)

Characteristics of Self-Actualizers

- They perceive reality efficiently and can tolerate uncertainty
- Accept themselves and others for what they are
- Spontaneous in thought and action
- Problem-centered (not self-centered)
- Good sense of humor
- Able to look at life objectively
- Highly creative
- Resistant to enculturation, but not purposely unconventional
- Concerned for the welfare of mankind
- Capable of deep appreciation of basic life-experiences
- Establish deep satisfying interpersonal relationships with a few people
- Fear experiences

Behaviors leading to Self-actualization

- Experience new things instead of sticking to safe paths
- Trying life like a child, with full absorption and concentration
- Listening to your own feelings in evaluating experiences instead of the voice of tradition or authority or the majority
- Avoiding pretense (“game playing”) and being honest
- Being prepared to be unpopular if the views do not coincide with those of the majority
- Taking responsibility and working hard
- Trying to identify own defenses and having the courage to give them up.

Self-Trust and Success:

Self-trust is the first secret to success (R. Emerson, 2012). C. Rogers (1961) used the term unconditional positive regard in describing Self-trust. C. Jung (in D. Richo, 2010) suggests that children be taught how to go inward to learn the art of Self-trust. Other researchers suggest that Self-trust is an all important factor in growth whether it is personal or economical, and is a learnable skill as well as an emotional ability (S. Covey, 2011; C. Wall, 2004). Of all the motivational factors examined by J. Baum (2001) to determine the motivational factors of successful businesses, he found the strongest tie with long term success was the CEO’s attitude of self-efficacy. J. Baum (2001) also suggests that understanding the links

between an attitude of Self-efficacy, trust, and long term business success provides an important lesson for managers at all levels and in all settings. M. Healy (2009) sums up the importance of self-trust as follows: “it is the key that unlocks the doorway of creative freedom and personal truth”.

Social Support and Identity

One main area to review when self-trust and success are considered is socio-psychological support and its effect on the development of personal identity. Social support can be defined as supportive relationships with others (DuBois, et al., 2002). Many researchers suggest that the two greatest sources of support come from family and

peers, with play being a part in the development of personal identity (H. Bosma, E. Kunnen, 2001; DuBois, et al., 2002). Bannerman (internet 10-2011) finds that the social support from family offers the opportunity to provide children learning to make positive choices and learning from choices that do not bring expected results. He suggests that repeated opportunities to make choices during daily routines can provide a child with a positive, general sense of well-being, both psychological and physical. R. Baumeister and M. Muraven (1996) proposed that, whereas societies play an important role in shaping identities, individuals also exert choices that influence their identities. Being able to make a choice, recognize opportunities provided by others to make choices, and initiate choice-making opportunities lays the foundation for independent and successful living (R. Bannerman, 1996; internet 10-2011).

In summing up the importance of personal identity, self-trust and social support, the above authors suggest these factors are necessary for a productive, positive life. But what happens to the individual who do not developed the ability, skills or life habits that foster a positive self-identity and who cannot find the path to an active, joyful life and struggles with personal relationships, leaning and life careers? Generally, researchers and educators alike suggest that the negative and positive self-feelings of children are rooted in their social relationships, mental health, performance at school, and their overall successful adaptation to the environment around them (M. Rosenberg, 1979). Current research describes how "beliefs control biology" (B. Lipton, 2005), how the vibration field if the heart affects the way we interact with others (C. Hannaford, 2002), how the flooding of chemicals released in the body during stress

and threat affects individuals, (E. Jensen, 2000; E. Goldberg, 2009), and the effect emotional arousal has on everything we do (R. Sylwester, 2007; E. Jensen, 2000; B. Lipton, 2005). These inappropriate responses from the body exhibit in many forms such as anxiety, antisocial behavior and general emotional delays. Stress is the body's reaction to any change that requires an adjustment or response. The body reacts to these changes with physical, mental, and emotional responses (E. Jensen. 2000; E. Goldberg, 2009; R. Sylwester, 2007).

J. Kiffer (WebMD,10-2011) lists the following as the effect of stress on the body:

- Forty-three percent of all adults suffer adverse health effects from stress.
- Seventy-five percent to 90% of all doctor's office visits are for stress-related ailments and complaints.
- Stress can play a part in problems such as headaches, high blood pressure, heart problems, diabetes, skin conditions, asthma, arthritis, depression, and anxiety.
- The Occupational Safety and Health Administration (OSHA) declared stress a hazard of the workplace. Stress costs American industry more than \$300 billion annually.
- The lifetime prevalence of an emotional disorder is more than 50%, often due to chronic, untreated stress reactions.

Stress and Role of Reflex Integration for Stress Resilience and Success

Stress is defined in medical and psychological sciences as an internal state and process presenting a non-specific response of the organism as the results of the effect of different extreme factors potentially dangerous for homeostasis, and characterized by stereotypic changes in functions of the nerve and endocrine systems (H. Selye,

1974). A need or demand that is perceived to exceed the resources available to effectively deal with it at a certain time, can cause a stress. However too intense stress can lead to pathogenic diseases (psychological, endocrine, heart and circulation, and other).

The term stress (pressure, tension, suppression) means pressure applied on the system or organism. This term was first proposed by Walter Cannon (1999). Canadian scientist Hans Selye in 1926, started using this term in the sense of emotional response and as a state affecting the health condition. As a medical student he had noticed the fact that many patients suffering of different diseases were showing up common symptoms such as: loss of the desire to eat, loss of body weight and poor muscle tone regulation and muscle pain, easy tiredness and sleepiness.

Different responses in stress can greatly affect the development of personality, lifelong success and positive life experiences and are developed from early childhood. D. Amen (2005), E. Jensen (2000, 2006), C. Hannaford (2002), B. Lipton (2005), and others all express the need to use movement and exercise to maintain a well-functioning “body-mind” system that is resistant to non-controlled, reactive and inappropriate behaviors. S. Masgutova (2005, 2006, 2007), takes this principle for the need to integrate the basic sensory-motor patterns and reflexes to supply their neuro-maturity to achieve the “freedom from automaticity” (S. Masgutova et al., 2015). Primary motor reactions and reflex patterns are the source of sensorimotor and cerebral development, which, in turn, becomes the foundation for future intentional movement, learning, and further intellectual development. (L. Vygotsky, 1986; J. Piaget, 1973; A. Leontiev, 1972; B. Elkonin, 1974; L. Bozovich, 1968).

