A MODEL OF STRESS RESILIENCE AND LEARNED HELPLESSNESS

UN MODEL DE REZILIENŢĂ LA STRES ŞI NEAJUTORARE ÎNVĂŢATĂ

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This paper proposes a comprehensive model of stress resilience based on previous research and literature reviews. The model details stress resilience being influenced and interdependent on 6 psycho-socio-economic factors, which can either work as protective or toxic on the individual. These 6 factors are: the physical factor, the emotional, the cognitive, the socio-economic, the spiritual or existential factor and the environmental factor. When these 6 factors are believed to be protective and act positively by the person subjected to stress, the mechanisms of resilience are established and maintained, while when these factors are negatively impacting the individual, the onset of learned helplessness is established. The postulate of this paper's author is that whatever factor or factors a person believes in predominantly, will act on increasing resilience more than the others. The proposed model is named the "Spinning Wheel" resilience model because it represents a dynamic construct where each one of the 6 factors can change its place and is interdependent on each other, as well as on establishing the mechanisms of resilience or learned helplessness in a particular individual.

Keywords: *learned helplessness model, psycho-socio-economic factors, stress resilience model.*

INTRODUCTION

The belief that stress only leads to negative consequences has long been abandoned. Nowadays, through various studies and research articles, it is clearly proven that there are two types of stress: positive and negative stress. To put it simply, we either experience good stress or healthy tension, or we experience distress, which leads to fatigue, exhaustion, and break down.

It is a sort of logarithmic curve reaching a peak then going downwards. Some researchers break down the healthy stress into healthy pressure or optimal performance. Healthy pressure is a level of stress or challenge that is pretty low. It improves performance. The next level of stress or challenge, slightly higher on the curve, improves performance further and it's determined to be a period of maximum efficiency. Then, there is a significant point where stress is high enough that it enters the hyper-reactive stage, where performance starts decreasing. We assume that for every person the significant point when stress becomes detrimental to an individual is different, dependent on various socioeconomic, physiological, and psychological factors. After the

hyper-reactive stage, further increase in stress or challenge results in emotional and physical exhaustion, or even worse, damage to health and breakdown [1,2]. There are individuals whose significant point of change, the point of inflection from positive to negative stress is further up on the line. Some individuals have higher stress resilience than others. Resilience represents the capacity of an individual to tolerate stress and overcome it successfully without significant impact [3]. The purpose of this paper is to determine which factors influence the significant point of change from positive to negative stress, as well as to present a model of resilience and of learned helplessness.

The suggested model of this paper has been elaborated after careful study of the current research on resilience models.

LEVELS OF STRESS AND PATTERNS OF STRESS

It is clearly documented in scientific literature that a high level of stress above the significant point of inflection from positive to negative stress, leads to long-term consequences like accelerated aging and poor health.

Besides the level of stress, the patterns of stress must be examined. When the patterns of stress are unpredictable, extreme, and prolonged, an individual develops learned helplessness. Learned helplessness is a person's belief that they are incapable of changing or being in control of their circumstances. If a pattern of stress which was unpredicted, extreme and prolonged is repeated in a person's life, it only increases their learned helplessness. Chronic pain is one such instance where extreme and prolonged pain is felt by an individual, often times leading to learned helplessness.

The patterns of stress can be predictable, moderate, and controllable. Then, an individual is more likely to develop stress resilience.

When introducing the notion of patterns of stress, perception becomes important. An individual who is exposed to adverse events repeatedly but within a predictable, moderate, and controllable pattern, will develop a perception of the stress being manageable. Thus, an adaptation and coping mechanisms will be set in place within the individual's psychosomatic systems. This adaptation and coping mechanisms will push the significant point of change from negative to positive stress towards a higher level of stress tolerance.

However, repeated patterns of unpredictable, extreme, and prolonged stress will make an individual less resilient, more vulnerable, and instead of reinforcing stress inoculation, will usually reinforce learned helplessness. What are the factors which will reinforce one or the other?