Primary sensory-motor system affects the development of the body-mind system (L. Vygotsky, 1986; L. Bozovich, 1968), and the process of integrating primary movements and cognitive development is most crucial in infants and toddlers (L. Vygotsky, 1986; J. Piaget, 1973; B. Elkonin, 1974; D. Elkonin, 1998; L. Venger, 1969, 1988). S. Masgutova (2004–2007) explains that experiencing stress (physical or emotional) affects emotional and cognitive-intellectual maturation and the ability to learn. Stress is the main source of impulsive behavior and engenders a reliance on primitive reactions and reflexes, both of which lead to a regression in the formation of coordinated movement systems and skills. Because reactive responses and primary reflexes are designed to protect the individual and to ensure survival, they often overshadow the reasoning that occurs in the neocortex of the human brain. In Masgutova’s research on over 3,560 subjects (age range 1 month–18 years) with any of a variety of developmental deficits, a correlation between the poor development of reflex patterns and the challenging deficit(s) are noted. Seventy-eight percent of those individuals (age range 4–15 years) demonstrated various difficulties such as: poor memory or a hyperactive or hypoactive Asymmetrical Tonic Neck Reflex. It was also found that attention deficit disorder (ADD), attention deficit/hyperactivity disorder (ADHD), and poor transition from concrete to abstract thinking were associated with having a poor Symmetrical Tonic Neck Reflex in 57% of these subjects. Fifty-eight percent of the children with an attention disorder also exhibited problems with the Spinal Galant, Spinal Perez, and also the Asymmetrical Tonic Neck Reflexes (S. Masgutova et al., 2015; P. Shackleford, 2015). L. Vygotsky (1986) recognized the importance of reflexive responses serving all hu-

man life. Reflexive responses serve two tasks: to carry out protection role, and to build the transition for internal regulation.

Masgutova Neurosensorimotor Reflex Integration Program

MNRI® has been used since 1989–2000 in Russia and Europe (2000–2017) and, more recently, in other countries (1994–2017) to treat individuals with certain types of sensory-motor or reflex development deficits, behaviour disorders, disorders of speech or language development, or learning disabilities. It has been our clinical experience that MNRI furthers neurodevelopment in impaired individuals and enables them to integrate primary movements, reflexes, coordination systems, and skills that enable optimal functioning, development, and learning. We have found that therapy with MNRI stimulates the reflex patterns that awaken sensorimotor memory, which has been shown to positively affect physical strength, immune activity, cognitive, emotional, social, and motor abilities. This Program also is successful in brain mapping functions changes (J. Koberda, N. Akhmatova, et al., 2016). The official research of the Effect of MNRI on children and adult Individuals with PTSD have demonstrated significant results in objective brain method and immune tests (J. Koberda, N. Akhmatova, et al., 2016; J. Koberda, N. Akhmatova, 2016; Akhmatova N., et al., 2015).

In brief, MNRI is based on exercises and techniques (repatting, re-education, and recoding) that involve the repetition of dynamic and postural re ex patterns. e stimulation of those re exes revives traces of genetic motor memory and activates the innate defensive mechanisms of the body—brain system. MNRI exercises stimulate in-

nate resources such as self-regulation, stress resistance, and immune system regulation. Repatting, which is also facilitated by the exercises, involves the stimulation of the “defense” functions of the lower brain regions, the extension of links between neurons, the growth of neural nets, myelination, and the creation of new nerve routing, as described by I. Sechenov (1960, 1995) Virella et al. (1990), and P. Anokhin (1975, 1973).

Normal Stress Response, Negative Stress and Trauma:

The early work of Walter Cannon (1931) revealed that the autonomic nervous system manages two general states of function in the body as a normal course of daily life: 1) The Non-Alarm State and 2) The Alarm State. A healthy individual exposed to an isolated traumatic event will experience normal activation of neural responses designed to protect the body and enhance survival. Generated by the sympathetic nervous system, impulses from the lower brain travel to the organs and tissues, causing all the symptoms we recognize in stress: sweating or goose flesh, dilated pupils, rapid heartbeat, shallow breathing, internal pressure, trembling, pallor, and perhaps even nausea. The release of adrenalin in the HPA-stress-axis (hypothalamus-pituitary-adrenal; H. Selye, 1974) pumps energy out to the limbs to support escape or self-defense (‘fight or flight’). The enteric nervous system, popularly referred to as the ‘brain in the gut,’ acts to regulate digestion in ways that enhance survival.

The parasympathetic nervous system activates a relaxation response when danger has passed and one can safely return to the Non-Alarm State. In cases of overwhelming terror

when no escape and no hope for survival seem possible, the parasympathetic system releases the same neurotransmitters and hormones that help the body relax, but in much larger amounts. This brings on the freeze response (hold breathing). In car accidents, during rape or under threat at gunpoint, protective 'freezing' enables a person to collapse, faint, or dissociate from their body.

Following a traumatic event other symptoms may persist for a few days: intense bad memories, at effect, muscle tension, tremors, unstable gait, lack of grounding, poor balance, anxiety, and feelings of isolation. Normally, when the traumatic event is over or the source of trauma removed, a healthy individual will gradually phase out of the stressed state and move into a state mediated by the parasympathetic nervous system, recovering fully within a few days or weeks. This cycle of transition from Non-Alarm State to Alarm State and back to Non-Alarm State is governed by the autonomic nervous system with its sympathetic, enteric, and parasympathetic subsystems (H. Selye, 1974). Chronic stress and trauma can affect the personality qualities development: suffering causes reactivity in thoughts and behaviour; irretentiveness; lack of desire to be active or opposite, reactive; improper self-criticism; being critically demanding towards others, hypervigilance, poor positive thinking, poor creativity and other. Trauma is also affecting the cortical and extrapyramidal nervous systems destroying their neurons, and particularly, limiting functions of: the prefrontal cortex (programming centres, decision making, inhibition of reactive emotions and behaviour, speech); diencephalon and specifically of basal ganglia (balance of excitatory and inhibitory neurotransmitters, behaviour regulation), hippocampus (memory), amygdala (fear and other emotions decod-

ing centre), limbic system (emotions regulation), brain stem (automatic programs of an organism and reflexes) (M. Milad, G. Quirk, 2002; M. Morgan, L. Romanski, J. LeDoux, 1993; L. Shin, S. Rauch, R. Pitman, 2006; F. Dolcos, K. Labar, R. Cabeza, 2004; N. Doidge, 2014).

Stress and its Bio-physiological Characteristics

The knowledge of stress is essential for understanding the nature of the personality growth limiting factors, and for choice of the therapy and methods. Most important questions are: what are stressors causing the state and inability to develop healthy self-protection patterns. Stressors can be: medical condition of health (injuries, pain, surgery, loss of blood, drug and other poisoning, low and high temperatures, radiation), sensory over- or under-stimulation (too much light/darkness, noise higher of 85 db.), psychological factors (emotional tension and trauma, poor control of intellectual processes), too intense and hard work (high expectations in achievements, failure in job and life goals), too intense physical activities (sports, dances), and other.

The biological meaning of stress is switching on adaptive abilities of the organism to a response to extreme changes in external and internal environment. However, the long-term or too intense influence of a stressor or several stressors can compromise the adaptive abilities, which leads to homeostasis dysfunctions and even pathological disorders.