THE "SPINNING WHEEL" RESILIENCE MODEL

A simple way to visualize a resilience model is to draw a scale, on one side our positive experiences, on the other side our negative experiences and patterns of stress. When positive experiences outweigh the negative ones, the scale tips towards resilience. When negative stress patterns outweigh positive experiences, the scale tips towards

learned helplessness. However, this very simplistic model does not explain why certain people with predominantly positive experiences in life feel helpless. It also doesn't explain why certain individuals repeatedly exposed to toxic stress, unpredictable, extreme, or prolonged stress, still develop resilience and are able to function harmoniously in a society. Generally speaking, the accumulation of positive experiences should lead to happiness [4], which makes us more explorative and resourceful. We generate enduring resources that make us resilient [5,6]. However, the cause and effect between positive experiences and happiness is not always directly present in humans.

What are those tapped and untapped resources which enable and strengthen our resilience? What are those tapped and untapped reserves which enable learned helplessness?

According to the author of this paper, the resilience model is more than a balance or a scale. More than a seesaw, it resembles a wheel, a spinning wheel.

Mason's resilience model loosely resembles the model presented by the author of this paper. However, Mason's model does not show the positive or negative interaction and interdependence between the six factors and resilience [7].

The resilience model presented by the author of this paper is a dynamic construct with cascades or cycles of activity. It is partially covered by the theories around development of resilience and positive psychology [8,9,10]. There are cycles of reinforcement between the 6 psycho-socio-physiological factors, resembling a "Spinning Wheel". In the middle of this wheel is resilience, influenced by six factors arranged in a circle around resilience. Each factor is connected and influences the other factors no matter the order you put them in around the circle. It is a tight interdependence and mutual influence between the factors. It is also a tight interdependence and influence between resilience in the middle of the circle and each of its six factors.

THE SIX FACTORS IN THE "SPINNING WHEEL" RESILIENCE MODEL

The factors in the "Spinning Wheel" resilience model are physical, emotional, cognitive, socio-economic, spiritual and environmental (Fig. 1). The physical factor includes our health, genetics, epigenetics, medical treatments, our physiology, nutrition, exercise, sleep [11]. The emotional factor includes our emotional intelligence, humor, optimism, empowerment, confidence, motivation and activation of our emotional resources, emotional agility, emotional regulation, determination, kindness, bravery, hope, gratitude [12,13].
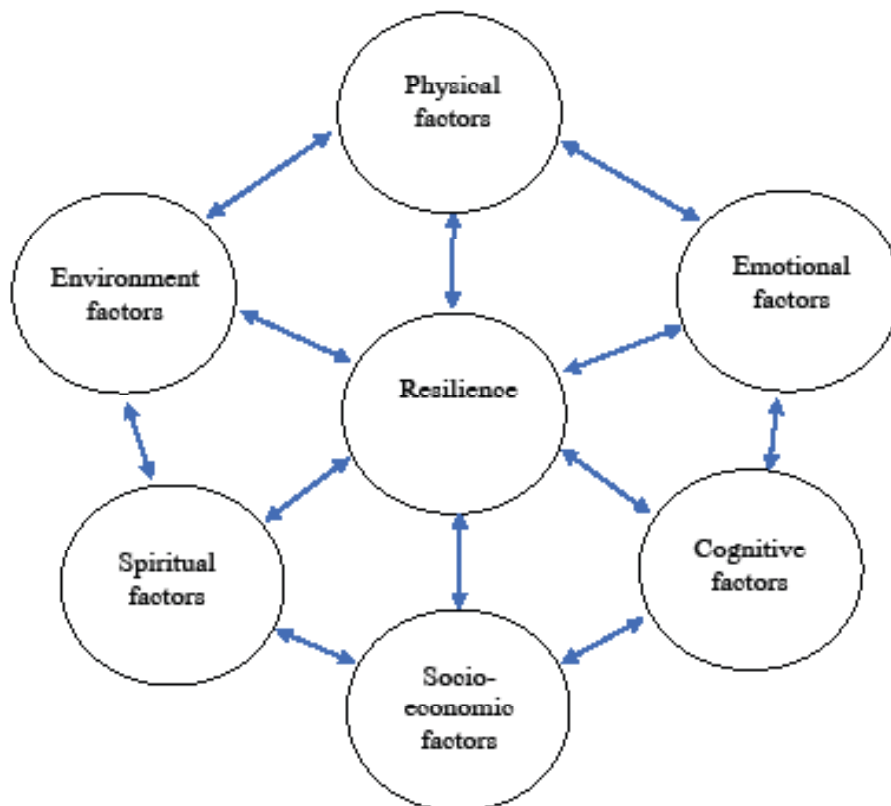
Fig. 1. The "Spinning Wheel" resilience model