Hans Selye (1926/1974) found that independent of the nature of a stressor the common symptoms are seen in patients (hypertrophy of hypothalamus, adrenals; involution of the hypophysis and lymphatic

glands; stomach-intestine and digestion problems) called “*Selye triade*”.

Stress usually is described as a negative condition of the organism. It actually is a condition that can be caused by both, a negative or positive stimulus, that can impact on a person’s mental state and physical health by over-activation of the sympathetic nerve system. The stress can also move to positive changes and choices though the stressor was negative and painful, challenging our homeostasis (H. Selye, 1974).

The level of stress depends on a stressor – its frequency, intensity, duration of stress stimulus and environments. Stress management is based on our genetic factors (the strength of the nerve system and ability for stress resistance), and on the fact of how much the stressor triggers. When the intensity of the stressor is exceeding the ability of the nerve system to decode and cope, the personality growth can come to a limiting end, shifting to *Survival Roles* can take place, and the interpersonal relations can be affected negatively (a tendency to conflicts, too irrelevant demands to surrounding people, lack of ability to project and build positive relations and business).

Analysis of existing concepts of personal growth and interrelations, stress and survival based on the evidences of the neurological functions of the extrapyramidal nervous system responsible for defensive reflex patterns allows to link all these realms and to find any possible correlations between them.

Role of Survival in Personality Development

The process of survival is an essential part of our life. The assurance of protection and survival on the physical and neuropsychological levels supplies the feeling

of security and satisfaction, also the feeling of freedom, the state of curiosity, motivation and orientation for learning, and true success. The concept of the importance of survival process in personality development has been shown in psychology by numerous authors, each with their own focus on different aspects of survival. Some of these focuses include: survival as seen from the concept of development of self-identity and features of maturity (E. Erickson, 1980; H. Dubowitz, 1989; N. Tolstykh, 1991); neurodevelopment (L. Sadowska, 2001; S. Masgutova, 2005; S. Masgutova, A. Regner, 2008); as a basic feature of trust into the world (E. Erickson, 1980; C. Rodgers, 1961); natural personality development mechanisms (L.S. Vygotsky, 1968); attachment and disorders (K. Brisch and K. Kronenberg, 2004; T. Levy, M. Orlans, 1998; J. Masterson, 2006; R. Sylwester, 2007); protections mechanisms (S. Freud, 1926), family structure and stereotypes in relationships causing co-dependence (S. Wegsheider, 1998), unconscious processes and reflexive behavior (S. Freud, 1923; S. Masgutova, 2004), goal and values orientation (A. Leontiev, 1971, 1977), and also lack of development of Bonding reflex (S. Masgutova, 2004, 2005). A. Schore (1999) suggests that the early mother-child bonding affects the orbitofrontal cortex, and if early life is stressful then later-life stress related diseases are possible, including the psychiatric ones.

Positive survival creates the ground for development of self-identity and the use of the protection mechanisms with orientation on solutions. On the neuro-developmental level a positive mental attitude is an integral part of survival and combats your unconscious stress, allowing one to think more clearly and make better decisions (E. Jensen, 2006; C. Congar, 2011; B. Lip-

ton, 2005; S. Masgutova, 2010). Researchers have shown how the fight-or-flight (also known as the acute stress response) limits the amount of things one can observe: while, improving one's attitude and therefore lowering stress, one becomes reinvigorated and awareness of their surroundings improves (S. Masgutova, 2010; B. Lipton, 2005; PsychologyWorld.com, 2011).

Negative survival results in the tendency to anchor and orient in a long-term way on the negative experience; builds co-dependent relationships; and, suffers from, "production of the negative feelings" of helplessness and being alone. Personalities with such a tendency usually demonstrate the features of slow adaptation to new conditions and dislikes life changes; lacks self-confidence and poor decision making; exhibits low self-esteem, shyness, and embarrassment in social relations; demonstrates continuous immaturity and escape mechanisms. These create co-dependent attitudes towards people, things, ideas etc. E. Goldberg (2005) reminds that choices and creativity are limited in negative and chronic survival stages.

Poorly developed self-identity as the result of the un-integration of the bonding reflex and motivation integration leads to two basic non-productive responses in relationships: *co-dependent relations* and *negation, rejection of the world and of own "Self"* (E. Erickson, 1980). In *co-dependent* relations such a personality demonstrates the features of slow adaptation to new conditions and dislike of changes; lack of self-confidence and poor decision making; low self-esteem, shyness, and embarrassment in social relations; continuous immaturity and escape mechanisms. The co-dependent person orients on receiving support and praise because of fear of failure, instead of being naturally curious and open to new informa-

tion. These individuals are hyper-sensitive to social opinions, reject their own feelings, and creates co-dependent attitudes towards people, things, ideas etc. In *negative* types of interaction there appears trends like superiority, aggressiveness, hostility, evoking of offensive behavior, an inability to forgive, and have difficulty in dealings with authority.

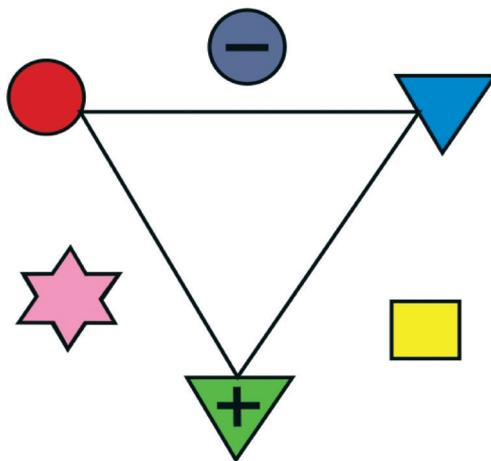


Fig. 1. Survival Roles Model based on concept by S. Wegsneider-Cruse, 1998)

Both types of relations cause a co-dependent style in cognition, learning and relations, and have the concrete expression through *Survival Roles* (S. Wegsneider-Cruse, 1998): such as "Fanatics", "Enabler", "Family Hero", "Scapegoat", "Lost Child", and "Mascot" and possibly others. The priority behaviors in these roles are based on negative protection and compensations in stress situation. For example, in the role of "Fanatic" the person is so involved in their ideas and beliefs; they cannot be open to communication with others and can't see a wider perspective of reality and event. In the role of "Family Hero," the person is taking on so many responsibilities for all other people, they forget about their own needs, plans and responsibilities. In the role of "Scape-

goat,” the person demonstrates the tendency to take the responsibility for the failures of other people and groups and events and responds with the feeling of being guilty. All these examples show a tendency of limitation regarding the possibilities for constructive communication and personal growth.

Study Goal. The main goal of this study is to find out the correlation between the socio-individual *Survival Roles* and their links with *stress resilience*, and *survival reflex patterns* that serve as the physiological aspect of the socio-personality growth creating in an individual the feeling of a ‘protection-safety’ in their interactions with others and in reaching the business professional tasks.

Research Logistics, Study Participants, and Hypothesis

The present research was realized in 3 steps:

Step 1 – Pre-test (n=464): The research was carried out with a *Study Group* of 340 professionals and *Control Group* of 124 having the high rank jobs as business managers and directors of offices aged from 32 to 54 with experience of 3–10 years of work. All having high business education and high or good level of success overall. Participants were from different countries – Poland, Russia, Germany, USA, Canada, Israel, and Singapore. Research was conducted in years of 2006-2014.

They were proposed to participate in: 1) *the modified Survival Roles Test* by S. Wegsheider-Cruse (1981, 1989), 2) *the MNRI® NeuroReflex Assessment* by S. Masgutova (2004, 2010), 3) *the Stress-Resilience Questionnaire* by S. Masgutova (2010–2017) validated through tests of 1600 individuals with chronic stress, post-trauma and PTSD (S. Masgutova, 2015).

Step 2 – MNRI® Training Procedure: The *Study Group* of business professionals (n=340) undergone the MNRI® Reflex Integration training called also as the MNRI® anti-stress program oriented on work with negative effects of stress and stress resilience increase using the Reflex Integration concept. *The Control Group* (n=124) was not proposed any training program. All results were compared on step 3.

Step 3 – Post-test. All initial tests were repeated with participants of the Study (n=340) and Control (n=124) groups again in one month, and compared using the statistical and qualitative analysis (see in *Results and Discussions* below).

The hypothesis was that the negative aspects of *Survival Roles* expressed in stress correlate with lower level of stress resilience, and lower scores for reflex patterns functionality.

It also was presupposed that the specialized MNRI® anti-stress training using the concept of reflex integration can target the neurophysiological aspect of the socio-personality development and improve all – the reactivity of reflex patterns in stress, level of stress resiliency and increase ‘freedom’ from *Survival Role/s*.

Research Methods

1. *Modified Test of Survival Roles* by S. Wegsheider-Cruse (1981, 1989; projective version by Dr. S. Masgutova) was used to identify study participant’s *Survival Role/s* by description anchored by specific symbolic signs. The participant was choosing in descriptive questionnaire the features similar to in own personality and this way was identifying the role that they present/play in stress and frustrated state in every-day life or during more intensive stress within six main *Survival*

Roles: “Fanatics”, “Enabler”, “Family Hero”, “Scapegoat”, “Lost Child”, and “Mascot” (see description in theoretical part).

2. *The MNRI® NeuroReflex Assessment* by S. Masgutova (2004, 2010). In MNRI® research (S.K. Masgutova, 2002–2007; N.K. Akhmatova, S.K. Masgutova, 1989, 1994, 1998, 2004–2006), several criteria were used to define reflexes according to their role in protection or survival, motor action complexity, and level of their neurophysiological circuit.

The MNRI Assessment has evaluated the level of functioning of 30 reflexes (coded X1–X30 (S. Masgutova, N. Akhmatova, 2004, S. Masgutova, N. Akhmatova, M. Kiselevsky, 2008; S. Masgutova, D. Masgutov, 2015) of individuals in the *Study Group* (n=124) twice: prior the MNRI® therapy and after its completion.

Evaluation of the reflex patterns was based on the neurophysiological definition of the inborn reflex and its parameters such as: *sensory-motor coordination, direction of the response, intensity (muscle tone regulation), timing/dynamics of the response, symmetry* (S. Masgutova, D. Masgutov, 2015). Every parameter is tested according to four determined features. For example, assessment of the first parameter of ‘*sensory-motor coordination*’ (sensory stimulus and biomechanical aspect of the motor response)

in the Hands Grasp Reflex tested the next four features: 1) tactile stimulation on the base of a closed palm in a more intense proprioceptive way-deeper to activate palm flexors, should trigger a stronger grasp response, 2) all fingers are closed and thumb is between index and middle fingers, 3) elbow can be easily extended in front of the body for 180 degrees, and shoulder for 90 or more degrees (differentiation between elbow and palm and shoulder is evident/in norm), 4) arm/palms are directed horizontally to the ground (no abnormal abduction/adduction in the wrist joint). Every parameter has its own four described features. Scoring of a reflex pattern within the parameters above were assigned on a scale of ‘0–4’, with ‘4’ indicating full display of all four features in a parameter, and ‘0’ indicating that normal/correct responses or features in a certain parameter were absent. The maximum score for 5 parameters and 4 features in each reflex pattern gave a total of 20 points-the highest level of maturity or integration (Table 1). A summary of scores are: between 11 to 20 represent functional development, and below 10 points (0–9)-dysfunctional or abnormal development. The scores of 10 to 11.99 are marginal results between functional and dysfunctional states of reflex patterns. Scores of 16.99–17.99 represent the norm (see Table 2).

Table 2: Clinical Evaluation: Reflex Assessment Scores Criteria (in points 0–20)

Points	Level of reflex integration	Points	Level of reflex integration
20	Full/Complete integration	10–11.99	Marginal pathology and dysfunction
18–19.99	Mature and integrated	8–9.99	Incorrect, light dysfunction
16–17.99	Correctly developed-normal	6–7.99	Dysfunction
14–15.99	Functional, but low level of development	4–5.99	Severe dysfunction
12–13.99	Functional, but very low level of development	2–3.99	Pathology
10–11.99	Marginal pathology and dysfunction	0–1.99	Severe pathology

The scoring system has been validated by statistical research carried out by math Professor A. Krefft (Krefft, 2007), and also the ANOVA test (IBM SPSS Statistics Grad Pack 22.00); results were considered statistically significant with p values ($M \pm SD$) less than 0.001 and interpreted as significant, and not significant at $p > 0.05$.

Reflex patterns were further categorized for convenience according to body movement planes, with ten patterns in each, corresponding to sagittal (medial-lateral), horizontal (superior-inferior), and dorsal (anterior-posterior) body movement planes (S. Masgutova, D. Masgutov, 2015).

In more than 35 years of clinical observation of individuals with chronic and traumatic stress, and PTSD, the authors have found that they consistently exhibit hyper-reactive reflex responses in stress that affect their behavior and emotions; they often show inability to relax, report about overwhelming emotions and internal pressure, inability to focus and easily distracted, distressed. They also express the need for a specialized psychological-neuro-functional assistance of their reactivity to work with survival and *Survival Roles*.

People undergoing stressful events have a weaker immune response, and their overloading stress hormones attack the brain and neuroendocrine system.

3. *The Stress-Resiliency Questionnaire* (by S. Masgutova, 2010–2017)

This questionnaire was designed to help measure an individual's stress resiliency capabilities.