The cognitive factor includes active learning, problem solving, clarity of goals, coping strategies already in use in a habitual way, focus, brain building. The socio-economic factor includes family [14,15], friendships, role models, social support, community resilience [16,17], financial security, housing and others. The spiritual or existential factor includes life meaning and hope, overlapping somewhat with the emotional and socioeconomic factor. It comprises meditation, reflection, prayer, altruism, a supportive spiritual framework. The environmental factor includes the environment, the natural surroundings, as well as the environment in the past, for example the environment lived in during childhood. A traumatic childhood affects resilience [18,19].

Each one of these six factors affects resilience to a certain extent, depending on which factor the individual gives importance to. For example, if a person firmly believes that exercise and good nutrition contribute to stress resilience, then the physical factor will greatly influence that person's increase in resilience. If a person firmly believes that a good circle of friends and a support group are paramount to increasing resilience [20], then the socioeconomic factor will be predominant in increasing resilience. There might be two or

more factors that a person believes in, which will reinforce their resilience. There might also be mutual reinforcement between these two or more factors the person believes in.

HOW DO WE FIX ONE OF THESE FACTORS AFFECTING RESILIENCE?

If a person believes in the physical aspect of their personality as being the most crucial to stress resilience, then this person will actively work on improving their nutrition, exercise regime, sleep patterns, sometimes using medical supplements, drugs, placebo, traditional and non-traditional medical treatments to increase their physical health.

The emotional factor influences resilience through the emotional state of the individual. It can be boosted through mindfulness exercises, awareness of vulnerabilities, and emotional regulation. The cognitive factor's influence on resilience can be enhanced by increasing cognitive skills, brain building activities, problem solving and cognitive behavioral therapy. The effect of the cognitive factor along with the emotional one on resilience can be boosted by cognitive behavioral therapy.

The socioeconomic factor, likewise, influences the build-up of resilience. A strong socioeconomic background improves resilience. At least one stable, supportive, and committed relationship with a mentor, a parent, a caregiver, a significant positive influence adult in the life of a child will establish the child's resilience mechanisms and maintain them for years. A supportive relationship, whether for adults or children, is an active ingredient in building stress resilience. Such a relationship provides protection, confidence and multiple perspectives to a person being subjected to stress.

Community resilience and support is another boost to the socioeconomic parameter influencing resilience positively. There have been multiple studies showing that community resilience during a calamity or a disaster helps people mitigate stress and build resilience. Community resilience becomes a protective factor for societies and communities. Community resources are mobilized by community members to adapt collectively, through collective intelligence, to uncertainty, unpredictability and stressful environments.

A strong support group, a mentor, a coach, a psychotherapist can help gain perspective, support, often enhances the problem-solving abilities of the person subjected to high levels of stress. Framing our problems through the eyes of a supportive person helps gain several perspectives, for example a solution to stress using the cognitive angle, a solution using a business perspective or a solution using a socio economic one. Thus, social connectedness plays an important role in creating resilience and maintaining it over time. Social and financial Security often, but not always, act as protective factors to establish and maintain resilience.

Another protective factor which can act towards establishing and maintaining mechanisms of resilience is the spiritual factor. A spiritual framework, meaning in life, a sense of purpose, a series of values including integrity and agility, can act towards enhancing resilience. The environment, fresh air, nature, can as well contribute towards resilience. A peaceful clean environment will contribute towards resilience by interacting positively with the individual's physical and emotional factors.

THE NEGATIVE INFLUENCE OF THE SIX FACTORS ON THE "SPINNING WHEEL" MODEL

The same six factors on the "Spinning Wheel" model can be protective or harmful (Fig. 2).