The questionnaire results allow to see the level of individual's resilience to stress when dealing with beyond everyday stressor that is intense, more extreme and severe. It proposes evaluation of 10 areas-clusters of activities of an individual in stress: 1) *feelings and emotions*, 2) *sense function*, 3) *movements and body responses*,

4) *physiological functions*, 5) *coping with stress*, 6) *behavior*, 7) *cognitive functions*, 8) *relationships management*, 9) *approach to future perspective*, 10) *work/school in times of stress*. This test contained also questions of Self-actualizing characteristics (based on A. Maslow's concept – see above).

The questionnaire survey in this research allowed for comparative analysis of level of stress resiliency of business people in *Study Group* before and after the use of the MNRI® Program. The research was proposing the professionals to repeat the survey at 1, 3, 6, 9, and 12 month intervals, so that they may monitor their stress resiliency in longitudinal perspective. The questionnaire was proposing the questions-statements, like: "When stress is intense, I go into a freeze response (Examples: "I become immobilized" or "frozen with shock or fear")", and ready given responses: "I don't know" (0 points), "Always" (1 point), "Usually" (2), "Seldom" (3), "Never" (4). The scoring for one statement can get '4' points. Therefore, one cluster of 10 statements can reach 40 points, and all test 400 points (the highest level of stress resilience). Depending on individual features of living through stress the scores determine the level of resiliency defines as: 1) excellent/very good level (360–400 points), 2) good level (280–359), 3) moderate level/optimum (120–279), 4) lower level (40–119), 5) poor level/high stress (0–39). Statistical analysis for comparison of results of pre- and post-reflex integration training was done using the ANOVA test (IBM SPSS Statistics Grad Pack 22.00 and the Mann-Whitney U-test, using Statistica (version 6.0; Stat So Inc., Tulsa, OK, USA); results were considered statistically significant with p values ($M \pm SD$) less than 0.05 interpreted as significant, and not significant at $p > 0.05$.

Results and Discussions

A. Socio-Individual Survival Roles

1) *The initial research on Survival Roles* with *Study Group* of 464 business professionals (see Table 4 for data) demonstrated that they do use *Survival Roles* to negotiate the daily stresses they face. Particularly, a) 70,9% of individuals (n=329) shown the presence of *Survival Roles* in stress; b) 25,4% (n=118) – didn't shown presence of *Survival Role* – by other words they were free of survival roles, and c) 3,7% (n=17) didn't give any definite response (no stable *Survival Role*, not clear responses in test) (see Fig. 2 and Tab. 4).

Further analysis of *Survival roles* has demonstrated the fact that: A) *Survival Roles* in stress were presented rather proportionally: in *Study Group* (n=340) by 71,8% of individuals (n=244), and in *Control Group* (n=124) by 70,2% (n=87); B) presence of none of *Survival Roles* was noted in *Study Group* for 25,3% individuals (n=86), and in *Control Group* for 24,2% (n=30); C) no definite response (no stable *Survival Role*, no clear responses in test) was given in *Study Group* by 2,9% individuals (n=10), and in *Control Group* by 5,6% (n=7).

Next, business professionals were proposed the informative description of Functions of Survival Roles, their function in stress and every-day life, their strong and poor traits, also the ways of making the “Self” free of negative aspects of them. The *Study Group* (340) was proposed also the MNRI® Reflex Intergration training procedure of doing 8 exercises from manual: “*Reflex Integration for Trauma Recovery: MNRI® Stress Resilience Introductory Program*” by S. Masgutova, and D. Masgutov (S. Masgutova, D. Masgutov, 2015).

The post-tests of the business professionals for their *Survival Roles* after this training were showing the decrease of percentage of them, thus improvement in their survival. The results were as follows (See Tab. 3):

The data in Tab. 4 and Fig. 3 demonstrates the fact of decrease of number of individuals presenting *Survival Roles* and increase of the freedom from them in *Study Group* (n=340) with high statistical significance ($P < 0,05$). There are no significant changes in number of individuals presenting *Survival Roles* in *Control Group* ($P > 0,05$). The positive dynamic of changes

Business People Demonstrating Survival Roles in Stress
(n=464 individuals with 3-10 years of experience of work)

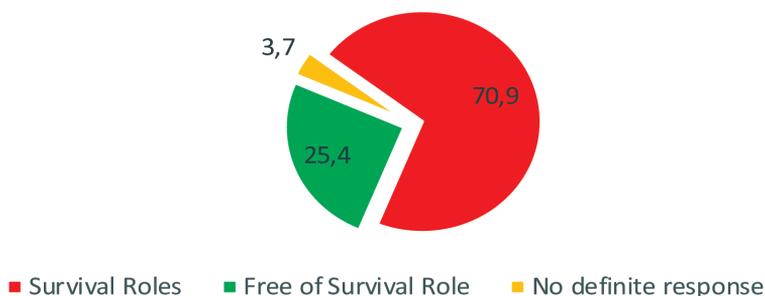


Fig. 2. *Survival Roles* in stress in business professionals (n=464) with 3–10 years of experience of work

Table 3: *Survival Roles* presence in the business professionals (n=464) in *Study* (n=340) and *Control* (n=124) groups

Survival Role presence		Groups	Both groups		Study Group		Control Group	
		Pre- and post-test	Number	%	Number	%	Number	%
A	<i>Survival Roles</i>	Before	329	70,9	244	71,8	87	70,2
		After	135	29,1	85	25,0	90	72,6
		P	<0,05		<0,05		>0,05	
B	No <i>Survival Roles</i>	Before	118	25,4	86	25,3	30	24,2
		After	316	68,1	246	72,4	29	23,4
		P	<0,05		<0,05		>0,05	
C	No Clear response	Before	17	3,7	10	2,9	7	5,6
		After	13	2,8	9	2,6	5	4,0
		P	<0,05		<0,05		>0,05	

Business Professionals Demonstrating Survival Roles in Stress (n=464) in Study and Control Groups Before and After the MNRI® Training

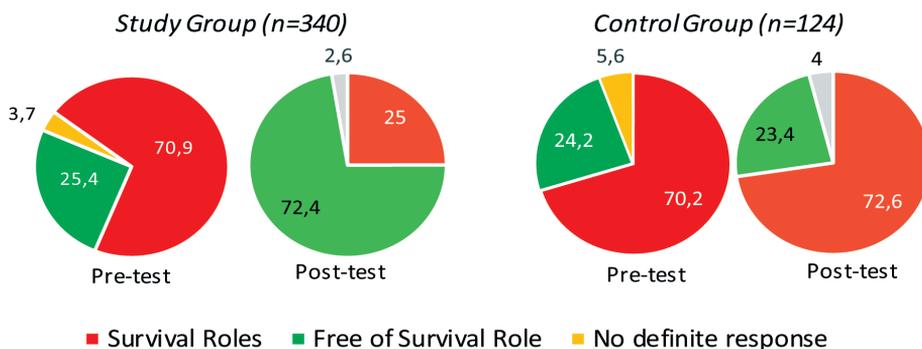


Fig. 3. *Survival Roles* in stress in business professionals (n=464) in *Study* (n=340) and *Control* (n=124) groups in pre-test and post-test after one month of the MNRI® Reflex Integration training

in decrease of negatively affecting *Survival Roles* after the MNRI® training program is the evidence of the positive influence of the MNRI® techniques on the stress resilience and protective responses.

The individual *Survival Roles* are also of a special interest. The participants were presenting all of the six *Survival Roles* in different percentage proportion (see Fig. 4).

They were presenting one to three *Survival Roles* simultaneously.

When the specific *Survival Roles* were further investigated it was found out that 74,8% of businessmen (n=246 out of 329 presenting *Survival Roles*) were demonstrating the features of a *Family Hero* role. The least presented role by this group of businessmen was the *Lost Child* (28,9%;

Survival Roles in Business Professional (n=329) in Initial Test in percentage

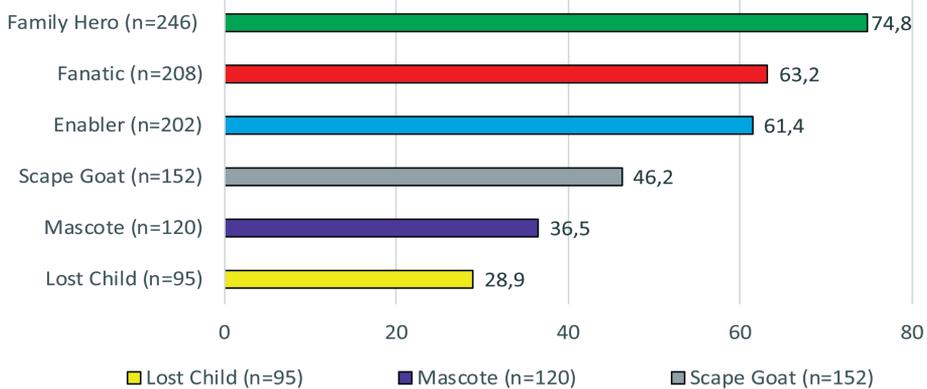


Fig. 4. Different *Survival* roles presented by business professionals in stress (n=329)

n=95) (see Fig. 2). The analysis of the specifics of individual *Survival Roles* can be a separate topic for the next publication.

B. Stress Resiliency

Neuro-psychological aspect of stress resiliency was the target of this study, which can be not presented in a person's consciousness hidden by *Survival Roles* and over-control over their emotions and reactivity. Participants of this study presented the control of behavior and emotions in stress in external interaction on a very good level.

The initial research on stress resiliency with a group of 464 business professionals (Study Group – n=340, and Control Group – n=124;) demonstrated the fact of their lower level of resistance against stress, and particularly, was the following:

1) Excellent/very good level of stress resiliency (360–400 points) was characteristic in:

- Study Group for only 15,3 % (n=52) of business people,
- Control Group for only 12,9 % (n=16),
- Average in both groups for only 14,1% (n=68);

- 2) Good level (280–359) – in:
 - Study Group for 25,9 % (n=88),
 - Control Group for 26,6% (n=33),
 - Average in both groups for 26,3% (n=121);
- 3) Moderate/lower than good level (120–279) – in:
 - Study Group for 32,4 % individuals (n=110),
 - Control Group for 21,8% (n=27),
 - Average in both groups for 27,1% (n=137);
- 4) low level (40–119) – in:
 - Study Group for 26,4 % (n=90),
 - Control Group for 38,7% (n=48)
 - Average in both groups for 32,6% (n=138).

The data shows at the fact that the neurophysiological aspect of stress resiliency in the majority of business professionals was lower initially than the optimum vs. the external control over stress that they demonstrate in interaction with others. The post-test results after the MNRI® anti-stress training in Study Group (n=340) show that the level of stress resiliency of participants increased significantly (see text below and

Fig. 4), which as we suppose, allowed for 'inner peace' and more internal comfort.

The results of the Questionnaire before and after using the MNRI® training program demonstrated significant improvement of stress resiliency in the *Study Group* of professionals (n=340) compared to *Control Group* (n=124) based on data below (see also Fig. 4 for *Study Group*).

1) Excellent/very good level of stress resiliency (360–400 points) was characteristic in:

– *Study Group* for 15,3 % (n=52) of business people in initial test, and 63,6% (n=216) in post-test after the MNRI® training program with statistical significance of $p < 0,05$;

– *Control Group* for 12,9 % of business people (n=16) in initial test, and 14,5% (n=18) in post-test with no any training program with no statistical significance, $p > 0,05$;

2) Good level (280–359) – noted in:

– *Study Group* for 25,9 % (n=88), increased and became characteristic for 28,2 % (n=96) in post-test after the MNRI® training with statistical significance of $p < 0,05$;

– *Control Group* for 26,6% (n=33) in pre-test, and 24,2% (n=30) in post-test (no training program) with no statistical significance, $p > 0,05$;

3) Moderate level/lower than good (120–279) – noted in:

– *Study Group* for 32,4 % individuals (n=110) initially decreased and became characteristic for 4,4 % of individuals (n=15) in post-test with statistical significance of $p < 0,05$;

– *Control Group* for 21,8% (n=27) in initial test, and 25,0% (n=31) in post-test (no training program) with no statistical significance, $p > 0,05$;

4) Low level (40–119) observed in:

– *Study Group* for 26,4 % individuals (n=90) in pre-test, and became characteristic for 3,8 % (n=13) in post-test with statistical significance of $p < 0,05$;

– *Control Group* for 38,7% (n=48) initially, and 36,3% (n=45) in post-test with no statistical significance, $p > 0,05$.

The data shows at the fact that level of stress resiliency in the majority of 464 business professionals was lower than the optimum. The post-test results in the *Study Group* after the MNRI® Reflex Integration anti-stress training show that the 'Excellent/very good level' of stress resiliency increased in 63,6% of individuals from 15,3 in pre-test, and the 'Low level' (26,4% decreased to 3,8%) and 'Moderate/lower than good' (32,4% dropped to 4,4%) improving the stress resiliency significantly ($p < 0,05$). Results of pre- and post-test in *Control Group* where the MNRI® training was not proposed is not statistically significant ($p > 0,05$) (see Fig. 5), which means that there were no changes in stress resiliency and that specially oriented work for changes is needed. Thus the importance of special neurophysiological-psychological assistance for work with protective aspects of the socio-personality development is evident.