Within the physical factor, genetic predisposition towards depression [21], chronic disease, lack of sleep, exercise, an unhealthy lifestyle can lead, usually in combination with stress or other factors on the wheel, to learned helplessness. Emotional parameters and states leading to depression, anxiety and fear can contribute as well to learned helplessness. From a cognitive perspective, the inability to learn, problems with memory, assimilation, or analysis of information lead to lack of perspective and focus, difficulty with problem solving, thus giving the perception of helplessness. Socioeconomic factors like a bad neighborhood, a difficult non-supportive family [22,23], traumatic or abusive relationships, a pattern of financial difficulties will likely erode on a person's emotional and cognitive load, increasing the perception of helplessness. The lack of a spiritual framework, purpose, meaning of life can also contribute to the onset of learned helplessness. Environmental factors like a difficult traumatic environment during childhood, pollution, *in utero* toxic drug influences or trauma, can contribute towards learned helplessness.
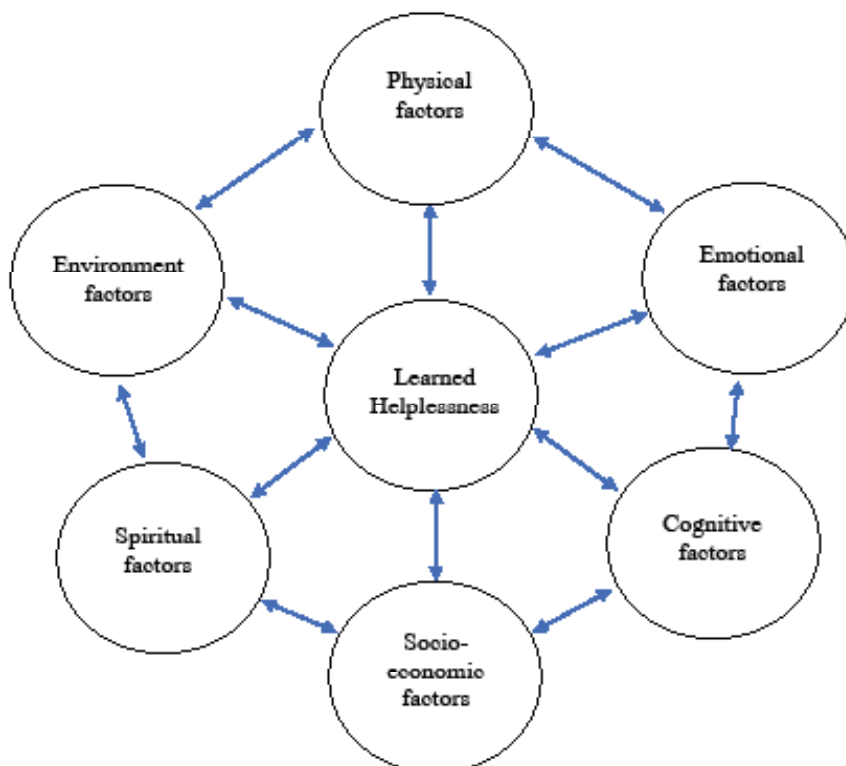

Fig. 2. The "Spinning Wheel" learned helplessness model

ALIGNMENT OF THE "SPINNING WHEEL" MODEL WITH THE 3PS MODEL OF SELIGMAN

The model proposed by this author aligns with the three Ps model of Seligman. Seligman's model postulates that resilience or lack thereof is based on the 3Ps, which are personalization, pervasiveness and permanence. When more than one factor on the "Spinning Wheel" model negatively impacts the individual, learned helplessness is gradually onset. The individual thinks himself accountable of the stress inflicted on him or her, blaming their own self, losing perspective, becoming the vulnerable victim of their own limitations and fears. This is personalization. Furthermore, when more than one factor impacts the person negatively, it is easy to assume it comes from all sides, from all the factors or areas of their life, the factors surrounding helplessness in the "Spinning Wheel" model. This is the pervasiveness aspect of Seligman's model. One factor triggers and negatively impacts another, creating the illusion of permanence of problems. Thus, stress seems to become a permanent condition rather than a transient state. It does become permanent due to learned helplessness, which prevents a positive change.

CONCLUSION

In conclusion, a simple but comprehensive model of resilience is the circular model presented in this article, with interdependency between all the factors and resilience, or learned helplessness in the center, respectively. This model represents a dynamic construct with cycles of reinforcement between the 6 psycho-socio-physiological factors, resembling a wheel.

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