C. Reflex Patterns Functioning

Reflex is designed by nature for survival mostly, but also for supplying the neuroplasticity for development of executive brain functions. Stress affects the reflex patterns and can cause overprotective behavior and non-productive interaction. This study has lead the Reflex Assessment for all 464 individuals from business area. It allowed to get a two-folded data on participants' reflex profile, and particularly:

1) specifics of the profile of 10 reflex patterns that are affected by stress overall;

2) the dynamic of improvement of reflex

Level of Stress Resilience in Business Specialists (n=340)

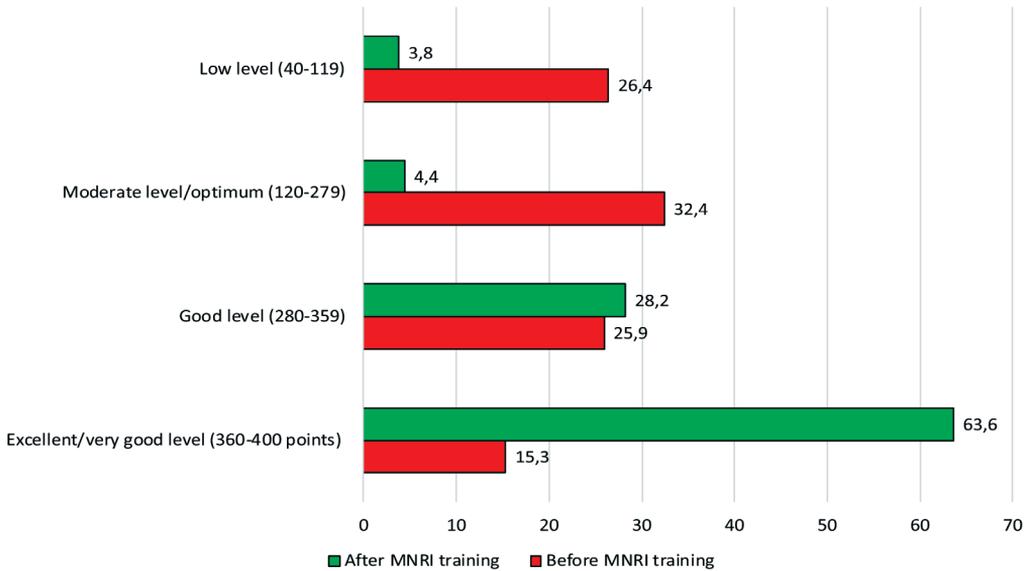


Fig. 5. Level of stress resilience in the *Study Group* of business professionals (n=340) before and after the MNRI® Reflex Integration training

functions in individuals in *Study Group* (n=340) after the use of the MNRI® Reflex Integration training.

The results of the Assessment show that the stress affects reflex patterns – the average score of functional state of reflexes was 14.1 points (low level of functionality, vs. norm of 16 points), and individual patterns were scored as follows: Core Tendon Guard – 12,7 points, Fear Paralysis- 12,2, and Moro – 12,7, Spinal Galant – 13,4, Eye tracking- 13,6, which were on a very low level of functioning (12-13.99). Next group of reflexes challenged by stress were the Hands Supporting scored with 14,7 points, Babinski – 14,6, and Foot Tendon Guard – 14,6, and the ATNR – 15,8, which were of low functional level (14–15.99). Note, only Hands Grasp had the scoring of 16,2 points responding the norm (in range of 16–17.99 points). These reflexes must be in the attention span of psychologists and other helping

professionals as their poor functioning can affect the ‘technical’ and neuro-physiological aspect of personality growth, communication making the work of businessmen much harder, less productive leading to failures, and thus, poor Self-actualization.

Next data after the MNRI® Reflex Integration training in the *Study Group* has demonstrated the increase of overall score for reflexes from 14.1 points (low level of functionality) in pre-test to 16,9 (norm; $p < 0,05$) with corresponding improvement of their specialized functions. The individual reflex patterns increased the scores as follows:

1) Core Tendon Guard improved from 12,7 points to 16,8 after the MNRI® Program, which known for improvement of the HPA-stress-axis and stress hormones regulation (H. Selye, 1974);

2) Fear Paralysis – from 12,2 points to 16,4; regulating the intensity of feeling

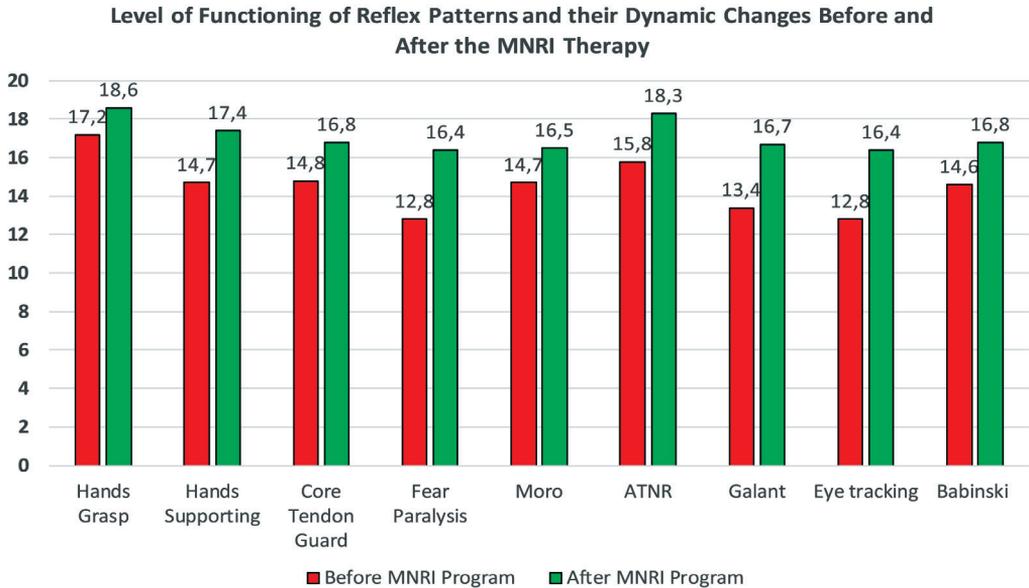


Fig. 6. Dynamic of changes in reflex patterns in the *Study Group* of business professionals (n=340) before and after the MNRI® Program

of danger and fear, also ‘freezing’/inhibiting from inappropriate action, and sensory system;

3) Moro – from 12,7 to 16,5 points, regulating the protection and ‘fight-flight’ responses;

4) Spinal Galant – from 13,4 to 16,7 points, allowing for horizontal movement of body to escape the stress on spine, also increasing sensitivity to detect a stressor timely, and regulating the stress hormones (adrenaline, cortisol);

5) Eye tracking – from 13,6 to 16,4 points, detecting any motion in the visual field to keep the ‘territory’ safe from danger;

6) Hands Supporting – from 14,7 to 17,4 points, responsible for keeping body safe in case of falling down, coordination of vision and body responses;

7) Babinski – from 14,6 to 16,8 points, increasing sensitivity to detect a stressor

timely, to regulate pain and decrease stress hormones;

8) Foot Tendon Guard – from 14,6 to 17,2 points, helping to keep balance of the whole body and decrease of stress hormones; and 10) the ATNR – from 15,8 to 17,4 points, activating hearing to detect an audial stressor, increase the attention and memory.

The data shows that all reflex patterns have improved significantly ($p < 0.05$) after the MNRI® Reflex Integration training reaching the level of norm except the Hands Grasp as it was closer to normal level initially.

This data shows the possibilities of regulation of stress level using the protective reflex patterns and release of stress as soon as possible, to increase coping mechanism and resilience of the nerve system against stress for increase of the quality of “Self-actualization”, life and work.

D. Comparative analyses of all test results have demonstrated the fact that the increase of stress was activating socio-individual *Survival Roles* causing the reactivity in behavior and emotions, also over-protection and non-constructive interactions with others, and limited business strategies. The results of this study has shown that 70,9 % of business professionals (n=329) were addressing the defensive features of *Survival Roles*. Many of them were presenting 2–3 role traits simultaneously. 74,8% of them (n=226 out of 329) demonstrating the features of a *Family Hero* role, 63,2% (n=208) – a *Fanatic*’ role, 61,4% (n=202) – *Enabler*’, and 46,2% (n=152) – *Scape Goat*’; the least played role was a *Lost Child* (28,9%; n=95) (see Fig. 3), which means that their *Survival Roles* were based on intense feeling of high responsibility for realization of goals, for others and success with scarifying own needs in the name of social community and business, and also the desire to be first with strong competitive features of trying hard to establish own “Self” among others accompanied with the expectation of high respect and appreciation from others, and readiness to take the blame for failures of others on own shoulders.

The study participants with these types of *Survival Roles* were evidencing rather high level of stress and lower resiliency to it. The lower level of resilience was characteristic for 32,6 % of individuals (n=138), moderate level/lower than optimum – for 27,1 % (n=137) vs. excellent/very good level – for 14,1 % (n=68), which means that their protective mechanisms were exceeding the norm – were reasons for reactive responses, exhaustion and limiting their strategic thinking, and possibly, better business decisions. Note, that the participants were demonstrating high level of control of their behavior and emotions in stress in external communication. However, their neuro-

physiological aspect of stress resilience was showing up high level of internal stress.

The correlation of the *Survival Roles*, stress resilience was also done towards protective reflexes of the study participants. They were demonstrating that 90% of their reflexes – the physiological basis of interaction in stress and survival – were in stress – in the state that usually is resulting in behavioral and emotional over-reactivity- impulsiveness, impatience, conflicting character, shouting/screaming, not-forgiving, not attentive to others and their ideas, notes and requests.

The MNRI® Reflex Integration training allowed revealing the fact that improvement of functions of reflex patterns in participants of *the Study Group* (n=340) affected positively the survival mechanisms, decreased the negative effect of *Survival Roles*, increased the stress resilience, and thus was able to support their neurophysiological and neuro-psychological aspects of a personality growth and socio-interpersonal activity optimizing their overall well-being in variety of areas of life and business.

Summary

This research carried out with business professionals (n=464) demonstrates the fact that the increase of stress activates socio-individual *Survival Roles* and protective reflex patterns resulting in reactivity and over-protection causing non-constructive interactions with others and limited business strategies, though their control over their emotions and reactivity was presented in external interaction as of a very good level. The results of this study shown that 70,9% of business professionals (n=329) were addressing the protective features of the *Survival Roles*. 74,8% of them (n=226

out of 329) presented the features of a *Family Hero* role, which means that their *Survival Role* was based on too intensive feeling of responsibility for reaching the goals, others, competitive features of trying hard to establish own “Self” among others, also expectation of high respect from others, bringing additional stress.

Neuro-psychological aspect of stress resiliency was the target of this study, which can be not presented in our consciousness, and hidden by *Survival Roles* 32,6 % of participants (n=138) were presenting rather low level of resilience in stress, 27,1 % (n=137) – moderate level/lower than optimum, and only 15,3 % (n=52) – excellent/very good level, which can be interpreted as the tendency for over-protective responses needed for stress exceeding the normal stress, thus cause shifting to *Survival Roles*, exhaustion and limitation for strategic thinking and business decisions.

The results of protective reflexes test have demonstrated the fact, that 90% of reflexes of participants in stress become affected and shown the hyperactivity. This data can mean that the physiological basis of their personality and features of their interaction in stress and survival were rooted in their deep responses of the brain stem – reflex patterns that are automatic and less controlled consciously.

The MNRI® reflex integrative training has revealed the fact that improvement of functions of reflex patterns in *Study Group* participants affected positively the survival mechanisms, decreased the negative effect of *Survival Roles*, increased their stress resiliency, and thus was able to support their neurophysiological and neuro-psychological aspects of a personality growth and socio-interpersonal activity optimizing their overall well-being in variety of areas of life and business.

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Использование ресурсов ролей выживания и схем защитных механизмов в интерактивном тренинге MNRI® (Reflex Integration) для оптимизации личностного развития и межличностного взаимодействия

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Личностный рост — социально-психологическая проблема, представляющая многокомпонентное явление, направленное на самоидентификацию, самореализацию и т. д. В последнем десятилетии ученые начали исследовать также и факторы, ограничивающие личностный рост, такие как стресс и пост-травма. Однако роли выживания — социально-индивидуальные схемы, основанные на механизмах нейрофизиологической и психологической защиты, подавляющие личностную самоактуализацию, социальные взаимодействия и профессиональные деловые качества личности, обсуждаются редко. Вместе с тем исследования, посвященные ролям выживания, могут расширить концепции и инструменты терапии, ориентированные на личностное развитие. В настоящем исследовании показана взаимосвязь между ролями выживания, стрессовой резистентностью и схемами защитных рефлексов (интегративных функциональных единиц нервной системы). Сравнительные данные, полученные в исследовании на группе, в которую вошли 464 представи-

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теля бизнеса высокого ранга (экспериментальная группа — $n=340$, контрольная группа — $n=124$), показали, что 70,9% из них ($n=329$) в стрессовых условиях активируют свои социально-индивидуальные роли выживания, а также защитные схемы рефлексов, повышающие реактивность, чрезмерные защитные механизмы, неконструктивное взаимодействие с другими и лимитирующие бизнес-стратегии. Интерактивный тренинг MNRI® (Reflex Integration), использованный в исследовании, показал, что улучшение функций защитных схем рефлексов положительно влияет на механизмы выживания: повышает устойчивость к стрессу, снижает отрицательный эффект ролей выживания. MNRI® предлагает новую парадигму в области личностного роста и межличностного взаимодействия, направленную на поддержку определенных нейрофизиологических механизмов в целях оптимизации общего качества жизни человека в различных ее областях, включая бизнес.

Ключевые слова: социально-психологическое развитие, самоактуализация, личностный рост, устойчивость к стрессу, роли выживания, защитные рефлексy, MNRI® — Masgutova NeuroReflex — диагностика и тренинг.